

Energy Facilities Siting Board

APPENDIX-1 TO 980 CMR 13.00 APPLICATION GUIDANCE

Draft Guidance

~~September 4, 2025~~ January 7, 2026

TABLE OF CONTENTS APPENDIX-1 TO 980 CMR 13.00 APPLICATION GUIDANCE

Table of Contents Appendix-1 to 980 CMR 13.00 Application Guidance	i
I. OVERVIEW AND GENERAL INSTRUCTIONS	1
A. Purpose and Scope	1
B. Application Filing Process	32
1. Filing Instructions	32
2. Electronic and Hard Copy Filing	54
II. REQUIRED COMPONENTS OF EFSB CONSOLIDATED PERMIT APPLICATION	64
A. Completeness Determination Checklist	64
B. Draft Notice Templates	75
C. Other State, Regional, and Local Permits and Approvals	75
D. Proposal and Analysis Sections (“P&A”)	86
E. Zoning Exemptions	96
F. Fee Worksheet [TBD]	107
G. Project Overview Presentation	107
III. STATE, REGIONAL AND LOCAL PERMITS REQUESTED	107
IV. PROPOSAL & ANALYSIS: GENERAL SECTION	149
A. Executive Summary	149
B. Application Overview	1410
1. Applicant Information	1510
2. Application Information	1610
3. Project Description	1711
4. Project Site	1812
5. Surrounding Area	1913
V. PROPOSAL & ANALYSIS: CONSULTATION AND COMMUNITY ENGAGEMENT	2014
A. Community Demographic Information	2014
B. Pre-Filing Consultation and Community Engagement	2114
C. Community Outreach Plan	2114

1. Coordination Component	2114
2. Notification Component	2215
3. Communication Component	2215
VI. PROPOSAL & ANALYSIS: PROJECT NEED (FOR LCTDIF AND SCTDIF)	2215
A. Basis of Need	2316
B. System Background Conditions	2416
C. Load Forecast Studies	2417
D. State Policies	2518
E. Consequences of “No Build”	2518
VII. PROPOSAL & ANALYSIS: DESCRIPTION OF ENERGY BENEFITS.....	2518
VIII. PROPOSAL & ANALYSIS: PROJECT ALTERNATIVES (FOR LCTDIF AND SCTDIF) ..	2618
IX. PROPOSAL & ANALYSIS: ROUTE SELECTION AND SITE SELECTION (FOR LCTDIF AND SCTDIF)	2719
A. Route/Site Selection	2819
B. Superior Route/Site Not Overlooked.....	2920
X. PROPOSAL & ANALYSIS: SITE SUITABILITY CRITERIA (ALL CEIF)	3021
A. General Requirements	3021
B. Applicant Instructions.....	3122
XI. PROPOSAL & ANALYSIS: ENVIRONMENTAL IMPACTS.....	3122
A. Land Use and Land-Based Resources	3122
1. Project Site Locus	3122
2. Terrestrial Ecology	3222
B. Rare Species	3323
C. Historical/Archeological Resources	3324
D. Water Resources and Aquatic Ecology	3424
1. Water Use and Wastewater	3424
2. Description of Wetland Resources Areas	3424
3. Water Discharges and Impacts on Water Quality	3525
4. Water Withdrawal and Extraction.....	3626

5. Wetlands and Waterbodies	3626
6. Underwater Archeological Resources	3727
7. Aquatic Ecology	3827
E. Transportation	3828
1. Disruption and Congestion of Road and Rail Corridors	3828
2. Public Transportation.	3928
3. Cyclists and Pedestrians.....	4029
4. Parking	4029
5. Marine Traffic and Navigation	4029
6. Air Traffic	4029
F. Air Quality	4130
1. General Requirements.....	4130
2. Standard Mitigation Measures	4230
G. Climate Mitigation and Resiliency	4331
1. Greenhouse Gas Emissions	4331
2. Climate Resiliency	4332
H. Public Health, Safety and Security	4432
1. Design and Construction Safety	4533
2. Public Health	4533
3. Site Safety and Security	4533
4. Occupational Safety.....	4734
5. Fire Safety.....	4734
6. Hazard Mitigation and Disaster Preparedness.	4735
I. Non-Hazardous Waste and Hazardous Materials	4835
1. Non-Hazardous Waste	4835
2. Hazardous Materials and Waste	4835
J. Decommissioning and Site Restoration.	4936
1. Useful Life	4936
2. Plan for Decommissioning and Site Restoration.....	4936

3. Cost and Financial Surety	5037
K. Magnetic Fields	5037
1. Baseline and Modeled Magnetic Fields Levels	5037
2. Impacts	5138
L. Noise and Vibrations	5239
1. Description of Noise	5239
2. Noise Impacts on Humans	5339
3. Vibrations	5340
4. Noise and Vibrations Impacts on Wildlife	5440
M. Visual	5440
1. Visual Assessment	5440
2. Light Pollution	5541
N. Other Environmental Impacts	5541
XII. PROPOSAL & ANALYSIS: PROJECT COST FOR LCTDIF AND SCTDIF	5541
XIII. PROPOSAL & ANALYSIS: RELIABILITY	5642
A. Grid Reliability	5642
B. Project System Reliability	5642
C. Project Component Reliability	5642
XIV. Proposal & Analysis: Policies of the Commonwealth	5642
XV. Definitions/Acronyms [TBD]	5742
XVI. ATTACHMENT 1: COMMON CONDITIONS [TBD]	5944
XVII. ATTACHMENT 2: UNIFORM SET OF BASELINE HEALTH, SAFETY, ENVIRONMENTAL AND OTHER STANDARDS [TBD]	6044
XVIII. ATTACHMENT 3: APPLICATION COMPLETION CHECKLIST [TBD]	6145

I. OVERVIEW AND GENERAL INSTRUCTIONS

A. Purpose and Scope

The purpose of this Guidance is to inform Applicants seeking ~~C~~onsolidated ~~siting~~ ~~and p~~ermit approvals from the Energy Facilities Siting Board (“Board” or “EFSB”) for Clean Energy Infrastructure Facilities (“CEIF”) as to what should be included in an Application. See 980-~~C~~MR 13.00. The Guidance is intended to help Applicants prepare a well-organized, informative, clear, and consistent Application submission to assist the Board, other state, regional, and local permitting agencies (“Permit Enforcement Agencies” or “PEA”), and community stakeholders in their review of the Applicant’s proposed Project. Importantly, this Guidance will also help an Applicant obtain a “Notice of Completeness” from the EFSB, commencing a mandatory timeline for EFSB adjudication and issuance of a final decision and Consolidated Permit. This Guidance will apply to ~~Project-EFSB Consolidated Permit~~ Applications filed on or after July 1, 2026. This Guidance is intended to explain the Board’s regulations at 980 CMR 13.00.¹ This Guidance will be updated from time to time ~~following notice, an opportunity for comment, Board approval.~~

A Consolidated Permit includes the longstanding EFSB Approval to Construct (“EFSB Construction Permit”) and all other state, regional, and local permits and approvals necessary for construction and operation of a CEIF. A Consolidated State Permit would include all necessary state permits.² The Guidance focuses on informational requirements that are ~~unique-central~~ to the EFSB Construction Permit, while relying substantially on the content of ~~other application forms for the other permits included in an EFSB Consolidated Permit. EFSB Consolidated Permit Application content for the local permit components relies on either existing Local Government permit application forms, or, at the Applicant’s choice, the~~ Massachusetts Department of Energy Resources’ (“DOER”) forthcoming small CEIF (“SCEIF”) Application Form(s) for Consolidated Local Permits~~;~~. See 225 CMR 29.00. ~~Applicants would use-and~~ other state agency permit application ~~formss~~ for the

¹ The definitions in 980 CMR apply to this Guidance.

² A Consolidated Permit pertains to CEIF Applications filed with the Board under M.G.L. c. 164, §§ 69T and 69U; a Consolidated State Permit would pertain to M.G.L. c. 164, § 69V Applications. ~~When referring to them jointly as,~~ **“EFSB Consolidated Permit.”**

corresponding state permits being sought.³ ~~See 225 CMR 29.00.~~ To the extent that zoning exemptions are sought ~~by an Applicant, the Board encourages Applicants~~ an Applicant to should prepare ~~their its EFSB Consolidated Permit Applications inclusive of the consistent with separately the requested~~ zoning ~~exemption relief being sought~~.⁴ See 980 CMR 13.04.

The Board's scope of review for an Application is broad and includes topics unique to the EFSB review, and other topics largely addressed in the other agencies' permit programs which would ~~be folded into~~ incorporated in an EFSB Consolidated Permit. The EFSB Construction Permit would address compliance with the wide-ranging statutory requirements applicable to EFSB. See M.G.L. c. 164, §§ 69G – 69W. To the extent that Applicants identify duplicative information requirements across different state and local permit programs and applications, the Applicant may cross-reference information in its Application submission to avoid such duplication.

The Board has endeavored to make the Guidance as useful as possible for Applicants. However, the Board is aware that it may not have anticipated and addressed all the informational needs that could be relevant to a particular Application. Therefore, prospective Applicants are strongly encouraged to consult with staff of the Board prior to submission of an Application to address any unique or Project-specific informational considerations. In the event of a conflict between this Guidance and applicable statutes, regulations, or decisions of the Board, said statutes, regulations, and decisions shall govern.⁵

Current Status: The 2024 Climate Act directs the Board to establish criteria governing the siting and permitting of LCEIF and SCEIF that include “a uniform set of baseline health safety, environmental and other standards that apply to the issue of a

³ DOER is developing its Application Form to support Consolidated Local Permit siting.

⁴ A separate zoning exemption petition would be submitted to the Board, if requested by an Applicant. The zoning exemption petition and EFSB Consolidated Permit ~~would~~ may be consolidated in a single EFSB proceeding to be issued together in an EFSB Consolidated Permit. See 980 CMR 13.04(2).

⁵ To the extent that any requirements in this Guidance request information that is confidential, the Applicant may provide that information consistent with the procedures in 980 CMR 1.06(5)(f).

consolidated permit.” (“Baseline Standards”). M.G.L. c. 164, §§ 69T(b), 69U(b), 69V(b). This language mirrors the requirements in the 2024 Climate Act for DOER’s development of a program for siting and permitting of SCEIF by Local Governments. Given the similarities between the EFSB’s and DOER’s responsibilities in establishing baseline standards, ~~the overlapping scope, and the benefits of a consistent approach,~~ EFSB and DOER are collaborating on developing their respective permitting standards. ~~The intention of this joint undertaking is to compile a comprehensive database of existing permitting standards, by energy facility type, seen in general use by state and local PEAs. Using this database, and with substantial input from state and local permit agencies and other stakeholders, EFSB and DOER will endeavor to develop a uniform set of baseline health safety, environmental and other standards, as each agency is required to do by the 2024 Climate Act.~~

EFSB and DOER also have similar responsibilities in developing “common conditions” applicable to Constructive Approval of CEIF Consolidated pPermits. For the same reasons described above, EFSB and DOER ~~also see considerable benefit in are also~~ collaborating on developing their respective common conditions for CEIFs. ~~Again, this effort will involve compiling information from other state and local PEAs in a database, and working jointly to develop common conditions, by energy facility type, with agency and stakeholder input.~~

EFSB will release draft Baseline Standards and Common Conditions for public comment as soon as possible, and these will be reviewed and approved by the Board before taking effect.

B. Application Filing Process

1. Filing Instructions

- a. The Applicant should use clear, concise, and plain language that presents relevant and material facts regarding the Project. The Application should specifically address each required finding, determination, and consideration that the Board will need to make in its decision, as well as the basis for the Applicant’s request that the state and local permits should be granted by the Board.
- b. Applicants should provide all data, assumptions, and calculations relied upon and provide the source of, and basis for, all data and assumptions employed.

- i. Include all studies, reports, and planning documents from which data, estimates, or assumptions were drawn, and support for how the data or assumptions were used in developing the projections or estimates.
 - ii. Provide and explain each supporting work paper.
- c. For state Permits and approvals, Applicants should use the application forms, procedures, and required content specified by the relevant PEAs whose permits are being sought in an EFSB Consolidated Permit. See 980 CMR 13.05(1)(a). For local and regional permits ~~included in DOER's Consolidated Local Permit program~~, Applicants should use either of the following, at the discretion of the Applicant: (1) local PEA application and required filing documents; or (2) the Consolidated Local Permit Application specified in 225- CMR 29.00.the appropriate DOER SGEIF Application Form(s), with modifications described in this Guidance.
- d. In the event an Applicant identifies conflicting requirements between different permitting programs, or where relief from zoning ordinances is being sought under a separate petition filed with the Board, and the Applicant cannot resolve any such conflicting requirements through pre-filing Agency Consultation (as defined in 980 CMR 16.02), then the Applicant may propose a resolution in its Application. Such proposed resolutions to conflicting requirements must be identified and explained in the Application with the Board. See Section III.D: Application Conflicting Requirement Summary.
- e. If the same information is required for more than one permit application or exhibit, it may be supplied in a single permit application or exhibit and cross-referenced (and hyperlinked) in the other permit applications or exhibit(s) where it is also required. See 980 CMR 13.05(2)(b).
- f. For all maps, include a map title, a north arrow, an accurate scale, a detailed legend, the source of the data, and the date the map was published, if applicable. Project overview maps should typically include:
 - i. The outline and centroid of every major Project component.↕

- ii. The ~~Project Facility Boundary area as defined by the Applicant for the Project, and~~
 - iii. Boundaries of lots/parcels associated with the Project.
- g. Geospatial data should be filed in common file formats such as GIS shapefiles (.shp), and in the projection and datum (e.g., NAD 1983 State Plane Massachusetts Mainland FIPS 2001 Feet) appropriate for Board review of the Project.
 - h. Submit each document in a searchable PDF file format, unless prior permission to submit in another form is obtained from the Presiding Officer. Other file types may be submitted, if appropriate (e.g., Excel, Word, PowerPoint files). However, a searchable PDF of such files is also required.
 - i. File names must include the exhibit number (which provides a recognizable abbreviation for the Applicant) and a brief descriptive phrase. For example, “Exh. GET-1 Initial Petition” (“GET” for “Grid-Enhancing Tech Company”).
 - j. For each file consisting of ten or more pages, add a table of contents (hyperlinked to the specific page) citing the related sections by page and section number.

2. Electronic and Hard Copy Filing

- a. Pre-filing requirements in 980 CMR 16.00 for projects under M.G.L. c. 164, §§ 69T and 69U require prospective Applicants to notify the Board no less than ~~45-60~~ days and no more than 90 days prior to filing an Application with the EFSB.⁶ Upon notification, Board staff will create a docket number(s) for the Application and enable posting for pre-filing materials.

⁶ Pre-filing requirements for Consolidated State Permits (under M.G.L. c. 164, § 69V) will follow the pre-filing requirements established by DOER for Consolidated Local Permits. See 980 CMR 16.00; 225 CMR 29.00.

b. Submit each document electronically to the Board through the Board's electronic filing system ~~(e.g., the Department of Public Utilities' ("DPU") Electronic Fileroom)~~. Each document submitted will be posted on the electronic filing system.⁷

b.c. ~~The Board will use the date of the electronic filing for any deadlines imposed.~~

c.d. The Board requires a minimum of one hard copy of the complete Application filing for record and public viewing purposes. In addition, prior to submission of the Application, the Applicant must contact the Program Coordinator assigned to the proceeding to inquire if additional hard copies will be necessary, and, if so, how many.

II. REQUIRED COMPONENTS OF EFSB CONSOLIDATED PERMIT APPLICATION

The following sections provide an overview of the main components of an Application:

A. Application Completeness Determination Checklist

The Completeness Determination Checklist provides a means of confirming that the necessary components of an Application have been prepared and submitted. ~~The Presiding Officer, with input from PEAs and Local Governments, will make a determination based on a review of the Application to determine if as to whether it satisfies the requirements for "Notice of Completeness." See 980 CMR 13.01(4) [See Attachment 3 TBD].~~

~~The burden of production is on the Applicant to obtain a for Completeness Determinations and such burden shall be administrative. The Presiding Officer shall determine whether the information required by the Board is provided by the Applicant in the Application. The Completeness Determination is intended to be administrative in~~

⁷ The Board may create a new filing portal in coordination with DOER. The new portal would enable applicants to upload files directly, ~~similar to existing Massachusetts Environmental Policy Act ("MEPA") and Massachusetts Department of Environmental Protection ("MassDEP") filing portals.~~

nature and is not intended to be an evaluation on the substantive merits of each piece of information provided by the Applicant to facilitate Completeness Determinations.

B. Draft Notice Templates

The Board requires the Applicant to distribute Notices of Public Comment Hearing and Adjudication by mail and other media to formally announce the submission of the Applicant's Project to the EFSB for review, and upcoming public comment opportunities. ~~Such~~ Notices will include information on how to participate in the public comment hearing and ~~also~~ in the proceeding, as well as an overview of the Project. Recent examples of notices, which generally conform to a standard form, can be found on Board's website: [EFSB/Siting Calendar | Mass.gov](#). [\(Click here for a direct link to a notice.\)](#) [The Board will provide a template to assist Applicants in preparing a standard draft Notice with the Application -- TBD.]

C. Other State, Regional, and Local Permits and Approvals

This section of the Application will contain the specific documents required for the Board, PEAs, permit advisory agencies ("PAAs"), ~~Local Government(s)~~, and other stakeholders to evaluate the Applicant's request for Permits that are within the Board's authority to issue in an EFSB Consolidated Permit.⁸

For state permits, the Guidance relies on existing Permit application forms and filing requirements by the PEAs whose permits and approvals will be included in an EFSB Consolidated Permit. For the local components of Applications, Applicants should use either of the following, at the discretion of the Applicant: (1) local PEA applications and required filing documents; or (2) the Consolidated Local Permit Application specified in 225 CMR 29.00., the Board intends to rely extensively (but not exclusively) on DOER's SCEIF Application Form(s).⁹ To the extent that zoning relief is sought by Applicants,

⁸ M.G.L. c. 164, § 69G recognizes that certain federal permits may be delegated to specific state agencies; and, therefore, would not be included in an EFSB Consolidated Permit.

⁹ "Local Government" means a municipal or regional authority, board, commission, office, or other entity, as defined in M.G.L. c. 25A, § 21, that would have had jurisdiction to issue at least one permit for an LCEIF or SCEIF absent a Consolidated Permit. Local

Applicants should prepare their Applications inclusive of the separately requested zoning exemptions.

~~The Board intends to align EFSB Consolidated Permit Application requirements with DOER's Consolidated Local Permit regulations, to the greatest extent practicable. The EFSB will supplement and update this Guidance after DOER releases the details of its Consolidated Local Permit program and application(s).~~

D. Proposal and Analysis Sections ("P&A")

The purpose of the P&A Sections is to explain the type of information required for the Board to issue an EFSB Construction Permit, as well as context supporting other Permits and approvals. Existing Applications to the Board have largely relied on using Applications from previous years as a basis. This Guidance is intended to explain and standardize what has largely evolved over time through Board precedent and practice. The Guidance establishes the minimum filing requirements, which may need to be supplemented by the Applicant, as appropriate.

In appearance, the P&A should closely resemble the type of information that the Board has previously received in an Application or "Analysis" sections supporting petitions (filed under M.G.L. c. 164, §§ 69J, 69J¼) and Zoning Exemption requests (M.G.L. c. 40A, § 3 and St. 1956, c. 665, § 6). The P&A would also contain similar material to past Massachusetts Environmental Policy Act ("MEPA") filings for Energy Facilities, i.e., Expanded Environmental Notification Forms, Draft Environmental Impact Reports, and Final Environmental Impact Reports. As good practice, Applicants are encouraged to meet with EFSB Staff prior to filing to clarify the scope and type of information required. To request such a meeting, Applicants can e-mail XX@mass.gov. Applicants are also

Governments enforce the portions of a Consolidated Permit that relate to subject matter within their jurisdiction as if that portion of the Consolidated Permit had been directly granted by the Local Government. 980 CMR 1.01(4).

~~M.G.L. c. 25A, § 21 defines "Local Government" as a municipality or **regional agency**, [emphasis added] including, but not limited to, the Cape Cod Commission and the Martha's Vineyard Commission. See St. 2024, c. 239, § 23.~~

reminded to meet pre-filing requirements articulated in 980 CMR 16.00.

E. Zoning Exemptions

If applicable, the Applicant ~~will~~shall describe all zoning exemptions that the Applicant asserts the Project would need ~~in order~~ to be constructed and operated, as summarized in Exhibit **Y** below:

Exhibit Y**Zoning Exemption Table**

Zoning Provision from which Exemption is Requested	Local Zoning Exemption Required	Why Exemption is Required

F. Fee Worksheet [TBD]

[The EFSB and DPU will issue ~~updated~~ EFSB fee regulations for the EFSB Consolidated Permit process. See 220 CMR 32.00. ~~220 CMR 32.00 will include~~The Board will issue a fee schedule ~~applicable to Consolidated Permit Applications~~based on the forthcoming Application fee regulations.]

G. ~~CEIF Project Overview Project Overview~~ Presentation

Applicants are encouraged to supplement the written Application materials with a short (approximately 5-minute) visual presentation overview of the Project (e.g., a video). The Applicant should also link the video on its Project website. The Board will post a link to the presentation in the DPU/EFSB Fileroom and on the EFSB's website for the Project.

The presentation should provide factual information using neutral language and avoiding a tone of "marketing advocacy" for the proposed Project, with images of proposed Project sites/routes, and visual renderings that would aid the public in gaining an understanding of the Project. The presentation must be compatible with on-demand closed captioning, translated closed captioning, and other accessibility features.

III. ~~STATE, REGIONAL AND LOCAL PERMITS REQUESTED~~REQUIRED FOR AN EFSB CONSOLIDATED PERMIT

A. PEA Permits

The following information and attachments shall be provided by Applicants for each Permit and approval which would otherwise be required, absent an EFSB Consolidated Permit:

- Permit name.⁺
- Permit type: state/regional/local.⁺
- PPEA, and the related permit program (e.g. “Wetlands Program”).⁺
- Application fee that would have otherwise applied to this type of facility, if submitted to the PEA.⁺
- PAA¹⁰ (if required by law or regulation).⁺
- PEA statutory and regulatory authorities for Permit.⁺
- Website (URLs) for PEA’s Permit rules, forms, and general requirements and guidance.⁺
- Completed Permit application form, i.e., the application for the permit that would normally be submitted to the ~~State PEA~~. ~~For state permits, use, or to a Local Government, the state PEA application forms; for local permits, use the local PEA application forms, or under~~ the DOER Consolidated Local Permit application, ~~per requirements at 225 CMR 29.00 (or the actual local agency PEA forms, if not covered by the DOER Consolidated Local Permit application).~~⁺ and
- A proposed draft Permit for the Project, including ~~all applicable EFSB, DOER and State Agency Common Conditions, and any other~~ site-specific conditions proposed by the Applicant, ~~and applicable Common Conditions, as may be adapted for the specific requirements of the Project by the Applicant. See Attachment 1: EFSB Common Conditions.~~ For State Permits, Applicants shall use the ~~current State standard~~ PEA permit format ~~and include State Agency Common Conditions.~~⁺ For local permit(s), Applicants shall use ~~DOER’s Permit format and DOER’s Common Conditions~~ the current local PEA permit format, or

¹⁰ A PAA describes agencies that have a statutory or regulatory responsibility to advise a PEA during the usual review process for a particular permit. See 980 CMR 13.01(4).

the DOER Consolidated Local Permit form.¹¹ See Attachment 1: EFSB Standard Conditions.

The Applicant's proposed draft PEA permit(s) shall highlight all instances where established PEA program requirements are in conflict may be inconsistent with other PEA requirements and the manner in which the Applicant's proposed resolution to resolve(s) thereto any such conflicting requirements. All such proposed resolutions must be identified in the Permit Application submission and summarized in the Draft Permit Conflicting Requirement Summary Table (see example below).

Applicants should note that the EFSB's Consolidated Permit authority must be consistent with the statutory requirements applicable to PEA permits. Similarly, the Board intends to comply with the substantive requirements contained in PEA regulations and ordinances, where not otherwise exempted or expressly modified by the Board. However, the Board is not compelled to follow the procedural requirements applicable to PEA regulations and ordinances, as the Board's own statutes and regulations will govern procedures.

¹¹ To facilitate the efficient review and adjudication of the Applicant's proposed permits, such forms must be submitted as editable text, in Microsoft Word, regardless of the PEA's normal permit issuance format (e.g., PDF, Excel, etc.).

Exhibit X**Application and Draft Permit Conflicting Requirement Summary Table**

Permit Name	Description of Conflicting Requirement(s) Between Different PEA Permit Programs	Proposed Resolution (Please cite (and hyperlink) to Application page where the proposed resolution occurs)

B. Federal Permits

List all federal permits and approvals required for the proposed Project. See 980 CMR 13.05. [Note: This question is for context only; the EFSB does not issue federal permits.] Provide the following for each such permit: ~~t~~

- Permit name.~~t~~
- Permit Agency, and issuing program entity.~~t~~
- Statutory and regulatory authorities for permit issuance.~~t~~
- Status of the permit process.~~t~~
- Website URLs to permit agency's permit rules, forms, and general requirements and guidance.~~t~~and
- Website URLs for Project application(s) filed with ~~each~~ federal agencyies.

IV. PROPOSAL & ANALYSIS: GENERAL SECTION

A. ~~Executive Summary~~ Application Summary Form

- Describe the proposed Project in a concise and clear narrative that uses plain English in an Executive Summary, which should include:
 -
 - Basic description of the Applicant's proposed Project, major components, locations, and surrounding community and land uses_{2,3}
 -
 - Purpose of the proposed Project and intended energy/environmental benefits_{2,3}
 -
 - Estimated Cost (for LCTDIF and SCTDIF only)_{2,3}
 -
 - Construction timing and key methods_{2,3}
 -
 - Potential environmental, health, and safety impacts, and how the proposed Project avoids, minimizes, and mitigates them through Project design and the use of Common Conditions or Applicant-proposed site-specific conditions_{2,3}
 -
 - Summary of Cumulative Impact Analysis ("CIA") (if applicable; See 9-80 CMR_{15.00}), Site Suitability Criteria scoring evaluation (if applicable), and other mitigation strategies_{2,3} and
 -
 - Summary of pre-construction outreach plan and intended follow-on communication and engagement plan with community during construction and operational phases; sources of Project information (e.g., websites, hotlines, meetings, electronic filing systems.)
 -

B. ~~Description of the CEIF Project, Site, and Surrounding Area~~ Application Overview

Provide the following listed information in the Description section~~Application~~
~~Overview~~:

1. Applicant Information

- Applicant's legal name and d/b/a common name.~~;~~
- Applicant's mailing address, phone number, email address, Project webpage URL~~.~~~~;~~
- A brief explanation of Applicant's type of business entity, including its date and location of formation and the name and address of any parent entities~~.~~~~;~~
- Name of Applicant's representative, mailing address, phone number, email address (if different from Applicant company)~~.~~~~;~~
- Project owner(s) (if different from Applicant) and ownership percentages~~.~~~~;~~
- If the Project is to be owned by a corporation, a copy of the charter of such corporation. If the Project is not to be owned by a corporation, a copy of the certificate or other documents of formation~~.~~~~;~~~~and~~
- Project owner(s) mailing address, company webpage URL (if different from Applicant).~~;~~
- Project operator(s) mailing address, phone number, email address (if different from Applicant company).

2. Application Information

- Project name₁;
- Municipalities where Project would be located₁;
- Assigned EFSB docket number(s) for the Application₁;
- Does the Application include a separate request for zoning exemptions? If so, provide the docket number₁;
- Project type (e.g., LCTDIF, SCTDIF, LCEGF, SCEGF, LCESF, SCESF)₁;
- Status of Project design (percent completed)₁;
- Proceeding Type (e.g., M.G.L. c. 164, §§ 69T, 69U, or 69V)₁;
- ~~Has-Identify ifwhether~~ the Project, or any portion of it, ~~has~~ been filed with the Board or the DPU for siting/permitting approvals before₁. ~~If yes, list the EFSB/DPU docket number(s)?.~~
- ~~Have-Identify ifwhether~~ any projects on this site ~~has~~ been filed with the Board or DPU before for any type of siting/permitting or other regulatory approvals₁? If yes, list the projects' EFSB/DPU docket number(s)₁;
- List any related EFSB/DPU docket(s) that explicitly address the Project, including but not limited to, the following areas of review: planning, ratemaking, safety, operations, contract review, and enforcement actions. If any such reviews have taken place as informal (non-docketed) matters, provide relevant summary details₁;
- ~~List all federal permits and approvals required for the proposed Project. See 980 CMR 13.05. [Note: This question is for context only; the EFSB does not issue federal permits.] Provide the following for each such permit:~~
 - ~~• Permit name;~~
 - ~~• Permit Agency, and issuing program entity;~~
 - ~~• Statutory and regulatory authorities for permit issuance;~~
 - ~~• Status of the permit process;~~
 - ~~• Website URLs to permit agency's permit rules, forms, and general requirements and guidance; and~~

~~Website URLs for Project application(s) filed with federal agencies.~~

3. Project Description

Describe the Project in detail in the Project Description and include the following information:

- An overview of the proposed Project including a brief description of size, ratings, purpose, location, and expected use.^{+, -}
- General description of the community where the Project would be located (e.g., land use, population).^{+, -}
- The major components of the Project, which may include, but are not limited to: generating equipment, energy storage units, conductors, structures/towers/containers, insulators, splice vaults, transition vaults, interconnection facilities, substations and switching stations, inverters, converter stations, collection lines, access roads, laydown areas, stormwater facilities, parking and vehicle access points, administrative, maintenance and control facilities, and any other related on-site facilities and equipment.^{+, -}
- Estimated Cost (only required for LCTDIF and SCTDIF -- other than generator interconnection lines).^{+, -}
- General Project construction methods, including the following:
 - Construction phases.^{+, -}
 - Construction methods.^{+, -}
 - Construction crews.^{+, -}
 - Staging areas and material delivery procedures.^{+, -} ~~and~~
 - Any other details necessary for the Board review of Project construction, including a Construction Management Plan.
- A Gantt Chart showing the timing and duration of the entire Project and the stages of construction.^{+, -}
- Identification and discussion of any site-specific adverse environmental impacts of the proposed Project and the manner in which the Applicant has proposed these impacts would be avoided, minimized, or mitigated by Project design or the EFSB and DOER's Common Conditions, the Applicant's proposed site-

specific mitigation, design improvements, Project and/or site alternatives, or community benefit plans or agreements.^{1,2}

- Append the following, or include as figures as appropriate:
 - Area Locus Map (or United States Geological Survey) Quadrangle Map with Project and Project Area delineated.^{1,2}
 - Map of the Project Area as defined by the Applicant.^{1,2}
 - Site plans, including general construction plans and elevation view drawings.^{1,2}
 - Design and technical drawings.^{1,2}
 - Map indicating property lines markings, identifying direct abutters.
 - Transmission and distribution system diagrams/maps of the existing electric system in the Project Area, including other projects in development.^{1,2} ~~and~~
 - Visual simulations, before and after construction, from key vantage points of greatest visibility.

4. Project Site

Describe all property (e.g., parcels, lots, easements) involved in the Project, including the following:

- The proposed location of the Project facility^{1,2}, including proposed electric collection and transmission lines and interconnections, as well as ancillary features located on the Project site such as roads, railroads, switchyards, energy storage or regulation facilities, substations and similar facilities.^{1,2}
- General dimensions of the Project site^{1,2}, including area in acres or square feet.^{1,2}
- A description of the maximum height of transmission and distribution structures, substations, solar panels, wind turbines, storage tanks, energy storage facilities, and associated electrical equipment.^{1,2}
- The proposed limits of clearing and disturbance for construction of all Project components and ancillary features^{1,2}, including laydown yards and temporary staging or storage areas.^{1,2}

- Existing land ownership, including whether ownership is private, public, tribal, conservation-based, and/or other.⁺
- Proposed land ownership status (e.g., would the Applicant own the land).⁺
- Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area in acres.⁺
- The location of noise-emitting facilities during operation, such as inverters and transformers, including the distance to occupied structures, property lines, and public rights-of-way.⁺
- A map using satellite imagery (or aerial photograph) with depictions of planned facilities, fences, roads, occupied buildings, and planned screening, landscaping, and vegetative cover.⁺
- The proposed location of any off-site utility interconnections, including all electric transmission lines, communications lines, stormwater drainage lines connecting to and servicing the site of the facility.⁺ and
- Output report from ResilientMass Action Team (“RMAT”) Climate Resilience Design Standards Tool.

5. Surrounding Area

Describe the general characteristics of the area surrounding the Project (within at least one-half mile of the proposed facilities) using maps and related geospatial data where appropriate. The Application description should include the following information:

- Geophysical, environmental, cultural resource, land use, and other constraints impacting facility design and layout within the Project area. Constraints shall include but are not limited to: state protected wetlands and waterbodies, lands used in agricultural production, prime agricultural soils, environmentally sensitive areas (e.g., threatened or endangered species locations, archaeologically sensitive areas), required setbacks.⁺
- State, regional, and municipal boundaries.⁺
- Adjacent neighborhoods and the populations residing therein.⁺
- Recreation and conservation areas.⁺

- Major institutions, landmarks, and facilities.¹²
- Waterbodies and other notable topographical features.¹² ~~and~~
- Major overhead and underground energy facility infrastructure, including transmission lines, electrical stations, generation facilities, energy storage facilities, gas pipelines, telecommunications, and water/sewer facilities.

C. Accessibility

- The Applicant shall describe how the public can access CEIF Project information, how CEIF Project materials are consistent with the Board's Language Access Plan, and provisions for meeting additional locality-specific accessibility needs.

V. PROPOSAL & ANALYSIS: ~~CONSULTATION AND COMMUNITY ENGAGEMENT~~

A. Community Demographic Information

Describe the following language and demographic information for the community or communities affected by the Project, including the following information:

- Pursuant to the Board's current Language Access Plan ("LAP") on <https://www.mass.gov/info-details/efsb-environmental-justice-information>: Identify the presence of any Census Block Groups within designated geographic areas¹² of the Project's boundaries in which five percent or more of the population reports speaking a specific non-English language and also indicate that they "speak English less than very well" ("Limited English Proficiency" or

¹² The current designated geographic area varies according to project type, as follows: (a) one quarter mile from the boundaries (such as edges of rights-of-way) of linear projects or linear project components that are not site-specific and lack a single point address, such as transmission lines and gas pipelines; and (b) one mile from the boundary of projects and project components for electrical switching stations, substations, pipeline meter stations, gas regulators, electric generating facilities, gas storage facilities, energy storage systems, or gas compressor stations. The Applicant should ensure that it is using the designated geographic area from the current EFSB LAP.

“LEP”); identity each Census Block Group that meets this population threshold, and the relevant languages in each Census Block Group^{+,2}.

- Presumptive translation and interpretation required by the Board LAP^{+,2}.
- Burdened Areas (“BA”) within the Specific Geographic Area of the Project for CIA purposes. [The Board is in the process of drafting regulations for application of CIA for EFSB-jurisdictional CEIF under 980 CMR 15.00].

B. Pre-Filing Consultation and Community Engagement

Provide an affidavit and documentation of compliance pursuant to 980 CMR 16.00 and provide a summary of pre-filing consultation and community engagement conducted. Describe the Applicant’s past and ongoing efforts towards establishing a Community Benefits Plan or Community Benefits Agreement with stakeholders in the affected communities.

C. Community Outreach Plan

This section details how Applicants should develop communication and engagement plans (“Community Outreach Plan” or “COP”) for construction and operation phases of the Project, for inclusion in EFSB Consolidated Permit.

The COP should use plain language, and include the following components:

1. Coordination Component.

The Applicant is expected to coordinate with stakeholders, including abutters, municipal officials, community groups, and property owners regarding:

- Development of the COP^{+,2} ~~and~~
- Discussion of upcoming construction activities prior to each major construction stage, including: (1) those that would create significant adverse impacts on or affect access to stakeholders’ properties, including traffic lane and street closures and detours; and (2) planned or unplanned construction activities that would occur outside of regular work hours, including during nighttime, weekends, and public holidays.

2. Notification Component.

- Notice sent via email, U.S. mail, or hand-delivered flyers or door hangers to abutters and other stakeholders regarding advance notice of scheduled construction activities in affected neighborhoods, including: (1) the scheduled start, duration, and hours of construction in particular areas; (2) the methods of construction that will be used in particular areas (including any use of nighttime construction); and (3) anticipated traffic lane and street closures and detours, as well as special deliveries such as involving oversized equipment or components.^{1,2}
- Translations into appropriate languages for the Project area, consistent with the EFSB current LAP provisions for presumptive language services.^{1,2}
- Outreach protocols to sensitive receptors of upcoming construction.^{1,2} and
- Work area signage.

3. Communication Component.

- Project representative(s) contact information.^{1,2}
- Creation of webpages displaying Project information.^{1,2}
- Creation of a telephone hotline, email address, and point of contact for public inquiries and complaints and a protocol to respond to complaints in a timely manner.^{1,2}
- Regular email updates to municipal officials and email lists.^{1,2} and
- Opportunity to sign up for updates via the Applicant's Project website.

VI. PROPOSAL & ANALYSIS: DESCRIPTION OF ENERGY BENEFITS

- For LCTDIF and SCTDIF Applications, describe any additional benefits the Project would provide in addition to the Project need identified in the section above and append any supporting studies or calculations.
- For LCEGF, LCESF, SCEGF and SCESF Applications, describe any energy benefits the Project would provide, in the following context:
 - In light of the Board's goal to "provide a reliable, resilient and clean supply of energy," energy benefits could include, but are not limited to:
 - Enhancing energy system reliability.

- Meeting future energy load projections.
- Achieving state policy goals such as Net Zero climate goals.
- Offering financial savings or stability to customer or wholesale market energy costs.
- Expanding energy access or service quality to underserved communities.
- Specify to whom the benefits would be provided (e.g., the ISO-NE region, the Commonwealth, the affected municipalities, specific ratepayers, Project partners, etc.).
- Append any supporting studies or calculations.
- For all CEIF Projects also describe the following:
 - Local benefits.
 - Other benefits anticipated by the project to the community or region.

~~VI~~.VII. PROPOSAL & ANALYSIS: PROJECT NEED (FOR LCTDIF AND SCTDIF)

A. Basis of Need

- Describe the basis of need for the Project and provide supporting documentation;
- Identify transmission and/or distribution system reliability issues (including due to system planning criteria from NERC, NPCC, ISO-NE, etc., or environmental risk to system infrastructure);
- Provide current Project area load projections by substation, over a 10-year (or longer) period;
- Describe asset condition improvement or modernization needs (e.g., damage to electric line structures, cable, obsolescence, outdated specifications);
- Describe performance improvement/economic benefit objectives of the Project supporting need;
- Describe interconnection need for generation or energy storage facilities; and
- Other state and federal policies that support Project need.

B. System Background Conditions

Describe system background conditions, including:

- The Project Area’s electric system topology, including: transmission and major distribution lines, generation/storage sources and expected retirements, substations, customer energy requirements served, and particular concerns regarding critical infrastructure or vulnerable populations;¹³
- If applicable, any electrical load pocket(s) in the electric system which require relief;
- Information about whether the Project facilities would be part of a regional transmission system (e.g., pool transmission facilities, “PTF”) or local transmission (non-PTF);
- The nameplate capacities and long-term emergency (“LTE”) ratings of transformers, the firm capacity for substations, and the N-1 and N-1-1 contingency scenarios and timelines for potential overloads; and
- If applicable, equipment performance concerns or recurring line outage history.

C. Load Forecast Studies

If the Project need is based on ISO New England (“ISO-NE”) system studies, or company-specific load forecast studies, provide said studies. Other relevant studies (such as Electric Sector Modernization Plans (ESMPs), or Long-Term System Planning Program studies) may also be provided (or referenced) to demonstrate Project need.

- If the Project need is based on existing or forecasted demand for interconnection of CEIF, describe the interconnecting facility and current interconnection queue related to the Project.
- If Project need is based on a load projection, provide a reviewable, appropriate, and reliable load forecast or forecasts. Such forecasts:

¹³ Applicants shall file confidential system information pursuant to 980 CMR 1.06(5)(f).

- Are based on accurate historical information and reasonable statistical projection methods, which should include an adequate consideration of conservation and load management.
- Include a full description of the load forecast methodology, including the relevant standards, and expected accuracy levels.
- Address significant trends including energy efficiency, clean energy generation, energy storage, major known step-load additions or expected load retirements, and electrification of buildings and transportation uses, and provide relevant breakdowns of these sub-categories of demand.

D. State Policies

If Project need is related to implementation of state policies, identify the policies (e.g., policy documents, statutes, regulations, rulings, orders and decisions) and describe how they influence Project need.

E. Consequences of “No Build”

Regardless of the asserted basis of Project need, describe the consequences of leaving the existing transmission and distribution system as is. Relevant considerations include:

- System failures (e.g., areas/number of customers affected, anticipated time to restore service, damage to the system, economic/public health/safety consequences of outages).
- Non-compliance with state policies or established reliability standards.
- Whether any stopgap improvements, and/or operational measures could defer the need, and if so, for how long and at what cost/impact.

~~VII. PROPOSAL & ANALYSIS: DESCRIPTION OF ENERGY BENEFITS~~

- ~~• For LCTDIF and SCTDIF Applications, describe any additional benefits the Project would provide in addition to the Project need identified in the section above and append any supporting studies or calculations.~~
- ~~• For LCEGF, LCESEF, SCEGF and SCESEF Applications, describe any energy benefits the Project would provide, in the following context:~~

- ~~In light of the Board's goal to "provide a reliable, resilient and clean supply of energy," energy benefits could include, but are not limited to:~~
 - ~~Enhancing energy system reliability;~~
 - ~~Meeting future energy load projections;~~
 - ~~Achieving state policy goals such as Net Zero climate goals;~~
 - ~~Offering financial savings or stability to customer or wholesale market energy costs; and~~
 - ~~Expanding energy access or service quality to underserved communities.~~
- ~~Specify to whom the benefits would be provided (e.g., the ISO-NE region, the Commonwealth, the affected municipalities, specific ratepayers, Project partners, etc.).~~
- ~~Append any supporting studies or calculations.~~

VIII. PROPOSAL & ANALYSIS: PROJECT ALTERNATIVES (FOR LCTDIF AND SCTDIF)

~~For LCTDIF and SCTDIF Projects:~~

- Describe how the Applicant has considered or implemented alternative approaches to meet the identified Project need, including but not limited to the following:
 - Advanced transmission technologies.~~✚~~
 - Grid enhancement technologies.~~✚~~
 - Non-wires alternatives, such as energy storage, distributed energy resources, etc.
 - Alternative methods of transmitting or storing energy, including distribution system solution alternatives.~~✚~~
 - Alternative sources of power.~~✚~~
 - A reduction of demand requirements through load management.~~✚~~
 - How the Project will increase the capacity of the system to interconnect large electricity customers, electric vehicle supply equipment, clean energy generation, clean energy storage or other clean energy generation sources that qualify under any clean energy standard regulation

established pursuant to M.G.L. c. 21N, § 3(d), or will facilitate the electrification of the building and transportation sectors.~~;~~~~and~~

- Other alternatives to avoid or minimize expenditures.
- Provide a comparison of the above Project alternatives with the Project in terms of ability to meet the identified Project need; cost (both capital and net present value (“NPV”) of capital and operating costs); energy benefits and other co-benefits; environmental impacts; reliability; feasibility; other state policy considerations, such as Environmental Justice or CIA; and Project management considerations.~~;~~~~and~~
- Describe whether, on balance, the proposed Project is superior to the alternative approaches identified.~~;~~~~and~~
- Append any supporting studies or calculations.

IX. PROPOSAL & ANALYSIS: - ROUTE SELECTION AND SITE SELECTION (FOR LCTDIF AND SCTDIF)

The Board’s statutes do not impose the same requirements on LCTDIF or SCTDIF as compared with clean generation/energy storage facilities for the Board’s evaluation of site and Project alternatives. For LCTDIF or SCTDIF (under both M.G.L. c. 164 §§ 69T and 69U)], the Applicant must provide “a description of the alternatives to the large [and small] clean transmission and distribution infrastructure facility, including siting and Project alternatives to avoid or minimize or, if impacts cannot be avoided or minimized, mitigate impacts.”

Regarding clean energy storage and clean generation facilities, the Applicant must provide “a description of the Project site selection process and alternatives analysis used in choosing the location of the proposed large [or small] clean energy generation facility or large clean energy storage facility to avoid or minimize or, if impacts cannot be avoided or minimized, mitigate impacts.” Unlike the requirements for LCTDIF or SCTDIF projects, the Board’s statute does not specifically mandate “siting and project alternatives” for clean energy storage and generation facilities.¹⁴

¹⁴ The statutory language for clean generation and energy storage facilities is similar to the language for legacy generation facilities contained in M.G.L. c. 164, § 69J¼ that

A. Route/Site Selection

The route/site selection process involves the following steps in EFSB proceedings:

- T&D Project route/site selection often revolves around connecting existing, upgraded, or new substations or switching stations to other such substations (or switching stations) to address identified system needs. This is generally the starting point for analysis of transmission line routing options.¹⁴
- Where new substations/switching station locations are required, Applicants shall identify relevant factors for consideration of potential sites, such as ownership status, local zoning, community input, engineering and planning considerations, constructability, environmental impacts, site security, and cost.¹⁵
- The Applicant shall also identify the objectives for route selection for the LCTDIF or SCTDIF. Such factors may include environmental impact avoidance, minimization and mitigation to built and natural environments, constructability constraints, reliability, and cost, among others.¹⁶
- The Applicant shall describe geographical diversity among the proposed routes/sites and the alternatives considered for the Project. The Applicant should evaluate geographical diversity as a function of land use, vegetation cover, population density, presence or proximity to sensitive receptors, archeological and historical resources, pollutant sources and regulated contaminated sites, water resource areas, existing public roads and utility corridors, cost, and reliability considerations. In general, the Applicant must establish that it identified at least two noticed sites or routes with some measure of geographic diversity.¹⁵

imposes only a **descriptive** requirement on the applicant regarding its site selection. In contrast, the Site Suitability Criteria, established by EEA, are specifically intended to help guide the proponent's selection of sites for clean generation and clean energy storage facilities, and not be limited to an after-the-fact "descriptive" use. The Board is required to develop standards for applying the Site Suitability Criteria.

¹⁵

Given that the designation of a noticed alternative route: (a) is not required by statute; (b) necessitates that a project proponent expend significant funds in both

- Consideration of CIA – the Board is required to evaluate cumulative impacts for all jurisdictional energy facilities. The Board is proposing a route/site scoring system that integrates CIA factors into the evaluations; See 980 CMR 15.00.; ~~and~~
- EEA's Site Suitability Criteria apply to LCTDIF or SCTDIF where Applicants propose to construct ~~them the Project~~ in a newly established public rights of way.

B. Superior Route/Site Not Overlooked

The Applicant must establish ~~that it a~~ developed and applied ~~a~~ reasonable set of criteria for identifying and evaluating alternative routes/sites in a manner that ensures that it has not overlooked or eliminated any routes/sites that, on balance, are clearly superior to the proposed route/site. The following steps describe a method, based on precedent, to achieve this objective:

- Identification of a Project Study Area: defines the geographic boundaries of where facilities could be located that would serve the identified Project need; and provides a wide range of siting options to consider.
- Development of a Universe of Routes: this step involves considering many possible routing options between two or more points (such as substations) that offer geographic diversity, and a wide variety of route characteristics such as distance, environmental impacts, construction challenges, community factors, cost, and reliability. In urban areas, the number of routing possibilities can be quite large, and various screening procedures can be used to down select to the more promising candidates.
- Identification of Candidate Routes: This step allows an Applicant to screen the Universe of Routes to reduce the number of options to a more manageable number of promising candidates. In this step, Applicants will typically consider

developing and supporting a noticed alternative route; and (c) has the potential to raise concern unnecessarily among potential abutters and others in the affected communities, the Board has indicated that a noticed alternative route may not be warranted in all cases. See e.g., Mid-Cape Main Replacement Project, EFSB 16-01, at 21 (2016).

early stakeholder input; and conduct pre-filing meetings with local and state regulatory agencies, and elected officials. Screening procedures include desktop and GIS analysis, document and plan review, site reconnaissance, general constructability assessments, cost considerations, deed research/property rights evaluations, evaluation of the presence of wetlands/waterways, traffic analyses, and a review of active and future planned developments.

- Route Scoring: Environmental, and Constructability factors, and CIA;
- Cost Analysis: A more detailed comparison of estimated cost for the Candidate Routes;
- Reliability Analysis: A more detailed evaluation of any differences in reliability of the LCTDIF or SCTDIF infrastructure related to the routing characteristics;
- Selection of a Preferred Route and Noticed Alternative Route: This step results in two remaining route choices for final evaluation based on relevant factors such as environmental impacts, reliability, cost, and cumulative impact considerations. May also include “route variations,” which are short alternative segments of a route intended to address potential issues such as land acquisition/access constraints and construction impediments; and
- Pre-Filing Consultation and Engagement: As part of 980 CMR 16.00, the Applicant should provide ample information about the process and substance of communications between the Applicant and the host community, its stakeholders, elected officials, and state and local agency representatives. The Board has found that contemporaneous meeting minutes are of great value in its review process. Applicants should share these minutes with meeting participants to ensure their accuracy.

X. PROPOSAL & ANALYSIS: -SITE SUITABILITY CRITERIA (CEIF)

A. General Requirements

In 980 CMR 15.00, the Board is establishing standards for applying Site Suitability Criteria developed by EEA. The Board was directed establish “standards for applying site suitability criteria developed [by EEA pursuant to M.G.L. c. 21A, § 30] to evaluate the social and environmental impacts of proposed clean energy infrastructure project sites include a mitigation hierarchy to be applied during the permitting process to avoid or minimize or, if impacts cannot be avoided or minimized, mitigate impacts of siting on the environment,

people and goals and objectives of the commonwealth for climate mitigation, carbon storage and sequestration, resilience, biodiversity and protection of natural and working lands to the extent practicable.” M.G.L. c. 164, § 69T. With respect to LCTDIF and SCTDIF, the applicability of the Site Suitability Criteria is limited to LCTDIF or SCTDIF in “newly established public rights of way.” M.G.L. c. 21A, § 30.

B. Applicant Instructions

CEIF Applicants must:

- Use the Site Suitability Criteria established by EEA to evaluate proposed sites and routes, as applicable. In the case of proposed LCTDIF and SCTDIF that are not in “newly established public rights of way,” there is no required evaluation for such facilities using the Site Suitability Criteria in such locations. ~~and~~
- Include a report summarizing an analysis of candidate routes and sites using the Site Suitability Criteria, and explain how, and to what degree, the Site Suitability Criteria influenced the Applicant’s selection of a preferred route/site versus alternative locations. Include a narrative on how the Site Suitability Criteria guided the Applicant’s Project development approach in terms of avoiding, minimizing, and mitigating impacts on the environment and people to the greatest extent possible.

XI. PROPOSAL & ANALYSIS: ~~ENVIRONMENTAL IMPACTS~~

~~The following is a description of the typical included environmental impacts associated with CEIF Projects. This list is not intended to be exhaustive; the Board encourages additional information where the Applicant deems appropriate or impacts are substantial. If any sections in this list are determined by the Applicant not to apply to a CEIF Project, the Applicant should identify the proposed impact and provide an explanation as to why the impact is not applicable.~~

~~E.A.~~ Land Use and Land-Based Resources

1. Project Site Locus

Provide a detailed description of the Project locus (reference above sections on [Project Description](#), [Project Site](#), and [Surrounding Area](#), as necessary), including:

- All zoning designations applicable to the Project site (e.g., districts, overlays) and corresponding compliance criteria (e.g., permitted uses; dimensional, setback, parking, ~~open, and open~~ space requirements).^{+,‡}
- The topography of the Project site(s) and surrounding area(s).^{+,‡} ~~and~~
- A qualitative description of the general character (e.g., urban, rural, industrial) of the surrounding land uses and ~~described~~ ^{describes} any anticipated challenges with integrating the Project accordingly. Specify any anticipated physical alteration(s) to surrounding land uses from Project construction, operations, or decommissioning, and how such alterations would contribute to the above challenges, if applicable.

2. Terrestrial Ecology

- Describe the Project's consistency with municipal or state land use planning documents and studies regarding: (1) economic development objectives; (2) adequacy of infrastructure; (3) open space impacts; and (4) compatibility with adjacent land uses.^{+,‡}
- Provide maps specifying the location and extent of any ecologically significant resource areas, e.g., areas of critical environmental concern ("ACECs"). For such areas, specify the delineation methodology (e.g., field delineation, mapping records, use of MassGIS data layers).^{+,‡}
- Describe the terrestrial ecology within and surrounding the Project site(s).^{+,‡}
- Provide a description of vegetation cover, and how vegetation is integrated with other defining topographical features – built and natural.^{+,‡}
- Describe any anticipated adverse ecological impacts of the Project (e.g., vegetation loss, soil destabilization, habitat (including rare species) destruction, and biodiversity loss).^{+,‡}
- Describe the following features of the Project site and surrounding area, as applicable:
 - Agricultural uses at present or past five years.^{+,‡}
 - Active forestry use.^{+,‡}
 - Article 97 land.^{+,‡} ~~and~~

- Conservation restrictions, preservation restrictions, agricultural preservation restrictions, or watershed preservation restrictions.
- If applicable, describe any impervious surface increase and resultant impact(s) on ~~urban~~ heat island conditions, including (?) anticipated impacts on public shade trees.
- Describe mitigation, best practices, or regulatory requirements (e.g., public shade tree requirements, avoidance of sensitive areas, establishment or continuation of wildlife corridors, preservation, rehabilitation, or generation of vegetation or other ecological features).
- Describe consultations to date and anticipated with the Massachusetts Historical Commission (“MHC”), and Natural Heritage and Endangered Species Program (“NHESP”), and local Native American tribes, respectively.

D.B. Rare Species

- Discuss presence of both common and rare species (including migratory species); overall biodiversity; ecological stressors, e.g., human activity, threats to habitat connectivity, disease prevalence, and presence of invasive species; and recent ecological history.
- Describe whether the Project site includes Estimated and/or Priority Habitat of State-Listed Rare Species. If so, specify.
- Describe whether the Project site falls within mapped rare species habitat in the current Massachusetts Natural Heritage Atlas. If so, provide the relevant page(s).
- Describe any past or intended future consultations with NHESP regarding the Project.

E.C. Historical/Archeological Resources

- ~~Does Identify if~~ the Project site includes any structure, site, or district listed in the State Register of Historic Places or the inventory of tribal, Historic, and Archaeological Assets of the Commonwealth. If so, ~~does identify if~~ the Project involves any demolition or destruction of any listed resources.

- Provide an unanticipated archaeological discoveries plan. The plan should outline procedures to be followed in the event of an unanticipated discovery of archaeological resources or human remains during construction activities for the Project.

F.D. Water Resources and Aquatic Ecology

1. Water Use and Wastewater

- Describe the Project's water use and wastewater generation. Describe the water source and disposal method of wastewater. Describe any designated classification to the water use (e.g., potable water, reclaimed water) and wastewater (e.g., sanitary, industrial).^{1,2} ~~and~~
- If the water source is municipal or regional supply, and/or would discharge to a wastewater facility, describe the total capacity of such water supply and/or wastewater facility. Describe the impact of the Project's water use and wastewater generation on such water supply and/or wastewater facility. If the water source and/or disposal method are something else, describe the impact and mitigation in the appropriate sub-sections below.

2. Description of Wetland Resources Areas

- Using maps and tables, describe the occurrence, location, and acreage, of the following surface water resources within or near the Project. Describe the delineation methodology of the water resources in both lists, including, but not limited to, the use of MassGIS data layers, mapping records, and field delineations. Provide the total sum of these areas by type in a table.
 - Surface watercourses, including but not limited to streams, rivers, ponds, and lakes.^{1,2}
 - Public waterways or tidelands, and land under Chapter 91 jurisdiction.^{1,2}
 - Waters of the United States (per 40 CFR Part 120).^{1,2}
 - Outstanding Resource Water ("ORW").^{1,2}
 - Wild and Scenic River.^{1,2}

- Jurisdictional federal, state, and locally regulated wetlands and adjacent areas (e.g., wetland buffers and setbacks).^{+,‡}
 - Vernal pools.^{+,‡}
 - Other local water resources, wetland resources, conservation and protection zoning districts or overlays.^{+,‡}
 - Coastal resource areas.^{+,‡}
 - Land Subject to Coastal Storm Flowage (“LSCSF”) and Land Subject to Flooding (“LSF”).^{+,‡}
 - Currently impaired water, specify by pollutants.^{+,‡} ~~and~~
 - Any other jurisdictional waters and resource areas.
- Using maps and tables, describe the occurrence location of the following subsurface water resources within or near the Project. Describe the delineation methodology of the water resources in both lists, which could include, but is not limited to, the use of MassGIS data layers, mapping records, and field delineations. Provide the total sum of these areas by type in a table. Table should include the following elements:
 - Notable underground aquifers, especially those used as public water sources.^{+,‡}
 - Public water wellheads and protection areas.^{+,‡}
 - Major water discharge and drainage outfalls.^{+,‡}
 - Private water wells and protection areas.^{+,‡} ~~and~~
 - Private septic systems including leech fields.

3. Water Discharges and Impacts on Water Quality

- For any water discharge not to a wastewater facility, describe the purpose, amount, and timing of the discharges, as well as any pollutants involved.^{+,‡}
- Describe any proposed dewatering operations on the Project site (e.g., necessary for Project construction), associated impacts on water quality, and corresponding mitigation.^{+,‡}

- Describe any changes that the Project would make to stormwater runoff and erosion at the Project site, and potential impacts on surrounding properties and waters based on the Massachusetts Stormwater Handbook, ~~and~~
- Describe any proposed mitigation, including the stormwater infrastructure. These descriptions may be presented and discussed in the context of a Stormwater Management and Erosion Control Plan.

4. Water Withdrawal and Extraction

- Describe any proposed water withdrawal and extraction for the Project from surface water or groundwater, including the purpose, amount, and timing of the withdrawals. ~~and~~
- Describe any proposed water withdrawal and extraction for the Project during emergency events and how this would be different from standard operations.
- Describe the impacts that the proposed water withdrawal and extraction would have on the source waters, including any impacts that would lead to depletion of water resources, and/or impairment of water quality and classified water use.

5. Wetlands and Waterbodies

- Provide the delineation of all wetland resource areas on and near the Project site. Include a description of the method(s) used to identify wetland presence and boundaries within the Project area and the credentials of the person who completed the delineation.
- Discuss the existing functional values of the wetlands present in the area of the Project site. Functional values include but are not limited to floristic diversity, fish and wildlife habitat, flood storage, protection of public and private water supply, groundwater discharge and recharge, public use, prevention of pollution, storm damage prevention, etc. Discuss how the Project may impact existing functional values of wetlands.
- Describe any direct impacts such as alterations and impediments, including dredging, that the Project would have on any waterbodies, including but not limited to watercourses, wetlands, and the ocean. Describe areas of waterbodies the Project would affect, as grouped in the following categories:

- Wetlands and their resource areas and adjacent areas^{1,2};
- Surface watercourses, including but not limited to streams, rivers, ponds, and lakes^{1,2};
- Coastal areas including tidelands^{1,2};
- Ocean including federal and state waters and the Outer Continental Shelf (“OCS”) ^{1,2};
- Estimate the extent and type of impacts that the Project will have on wetland resources, and indicate whether the impacts are temporary or permanent. If proposing any offsite mitigation such as enhancement to existing wetlands, replication of wetlands, or a mitigation fund, provide the details including the mitigation location(s).
- Provide the methods to be used for avoiding, minimizing, and mitigating construction impacts in and near wetlands. This discussion should include, but is not limited to, how wetland impact was first avoided then minimized by Project design, shifting the Project boundary, relocating structures and/or fill outside of wetland, minimizing construction through wetlands, by installation methods (i.e., directional bore versus open-cut trenching, soil segregation during trenching, etc.), equipment crossing methods (i.e. use of construction matting, frozen ground conditions, etc.), sediment and erosion controls, invasive species protocols for equipment, etc.

6. Underwater Archeological Resources

For Projects that have components that are located underwater or offshore, provide the following:

- Describe underwater archaeological resources at or near the Project site, by type if applicable^{1,2} and
- Provide a summary of and attach to the Application any relevant archeological surveys and studies.

7. Aquatic Ecology

- Describe the aquatic ecology within and near the Project, including the type of aquatic ecosystems, presence of both common and rare wildlife, overall biodiversity, recent ecological history if applicable, and ecological health (e.g., degradation from human activities, habitat connectivity, and invasive species).^{+,‡}
- Provide maps and sums of these areas by types in a table:
 - Rare wetland wildlife habitat.^{+,‡}
 - Wild and Scenic River.^{+,‡}
 - Marine protected areas, including ocean sanctuaries, wildlife refuges, and estuarine research reserves.^{+,‡, and}
 - Waterbodies with the presence of fish runs and shell fishing, if not covered above.
- Describe impacts associated with the Project on the following, and corresponding mitigation:
 - General health and condition of the aquatic ecology.^{+,‡}
 - Ecological health of resource areas such as tidelands.^{+,‡}
 - Rare species and habitat including migratory species with a local presence, by species.^{+,‡}
 - Habitat connectivity (e.g., fragmentation of habitats).^{+,‡}
 - Fishery.^{+,‡, and}
 - Wildlife-based recreation.

G.E. Transportation

1. Disruption and Congestion of Road

- Describe transportation corridors in the Project area with maps and information gathered from MassGIS data layers, aerial photography, field reconnaissance, mapping records, traffic data collection etc.^{+,‡}
- Describe the MassDOT classification of roads (i.e., Limited Access Highway, Multi- Lane Highway, Major Road, and Minor Street), and any other characteristics pertinent to the analysis of impacts on transportation (e.g., road

- width, number, and direction of lanes); on-street parking; dedicated bike lanes; sidewalks^{+,†}
- Include any traffic studies and traffic management plans as required by applicable permits^{+,†}
 - Provide a description of the pre-construction adjacent roadways' characteristics in the vicinity of the proposed Project site including:
 - Existing data on vehicle traffic and accidents on surrounding roads^{+,†}
 - A review of non-rail transit facilities and routes, including areas of school bus service^{+,†}
 - Access routes to and from the Project site for police, fire, ambulance and other emergency vehicles^{+,†} and
 - Available load bearing and structural rating information for construction equipment to access the Project site (including bridges and culverts).
 - Provide for each major phase of construction, and for the operation phase, an estimate of the number and frequency of vehicle trips, including an estimation of daily trips (identifying whether trips will occur during day or night) by size, weight and type of vehicle^{+,†}
 - Provide for major cut or fill activity (spoil removal or deposition at the Project site and affected interconnection areas) a separate estimate of the number and frequency of vehicle trips. Describe approach and departure routes, by size and type of vehicle^{+,†}
 - Identify approach and departure routes to and from the Project site for construction workers and employees of the facility^{+,†}
 - Specify expected road closures and timelines as well as alternative routes^{+,†} and
 - Describe overlap with other construction projects in proximity including but not limited to municipal public works departments and MassDOT.

2. Public Transportation

- Describe nearby public transportation operations and public access. Describe how entrances and exits will remain accessible for transit stations, including ~~for~~including bus routes and stops^{+,†} and

- Discuss initiatives to encourage or provide shuttling, carpooling, or public transportation options for employees.

3. Cyclists and Pedestrians

- During construction, describe if the Project would result in restricted access to cyclists and pedestrians, and how the Applicant will manage these restrictions. ⁺_{2,3}
~~and~~
- Highlight any co-benefits of the Project for pedestrian or bicycle infrastructure.

4. Parking

- Describe the Project's parking demand and supply, during Project construction and operation. ⁺₂
- Describe temporary parking to be used during Project construction and operation. ⁺₂ ~~and~~
- Describe disruption to both on-street and off-street parking during Project construction.

5. Marine Traffic and Navigation

- Provide any U.S. Coast Guard authorizations as necessary including proposed private aid to navigation (e.g., buoys). ⁺₂
- Describe any use of watercraft for the Project, including any expected bulk or large items to be delivered by barge or specialty vessel. ⁺₂ ~~and~~
- Provide for each major phase of construction, and for the operation phase, an estimate of the number and frequency of vessel trips (identifying whether trips will occur during day or night) by size, weight and type of vehicle.

6. Air Traffic

- Describe use of aircraft during the Project, such as construction helicopters. ⁺₂

- Describe any Federal Aviation Agency (“FAA”) regulations or guidelines that must be adhered to such as a notice of proposed construction to the administrator of the FAA. ~~and~~
- Include impacts on military training and operations in the national airspace system and special use airspace designated by the FAA.

H.F. Air Quality

1. General Requirements

- Describe air quality impacts of the Project and compliance with air quality requirements. ~~and~~
- Describe air quality impacts to sensitive receptors and Burdened Areas in the Project area. ~~and~~
- As part of a Construction Management Plan for the Project, provide
 - Baseline characterization of existing air quality with information on types of existing pollutants emitted, existing ambient concentrations of pollutants and their sources. ~~and~~
 - Air Quality Modeling based on federal and state recommended modeling approaches, if required by MassDEP or other regulatory authorities. ~~and~~
- If a MassDEP air quality permit would otherwise be required, describe how Project emissions will conform with the National Ambient Air Quality Standards (“NAAQS”), as applicable. ~~and~~
- Describe whether the Project is required to perform a MassDEP CIA for air emissions (per 310 CMR 7.02(14)). ~~and~~
- Describe fugitive dust level monitoring and mitigation including but not be limited to onsite dust control measures such as installing stabilized construction entrances/exits (using stone aprons, tracking pads, etc.) at road access points to reduce tracking of soil onto public roadways or adjacent properties, limiting the amount of bare soil exposed at one time, watering, surface roughening, wind barriers and covers to suppress dust generation during construction as well as precautions during transport/handling of construction materials, land infills and such that can cause fugitive dust impacts.

2. Standard Mitigation Measures

For onshore construction and operational impacts, wherever applicable:

- Describe how the Project meets applicable regulations and air quality operational requirements including but not limited to:
 - MassDEP Air Quality Regulations at 310 CMR 7.10 (1), Air Quality Approval Plan and 310 CMR 7.72, Sulfur Hexafluoride Emissions from Gas-Insulated Switchgear.^{+,‡}
 - The state's anti-idling law, M.G.L. c. 90, §16A, during the construction and operational phases of the Project, including the installation of on-site anti-idling signage.^{+,‡}
 - U.S. Environmental Protection Agency's ("EPA") Nonroad Diesel Rule aimed at reducing air emissions from diesel-powered construction equipment.^{+,‡}
 - EPA Tier 4 emission requirements.^{+,‡}
 - Use of electric-powered construction equipment and vehicles.^{+,‡}
 - New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants (NESHAPS).^{+,‡} and
 - The Dust Control measures outlined in the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers, and Municipal Officials for soil stockpile management.

For offshore construction and operational impacts, wherever applicable:

- Describe any Bureau of Ocean Energy Management ("BOEM") and Outer Continental Shelf ("OCS") air permit requirements that apply to the Project.^{+,‡}
- For OCS sources, describe how the Project complies with the New Source Performance Standards and the National Emissions Standards for Hazardous Air.^{+,‡}
- Describe the choice of emissions estimation method used that prioritizes the use of BOEM and US EPA recommended methods.^{+,‡} and

- Describe how the Project would comply with requirements on Annex VI of the International Maritime Organization’s International Convention for the Prevention of Pollution from Ships (“MARPOL”) treaty requirements^{1,2} and
- Use of shore-to-ship electric power for marine construction activities in lieu of diesel-powered construction equipment.

1.G. Climate Mitigation and Resiliency

1. Greenhouse Gas Emissions

- Provide a greenhouse gas inventory of the Project utilizing the MEPA Greenhouse Gas Policy and Protocol, and/or other analysis framework, including direct and indirect emissions sources where applicable based on technology^{1,2}
- Describe any steps taken to minimize emissions sources compared to 1990 standards specific to the construction and operation of the Project. Describe any mitigation techniques through measures such as carbon offsetting or sequestration. The Applicant may describe and credit any greenhouse gas emissions mitigated against Project alternatives, including the no-built alternative, as mitigation^{1,2} and
- Given the inventory and mitigation above, describe how the Applicant has considered foreseeable long-term climate change impacts, including additional greenhouse gas or other pollutant emissions known to have negative health impacts, predicted sea level rise, flooding and any other disproportionate adverse effects on communities in a specific geographical area/within or near the Project area.

2. Climate Resiliency

- Provide climate vulnerabilities of the Project, if applicable, including vulnerabilities from projected sea level rise, extreme temperature, humidity, flooding, severe weather events, wildfires, and other climate-related hazards in the Project area. Utilize state and federal geospatial data from the RMA2 Climate Resilience Design Standards Tool, the NOAA Climate Mapping for Resilience and Adaptation (“CMRA”) tool, or similar^{1,2}

- Consider high (RCP 8.5) and low (RCP 4.5) emissions climate change scenarios in the assessment of Project vulnerabilities if utilizing the CMRA tool~~., and~~
- Include relevant figures, maps, and metrics outlining the site-specific risks extending to at least 2070~~.,~~
- Provide a risk assessment for the Project as a whole and major components of the Project. Describe any proposed adaptation techniques to address these vulnerabilities, if relevant, and the timeline for implementation~~., and~~
- Describe how the Project has taken measures to adapt to climate change for all of the climate parameters analyzed in the RMA Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat).

J.H. Public Health, Safety and Security

- Describe how the Project would comply with all applicable public health and safety regulations, standards and codes at the federal, state, regional, and local levels during the site development, design, construction, and operation phases of the Project~~.,~~
- Describe all applicable performance testing standards, performance testing results, and risks associated with ~~the energy~~energy transmission, generation, and storage technologies on a Project and how the choice of technologies minimizes performance risks, promotes and maintains public safety~~., and~~
- Provide a roadmap for engagement with the local planning department, fire department, advisory bodies, and first responders to inform them about the Project, understand their safety needs, and receive timely local input on the design and construction phases of the Project (e.g., as part of the COP). The COP must also describe public health and safety education as well as training opportunities the Applicant will provide to ensure safe construction and operations.

1. Design and Construction Safety

- Provide all building codes, technical performance and safety standards as well as structural design standards that apply to the Project site in the development, design, construction, and operation phases.^{+,}
- Describe how the proposed Project would be in conformance with these codes, regulations, and standards to promote and maintain public safety.^{+,} ~~and~~
- Describe how the choice of construction sites/routes, staging areas, construction schedules/constructions hours would avoid or minimize public inconvenience and ensure public safety during and outside construction hours.

2. Public Health

- Provide all applicable public health policies and programs at the federal, state, regional, and local levels and describe how the Project would conform to them.^{+,} ~~and~~
- Describe public health concerns that already exist in the Project area and describe how the Project will alleviate or at the least avoid further exacerbation of these concerns through the design, construction, operation, and decommissioning phases of the Project.

3. Site Safety and Security

- Identify all applicable daytime, nighttime, and emergency lighting standards that apply to the Project and describe how the proposed lighting would comply with these requirements.^{+,}
- Describe how the Project considered Dark Sky standards.^{+,}
- Describe the site safety and security arrangements in the case of unmanned and remotely monitored facilities, including but not limited to 24/7 security camera monitoring, automatic and manual system shutdowns, fire suppression system activation, and alarm/emergency notification to the local fire department in the case of Project emergencies.^{+,}

- Describe how stormwater management systems convey and collect runoff from fire suppression activities such that any potential pollutants would not be discharged directly into the Project site, local stormwater system, or natural water bodies. ⁺_{2,3}
- Identify local codes and standards that apply to site access and fencing and describe how the Project would conform with these requirements. ⁺_{2,3}
- Describe the consultation process with the local planning authority, the fire department, advisory committees, and the public in designing the Project's perimeter fence, including the fencing material, fence façade treatments, dimensions, determining setbacks, and signage installations on and around the fence. ⁺_{2,3}
- Describe how electrical structures are clearly marked with warning signs to alert the public to potential hazards. ⁺_{2,3}
- Identify all cybersecurity requirements that apply to the Project and describe how the Project will conform with these requirements. ⁺_{2,3}
- Describe how access restrictions and identity verification mechanisms for personnel would provide protection against security risks. ⁺_{2,3}
- In the case of Project sites that have egress to public roadways including highways, provide all egress safety design standards, traffic safety permits, and regulations that apply to the Project and describe how the Project would meet these requirements. Describe how the design of such egress meets these requirements, supplementing such description with road safety audits, crash analysis reports, sight distance determinations, and other analyses that apply. ⁺_{2,3}
and
- Provide all applicable height and clearance standards for Project components/structures and describe how the Project conforms with these requirements to ensure public safety during construction, operation, maintenance, and decommissioning.

4. Occupational Safety

Describe all occupational safety standards, programs, and regulations that apply to the Project at the federal, state, regional, and local levels, including the Occupational Safety and Health Administration (“OSHA”) and Massachusetts Department of Labor standards, and how the Applicant proposes to comply with them.

5. Fire Safety

- Identify the following:
 - All international, national, and state level fire safety standards, codes, and best practices that apply to the Project.^{+,}
 - All applicable technology and performance standards to promote and maintain fire safety, both to the public and on-site personnel.^{+,}
 - Requirements of local permits, ordinances, and standards on the Project that promote and maintain fire safety.^{+, and}
 - All applicable codes, regulations, and standards that are being updated at the time of filing and describe the nature of updates or new provisions that the Applicant would incorporate into the Project.^{+,}
- Wherever applicable, describe how the Project would be in conformance with these standards, local requirements, and local permits and codes to prevent, mitigate, and manage incidents of fire within the Project site or in the vicinity of the Project site.^{+, and}
- Describe how fire safety considerations have been incorporated into determining site size and site design on the Project.

6. Hazard Mitigation and Disaster Preparedness

- Describe any proposed hazard mitigation and disaster preparedness measures, such as an Emergency Response Plan and Spill Prevention Control and Countermeasure Plan and provide such plans.^{+, and}
- Describe post-incident emergency maintenance procedures as part of the Project’s operation and maintenance plan to restore site conditions and safe facility operations following a fire event, hazard, or disaster.

K-1. Non-Hazardous Waste and Hazardous Materials

1. Non-Hazardous Waste

Detail any non-hazardous waste types that would be generated by the Project, and for each type specify anticipated protocols for handling, transport, processing, disposal, and recycling, including, if applicable:

- Protocols for ensuring that waste is not co-mingled with hazardous waste⁺_{2,9}
- All hazardous waste transport haulers licensed per MassDEP⁺_{2,9}
- Disposal or processing facilities for each waste stream (e.g., recycling, composting, municipal solid waste landfill, or transfer station)⁺_{2,9}
- Documentation of compliance with 310 CMR 19.00⁺_{2,9}
- Recycling and waste diversion strategies, including estimated recycling/diversion rate(s); use of LEED or Envision construction waste tracking, if applicable; any plans to reuse materials onsite; and compliance with local waste diversion bylaws, if applicable⁺_{2,9} and
- Data maintenance protocols for audits.

2. Hazardous Materials and Waste

Provide a Hazardous Materials and Waste Management Plan detailing:

- Protocols and regulatory requirements for encountering hazardous materials and contaminated sites⁺_{2,9}
- Hazardous waste planned for use or storage onsite during each Project phase, e.g., battery chemistries, oils and coolants, transformer fluids, cleaning solvents, adhesives, antifreeze, diesel. For each material, provide quantities, storage methods, and safety data sheets, and address compliance with the Massachusetts Toxics Use Reduction Act (“TURA”), if applicable⁺_{2,9}
- Hazardous material types that may be generated by the Project (e.g., spent batteries, electrolyte contaminated soil, fire-damaged equipment) and their respective classifications per the Federal Resource Conservation and Recovery Act (“RCRA”) regulations (40 CFR 261) and Massachusetts Hazardous Waste Regulations (310 CMR 30.000)⁺_{2,9}

- Materials/waste storage locations and containment designs (e.g., secondary containment, berms, fire-rated rooms), maximum onsite storage durations and quantities, labeling and signage protocols, and security measures to prevent unauthorized access or tampering.†
- Hazardous waste manifests and chain-of-custody and cradle-to-grave documentation, if applicable.†and
- For problems/emergencies: emergency contact information, government agencies that would be informed, and a public engagement strategy.

4.J. Decommissioning and Site Restoration

1. Useful Life

Describe the designed and anticipated useful life of the Project and every major Project component, including the following:

- Thresholds for decommissioning (e.g., end of life, structural conditions, use hours, performance degradation).†
- Planned major maintenance and overhaul events.†
- Opportunities for extension of useful life.†and
- Considerations for premature decommissioning.

2. Plan for Decommissioning and Site Restoration

Describe plans for Project decommissioning and subsequent site restoration, if any, including the following information:

- Decommission and deconstruction procedures.†
- Disposal of post-decommissioned waste, including any hazardous waste and recycling.†
- Site clean-up and remediation, if anticipated.†
- Restoration of grade and ~~top soil~~topsoil, including revegetation.†
- Stormwater management and erosion control.†
- Continued maintenance of visual screening and buffer, if applicable.†

- Post-decommission land use and opportunities for redevelopment^{1,2} and
- Contingency plan for premature decommissioning.

3. Cost and Financial Surety

Describe the anticipated cost of decommissioning and site restoration, including the following information:

- Total cost of decommissioning and site restoration^{1,2}
- Breakdown of cost by major cost items^{1,2}
- Calculations of the cost estimates^{1,2}
- Methodologies of the above calculations^{1,2} and
- A reasonable surety amount to guarantee proper decommissioning and site restoration. If the Applicant considers the surety amount unnecessary, provide an explanation.

M.K. Magnetic Fields

1. Baseline and Modeled Magnetic Fields Levels

- Describe the magnetic fields associated with the Project using maps, tables, and figures, including the following information:
 - Existing/baseline magnetic field levels^{1,2}
 - Source(s) of new magnetic fields^{1,2} and
 - Modeled average/sustained changes in magnetic field levels, including modeled maximum levels, during Project operation.
- Provide modeled magnetic field levels in the following contexts:
 - At a reasonable range of distances, heights, and depths away from the source^{1,2}
 - At average loading or capacity and at maximum loading or capacity^{1,2} and
 - At nearby residences, sensitive receptors, and at the edges of the Project site.

- Describe methodologies used, assumptions and data sources. Note any mitigation (e.g., configuration, shielding) incorporated in the modeling of magnetic field levels above.
- Append the following or include as figures²
 - Isoline diagrams of existing and modeled magnetic field levels across the Project site including the property line of adjacent properties and structures² and
 - For any proposed transmission lines, distribution lines, or other linear project components that could be a significant source of magnetic fields, cross-section profiles of magnetic field levels.
- In Applications that involve any other types of notable radiation (e.g., microwave, ionizing), describe the basic characteristics of such radiation and provide modeled radiation levels and other information similar to the requirements for magnetic fields above.

2. Impacts

- Describe the impacts of electric and magnetic fields, as well as of any other types of concerning radiation, associated with the Project on the following:
 - Human health²
 - Health of domestic animals and agricultural livestock²
 - Health of wildlife, particularly any rare species identified within or near the Project site (e.g., Magnet-sensitive fish species, bats)² and
 - Plans for addressing public concerns during construction and operation of the Project.
- Discuss the above in reference to the following:
 - The most recent exposure limits and guidance on electric and magnetic fields published by authoritative subject-matter organizations such as the World Health Organization (“WHO”); International Commission on Non-Ionizing Radiation Protection (“ICNIRP”); International Committee on Electromagnetic Safety (“ICES”) – part of Institute of Electrical and Electronics Engineers (“IEEE”); and American Conference of

Governmental and Industrial Hygienists (“ACGIH”), or any other relevant peer-reviewed research~~., and~~

- Describe any available low-cost/no-cost measures that would minimize magnetic fields along transmission ROWs and elsewhere. Such measures may include, but are not limited to the following:
 - Increasing distance between the source and abutting properties~~., and~~
 - Using higher voltage transmission lines~~., and~~
 - Putting conductors close to each other and optimizing conductor arrangement to maximize magnetic field cancellation effects~~., and~~
 - Installing ferromagnetic shielding~~., and~~
 - Inducing active or passive parallel currents.

N.L. Noise and Vibrations

1. Description of Noise

- Describe the sound producing sources during Project construction and operation. Include expected times when noise will be produced during construction work, also list sound producing equipment and associated sound levels in decibels A-Weighted (“dBA”) ~~., and~~
- Include a study showing existing sound levels, as well as a model simulation estimating operational sound results. At a minimum, the sound study should include:
 - Maximum sound levels produced during different times of day and at different times of the year~~., and~~
 - A map of the sound modeling study area showing the location of sensitive receptors within a one-mile radius in relation to the proposed locations of all noise sources~~., and~~
 - Ambient pre-construction baseline sound conditions using L_{90} (i.e., A-weighted sound level that ~~is exceeded~~ exceeds 90% of the time measured during equipment operating hours) ~~., and~~
 - Future sound levels after construction of the Project including predicted dBA sound levels using computer-modeled sound projections.

- In addition, the sound study should consider the following:
 - Noise impacts during both “leaf on” and “leaf off” conditions~~., and~~
 - Exclude data collected during hours with rain or snow, as noted during data collection~~., and~~
 - A seven day-long period of measurements.

2. Noise Impacts on Humans

- Include the following information:
 - The noisiest activities during construction and the sound levels of the major sound-generating pieces of equipment~~., and~~
 - Equipment which could result in permanent noise impacts (e.g., exhaust fans, transformers, high voltage transmission lines)~~., and~~
 - Sound information from the manufacturers, if available, including transformers and any other relevant sound sources~~., and~~
 - Compliance with the MassDEP noise policy for Project operation (i.e., maximum 10 dBA increase over baseline conditions and pure tone limits)~~., and~~
 - Sound mitigation strategies that the Applicant could use during noisy construction activities (e.g., sound barriers)~~., and~~
 - Complaint procedures/construction activity notification protocols specific to noise.

3. Vibrations

- Describe any blasting, underground construction (e.g., Horizontal Directional Drilling), or other work which could cause intense vibrations that may impact the integrity of nearby structures~~., and~~
- Describe the use of critical grade silencers, enclosures, or other strategies where practicable, on continuously operating equipment such as compressors and generators for noise reduction.

4. Noise and Vibrations Impacts on Wildlife

- Describe impacts on wildlife during operations that include noise and vibrations, especially in areas of natural habitat. Consider ~~d~~.
- Different Project technologies (i.e., wind, solar, battery) may require solutions to unique environmental concerns based on location and technology type and scenarios.

6.M. Visual

1. Visual Assessment

- Describe the visual impacts of the Project. Include representative front, side, and rear simulations, and describe current and anticipated visual conditions. Provide the following detail:
 - Visual character of the existing area~~.~~;
 - General nature and degree of visual change expected from Project construction and operations~~.~~;
 - Anticipated visibility of the Project, including effects from Project operations, e.g., shading, lighting, glare, shadow flicker~~.~~; ~~and~~
 - Visibility of any proposed above-ground interconnections and roads.
- Provide viewshed maps depicting views of the Project by sensitive receptors, e.g., views from cultural, historic, scenic, and recreational sites/areas; transportation corridors; public and private vantage points; and areas of local, regional, or statewide concern. Develop the maps to:
 - Depict any sensitive views beyond the study area, as necessary~~.~~;
 - Depict line-of-sight profiles for all sensitive receptor views~~.~~;
 - Illustrate visual screening and permeability conditions integral to the profiles~~.~~; ~~and~~
 - Detail all quantitative and qualitative data sources and baselines used in profile development, e.g., topography and vegetation;

elevation of Project structures; distance zone - foreground, midground, and background; consultation with local officials and community members.

2. Light Pollution

Describe any light emitted by the Project during operations. Detail lighting levels at the edges of the Project site(s); any lighting impacts on adjacent properties, including on wildlife; and any proposed mitigation (e.g., light shrouds, downward facing lighting).

P.N. Other Environmental Impacts

Describe any other environmental impacts associated with the Project not covered by any sections above, as well as corresponding mitigation.

XII. PROPOSAL & ANALYSIS: PROJECT COST FOR LCTDIF AND SCTDIF

For LCTDIF and SCTDIF Projects:

- Describe the Project cost including the following:
 - Capital cost of the Project, total cost and breakdown by Project components.
 - Annual operating and maintenance cost, total cost and breakdown by major cost item.
 - Net Present Value cost estimate for the Project over its useful life.
- Describe cost escalation contingencies, or the lack thereof, in the estimated costs. Describe risks to the costs from foreseeable trends of inflation, economic conditions, materials costs and supply chain shortage, labor costs, etc., and mitigation to these.
- Identify costs that would be recovered regionally, and those costs that would be recovered locally.
- Describe the percentage of utility-proposed Project costs would be borne by ratepayers, if any. Describe how the Project would change the monthly utility bill

for an average residential customer, with one example from a summer month and another from a winter month ~~h.h. and~~

- Describe sources of Project funding other than cost recovery from ratepayers, if applicable.

~~XII~~.XIII. PROPOSAL & ANALYSIS: - RELIABILITY

A. Grid Reliability

- Describe the reliability benefits or impacts on the Massachusetts and regional energy transmission system, as well as any applicable local energy transmission or distribution systems, from the Project.
- Describe any proposed mitigation that would enhance benefits or minimize impacts on such systems.

B. Project System Reliability

- Describe the designed and anticipated reliability of the Project as a whole, over its useful life.
- Describe any foreseeable reliability risks. Describe any proposed mitigation to such risks and major maintenance or overhaul efforts planned or anticipated.

C. Project Component Reliability

- Describe the designed and anticipated reliability of each major component of the Project, if applicable, over the component's useful life.
- Describe any foreseeable reliability risks. Describe any proposed mitigation to such risks and major maintenance or overhaul efforts planned or anticipated.

~~XII~~.XIV. PROPOSAL & ANALYSIS: - POLICIES OF THE COMMONWEALTH

M.G.L. c. 164, § 69H establishes a set of expanded policy requirements for consideration by the Board when reviewing CEIF. Specifically, the Board must: “ensure that large clean energy infrastructure facilities, small clean energy infrastructure facilities,

facilities and oil facilities are, to the extent practicable, in compliance with energy, environmental, land use, labor, economic justice, environmental justice and equity and public health and safety policies of the commonwealth, its subdivisions and its municipalities.” See 980 CMR 13.03.

- Describe how the Project would comply with the policies of the Commonwealth as identified in M.G.L. c. 164, § 69H.

~~XIV~~:XV. DEFINITIONS/ACRONYMS [TBD]

“Facility Boundary” means the outermost boundary of the Project site (such as a Project building or other structures, or the outermost areas of construction activity or disturbance), or the Project fence line. For linear projects, or project components, such as transmission lines or pipelines, the Facility Boundary shall be the edge of the right-of-way.

“Major Project Component” means a major sub-part of a proposed Project, which could be one facility in a Project that consists of multiple facilities (e.g., one of two proposed new substations), an ancillary facility (e.g., a new transmission line proposed between two new substations), a major work component involving a facility (e.g., proposed upgrade to an existing substation), or a major standalone component of the Project (e.g., an major off-site mitigation project).

“Sensitive Receptors” means, existing (or in active development) facilities that are particularly affected by noise, pollutants, and other environmental and construction-related impacts, including: (1) healthcare facilities; (2) elder care facilities including nursing homes; (3) education facilities; (4) licensed daycare facilities; (5) cemeteries; (6) places of worship; (7) district courts; (8) police stations; (9) fire stations; and (10) other locations which provide essential services to the public.

“Residences” means existing residential properties, or the location of such facilities that are in active development.

“Project” means the proposed Project as a whole, and includes all plant, property and equipment and related construction activities for which the Applicant seeks EFSB approval.

“Project-adjacent elements” include related facilities and construction activities that do not require EFSB approval but are undertaken by the Project Applicant and/or

others in concert with the Project, whether prior to, concurrently with, or after Project Construction.

“Project Site” means the actual physical location(s) of all Project components.

“Project Fenceline Boundaries” means the outer boundaries of a Project site demarcated by the edge of a right of way or fenced areas.

A “Project Impact Area” means the geographic area(s) that are estimated to be directly affected by the Project, including its environmental impacts. At a minimum, Applicants must use the Specific Geographic Areas, defined in 980 CMR 15.00 (as applicable to the Project components), as the basis for the Project Impact Area.

See 980 CMR 13.01(4) for additional definitions.

~~XV~~XVI. ATTACHMENT 1: COMMON CONDITIONS [TBD]

The purpose of Attachment 1: Common Conditions is to define conditions that would attach to an EFSB Consolidated Permit through Board approval, 980 CMR 13.00, or Constructive Approval, 980 CMR 17.00.

~~Note: EFSB and DOER are collaborating on developing a comprehensive database of common conditions applicable to local, regional, and state PEAs, including the Board.~~

~~The conditions in the database will be retrieved by an automated sorting function by technology type (e.g. LCTDIF or SCTDIF, BESS, generation), the size of the Project (Large or Small) and the type of Consolidated Permit sought (Consolidated Permit, Consolidated State Permit, or Consolidated Local Permit). The Common Conditions will also specify the relevant PEA permit under which the conditions would be enforced, once issued by the Board, or Local Government.~~

~~XVI.~~XVII. ATTACHMENT 2: UNIFORM SET OF BASELINE HEALTH, SAFETY, ENVIRONMENTAL
AND OTHER STANDARDS [TBD]

The purpose of Attachment 2: Uniform Set ~~Of~~ Baseline Health Safety, Environmental and Other Standards (“Uniform Standards”) is to define the permitting standards applicable to an EFSB Consolidated Permit through Board approval, 980 CMR 13.00, or Constructive Approval, 980 CMR 17.00. The Applicant would be required to consult the Uniform Standards in preparing its Application, based on type of CEIF Project, size, and the specific PEA permits requested as part of the Consolidated Permit.

~~Note: EFSB and DOER are collaborating on developing a comprehensive database of Uniform Standards applicable to local, regional, and state PEAs, including the Board.~~

~~The Uniform Standards in the database will be retrieved by an automated sorting function by technology type (e.g LGTDIF or SCTDIF, BESS, generation), the size of the Project (Large or Small) and the type of Consolidated Permit sought (Consolidated Permit, Consolidated State Permit, or Consolidated Local Permit). The Uniform Standards will also specify the relevant PEA permit(s) or under which the Uniform Standards would apply and be enforced, once a permit is issued by the Board, or Local Government.~~

~~XVII.~~XVIII. ATTACHMENT 3: APPLICATION COMPLETENESS DETERMINATION CHECKLIST

[TBD]