980 CMR 15.00 CIA REPORT TEMPLATE

PROJECT NAME: Enter Project name here
DOCKET NUMBER: Enter docket number here
APPLICANT: Enter Applicant name here

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CIA Report Template

Overview: The 2024 Climate Act requires that the Siting Board develop standards for applying the cumulative impact analysis standard and guidelines developed by the Executive Office of Energy and Environmental Affairs Office of Environmental Justice and Equity to apply to all jurisdictional projects submitted to the Siting Board on or after July 1, 2026. St. 2024, c. 239, §§ 74, 132, 139. 980 CMR 15.01(2) requires the submission of a CIA Report for every Application submitted to the Energy Facilities Siting Board for a Clean Energy Infrastructure Facility (M.G.L. c. 164, §§ 69T, 69U, 69V) and to every Petition to Construct a Facility (M.G.L. c. 164, § 69J) or a Generating Facility (M.G.L. c. 164, § 69J¼). 980 CMR 15.00 also applies to every project change that triggers the EFSB's jurisdiction. This document is the CIA Report Template and Instructions to which 980 CMR 15.01(6) refers. Once completed and submitted, this document is the CIA Report required by 980 CMR 15.09. This document relies heavily upon the definitions in 980 CMR 15.02: *Definitions*.

I. IDENTIFICATION OF THE PROJECT SPECIFIC GEOGRAPHICAL AREA(S)

Overview: In this section, the Applicant determines the Specific Geographical Areas ("SGAs") for the Proposed Site or Route, the Noticed Alternative Site or Route, if any, and the Noticed Variation Site or Route, if any (collectively, "Noticed Site or Route"). The SGA for a site or route is the area surrounding that site or route, as specified by 980 CMR 15.05(1): *Identification of the Project SGA*. The SGA defines the geographical area that the CIA Report examines.

***General Instructions**: Follow the guidance in italicized text for each of the sections below. If your Project proposes more than one site or route, you will need to create additional tables. In general, you may modify tables in this CIA Report (table numbers, heading names, heading orientation, number of columns, colors, etc.) to suit your Project. A sample completed version of this form is available here: _____. [SAMPLE LINK]. You may email sitingboard.filing@mass.gov if there are problems with this template.*

A. Sites or Routes

Instruction: *In Table 1, briefly describe each Noticed Site or Route the Applicant proposes for the Project and the location in the Application or Petition of the full description of such site or route.*

Table 1. Proposed Sites or Routes

Site or Route Type	**Site Address and Other Brief Description of Site or Route and Page(s) in Application or Petition Containing Full Description**
Proposed	
Noticed Alternative (if any)	
Noticed Variation (if any)	

B. Facility Boundary

Instruction: *For each Noticed Site or Route, complete Table 2 below and attach (or insert below) a site map that shows the Facility Boundary/ies*[1]*. In Table 2 below, describe each Facility Boundary and explain how the boundary for the Project complies with the definition of Facility Boundary at 980 CMR 15.02.*

Table 2. Description of Facility Boundaries (and Site Maps)

Site or Route Type	**Attachment Number**	**Description of Facility Boundary and Explanation of 980 CMR 15.02 Compliance**
Proposed		
Noticed Alternative (if any)		
Noticed Variation (if any)		

C. Specific Geographical Area

Instruction: *For the Proposed Site or Route, indicate in Table 3 below the Facility type or types and the corresponding radial distance from the Facility Boundary for that Facility type as described in 980 CMR 15.05: Identification of Burdened Areas*

[1] 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. *980 CMR 15.02: Definitions.*

Intersecting the Specific Geographical Area of a Project Site or Route. For a Project containing more than one Facility type, e.g., a transmission line and a substation, each different Facility type may correspond to a different radial distance. Prepare an additional table for any Noticed Alternative Site or Route and another table for any Noticed Variation Site or Route.

Table 3. Specific Geographic Area Radii from Facility Boundary for the Proposed Site or Route

	Facility Type(s)	**Radial Distance from Facility Boundary (mi)**
☐	Transmission and Distribution Lines	0.25
☐	Clean Energy Storage Facility	1
☐	Substation	0.5
☐	Ground-Mounted Photovoltaics	0.5
☐	Onshore Wind Facility	1
☐	Anaerobic Digester > 25 MW	1
☐	Liquefied Natural Gas Storage Facility	No air permit: 1 Non-major air permit: 2
☐	Gas Pipeline	1
☐	Fossil Generating Facility	Non major air permit: 2 Major air permit: 5
☐	Gas Compressor Station	No air permit: 1 Non-major air permit: 2 Major air permit: 5

D. Explanatory Comments

Instruction: *Comment on any of the above sections that merit further explanation or qualification.*

Comment:

II. IDENTIFICATION OF ANY BURDENED AREA(S) INTERSECTING A SPECIFIC GEOGRAPHICAL AREA (SGA) OF A PROJECT SITE OR ROUTE

Overview: In this section, the Applicant uses the MassEnviroScreen mapping tool to identify within each SGA of the Project any areas of overlap between the SGA and a Burdened Area (BA). As defined in 980 CMR 15.02(1): *Definitions*, a BA is a Census Block Group that has a MassEnviroScreen score of 75 or greater and/or an annual median household income of 65 percent or less of the

statewide annual median household income. The MassEnviroScreen score is a composite score that reflects the Census Block Group's percentile among all the Census Block Groups in the State based on the Indicators. Where the Director grants a petition for a CIA in a non-Burdened area pursuant to 980 CMR 15.04(6): *Petition for a CIA in a Non-Burdened Area*, the Applicant shall perform a CIA Report as if the census block area is a BA.

A. SGA Overlay with MassEnviroScreen Burdened Areas

Instruction: *For each Noticed Site or Route, attach (or insert below) a site map that clearly shows the Facility Boundary, the SGA, and any overlapping BA. If the SGA only partially intersects a BA or SGA, include the full BA on the map. Prepare the map(s) at a geographic resolution that clearly shows the geographic extent of the overlap, if any, between a Project's SGA and any overlapping BA. If there is no overlap between the BA and the SGA, provide a map that shows the closest BA relative to the SGA. Designate the Attachment number, in Table 4 below.*

Table 4. Attachment Designation for SGA Map(s)

Site or Route Type	Attachment Number
Proposed	
Noticed Alternative (if any)	
Noticed Variation (if any)	

B. Burdened Areas intersecting the SGA(s)

Instruction: *List the Census Block Group ID of any BA that intersects the SGA for a site or route in Table 5.*

Table 5. List of Burdened Areas within Project SGA(s)

Site or Route Type	Census Block Group ID(s) of Burdened Area(s)
Proposed	
Noticed Alternative (if any)	
Noticed Variation (if any)	

☐ Check this box if no BA overlaps any SGA.
If this box is checked, then the CIA Report concludes here and the remainder of the template may be deleted. Depending upon the Project type, the Applicant may still be required to prepare a Site Suitability Report. See 980 CMR 15.03(2) and 980 CMR 15.10.

C. Explanatory Comments

Instruction: *Comment on any of the above sections that merit further explanation or qualification.*

Comment:

III. ASSESSMENT OF BURDENED AREAS TO IDENTIFY ELEVATED INDICATORS

Overview: In this section, the Applicant identifies all Indicator values for each BA that intersects a Project SGA and then highlights the Elevated Indicators, as defined in 980 CMR 15.02: *Definitions*, for each BA. An SGA intersecting multiple BAs may have different Elevated Indicators in each BA.

A. BA Indicator Percentile Values and Identification of Elevated Indicators

Instruction: *For the Proposed Site or Route, use the data from MassEnviroScreen to list in Table 6 all Indicator percentile values for any BA that intersects the SGA for that site or route. Replace the generic "[Census Block Group #]" in the column headings with the corresponding Census Block Group ID number for the Project. Prepare an additional table for any Noticed Alternative Site or Route and another table for any Noticed Variation Site or Route.* ***Identify the Elevated Indicators in the table below by bolding or highlighting the corresponding percentile value.*** *An Elevated Indicator for a Clean Energy Infrastructure Facility ("CEIF") means an Indicator that is above the 50th percentile statewide in Massachusetts, prior to consideration of additional Project Impacts. For Fossil Fuel-Related Energy Infrastructure, each Indicator is treated as an Elevated Indicator. For purposes of 980 CMR 15.00, an Elevated Indicator is identified solely in those areas where a Project's SGA intersects one or more Burdened Areas.*

*Table 6. Statewide **Percentile Values** for each Indicator for each BA in Proposed Site or Route (provide additional columns for additional BA Census Block Groups (CBG); and attach additional tables for Noticed Alternative and Noticed Variation sites or routes)*

Indicators	**Indicator Percentile Values in Burdened Areas by Census Block Groups (Highlight Elevated Indicators)**						
	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]
Fine Particulate Matter (PM2.5)							
Ozone							
Nitrogen Dioxide (NO2)							
Diesel Particulate Matter (DPM)							
Drinking Water Non-Compliance							
Air Toxics Cancer Risk							
Air Toxics Respiratory Hazard Index							
Proximity to Heavy Traffic							
Pollution Cleanup Score							
Groundwater Threats							

Indicators	**Indicator Percentile Values in Burdened Areas by Census Block Groups (Highlight Elevated Indicators)**						
	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]
Hazardous Waste Generators and Facilities							
Solid Waste Sites and Facilities							
Impaired Water Bodies							
Drought							
Wildfire Risk							
Flood Risk							
Extreme Heat Days							
Pediatric Asthma							
Low Birth Weight Infants							
Elevated Blood Lead in Children							
Premature Mortality							
Adult High Blood Pressure							

Indicators	**Indicator Percentile Values in Burdened Areas by Census Block Groups (Highlight Elevated Indicators)**						
	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]	[BA Census Block Group #]
Coronary Heart Disease							
Chronic Obstructive Pulmonary Disease (COPD)							
Adult Cancer							
Adults without High School Diploma							
Housing Burdened Low-Income Households							
Linguistic Isolation							
Poverty							
Unemployment							
Median Household Income							

B. Explanatory Comments

Instruction: *Comment on any of the above sections that merit further explanation or qualification.*

Comment:

IV. ANALYSIS OF DISPROPORTIONATE ADVERSE EFFECTS

Background: In this section, the Applicant analyzes the Project's Impact on each Elevated Indicator during the construction and operation phases to determine whether the Project is likely to cause a Disproportionate Adverse Effect, defined as a net negative Project Impact that is likely to materially exacerbate an Elevated Indicator in a BA intersecting a Project's SGA. See also Appendix B: Method for Determining Whether Projects Materially Exacerbate Elevated Indicators for further explanation.

A. Construction Phase Project Impacts

Instruction: *For each BA within a Project SGA, qualitatively assess the expected Project Impacts (Benefits or Burdens or No/Insignificant Impact) on that BA during the construction phase for each Elevated Indicator in Table 7 below. As part of this assessment, provide a rationale for the Impact determination in the table or include citation reference(s) to other documents that provide supporting rationale where applicable. To the extent practicable, include a quantitative assessment of expected Project Impacts. For purposes of making such an assessment, the Applicant may consider the Project Impacts inclusive of any measures to avoid, minimize, or mitigate Project Impacts that the Applicant has made a firm commitment to undertake. The Applicant may also describe corresponding Project Burdens and Benefits outside the BA to provide further context. Project Burdens and Project Benefits can occur concurrently. Assess the severity of an Impact in terms of its nature, magnitude, geographic extent, and duration (See also Appendix B).*

For each Noticed Site or Route, complete Table 7 to summarize your assessment of construction phase-related Project Impacts on Elevated Indicators and the supporting rationale for your assessment. Create a separate table for each Noticed Alternative or Noticed Variation as applicable.

Table 7. Summary of Proposed Site or Route's Construction Phase Project Impacts Related to Elevated Indicators

Elevated Indicator	Project Impact (During Construction)	Disproportionate Adverse Effect? (Yes/No)	Supporting Rationale or Reference to Documentation in Support of Impact Determination
[Elevated Indicator #1]			
[Elevated Indicator #...]			
Elevated Indicator #N]			

B. Operations Phase Project Impacts

Instruction: *Do the same as in part IV.A above except with respect to the operations phase of the proposed Project and summarize your assessment in Table 8 below.*

Table 8. Summary of Proposed Site or Route's Operations Phase Project Impacts Related to Elevated Indicators

Elevated Indicator	Project Impact (During Operations)	Disproportionate Adverse Effect? (Yes/No)	Supporting Rationale or Documentation for Impact Determination
[Elevated Indicator #1]			
[Elevated Indicator #...]			

C. Explanatory Comments

Instruction: *Comment on any of the above sections that merit further explanation or qualification.*

Comment:

V. IDENTIFICATION OF REMEDIAL ACTIONS TO AVOID, MINIMIZE OR MITIGATE DISPROPORTIONATE ADVERSE EFFECTS

Instruction: *For each Noticed Site or Route, describe in Table 9 the proposed avoidance, impact minimization, or mitigation measures (collectively, "Remedial Actions") proposed to address the nature, magnitude, duration, and geographic extent of the Disproportionate Adverse Effect(s) associated with the site or route for impacts associated with both the proposed Project's construction and operation phases. Explain how the proposed Remedial Actions address the Disproportionate Adverse Effects. State and explain the expected cost of the proposed remedial action(s). Provide supporting documentation, where appropriate, to describe proposed mitigation hierarchy actions, costs, and anticipated outcomes of these actions.*

Table 9. Summary of Remedial Actions to Address Project Disproportionate Adverse Effects for Proposed Site or Route

Elevated Indicator(s)	Action Type[1]	Description of Proposed Remedial Action	Description How Proposed Remedial Action Addresses Disproportionate Adverse Effects	Expected Cost	Supporting Documentation
[Elevated Indicator #1]	[Avoidance, Minimization, or Mitigation]				[Attachment Reference]
[Elevated Indicator #...]	[Avoidance, Minimization, or Mitigation]				[Attachment Reference]

[1] If an Applicant cannot avoid one or more Project Impacts reflected by an Elevated Indicator, it shall describe how its proposed actions could minimize such Project Impacts. If an Applicant cannot minimize one or more Project Impacts reflected by an Elevated Indicator, it shall describe how its proposed actions could mitigate such Project Impacts.

VI. DESCRIPTION OF PROJECT BENEFITS

Overview: *Describe in Table 10 the Project Benefits that have a geographic, socio-economic, environmental, public health, or other nexus to areas where BAs and the Project's SGA intersect. Include references to supporting documentation as appropriate. Provide a similar table for each Noticed Alternative and Noticed Variation as well.*

Table 10. Description of Project Benefits

Project Benefit	Description of Benefit (Nature, Location and Extent, and Duration of Benefit)	Supporting Documentation

VII. DESCRIPTION OF COMMUNITY BENEFIT PLAN AND/OR AGREEMENT (OPTIONAL)

Overview: *Describe any Community Benefit Plan or Community Benefit Agreement to which the Applicant has committed. In doing so, summarize the community needs that the plan or agreement identifies and the benefits the plan or agreement envisions for the host community. Explain how such plan or agreement, if any, constitutes action that addresses any Elevated Indicators. Include an electronic copy (or link to a copy) of the CBP/CBA if one exists and is available.*

Description and Explanation:

VIII. CONCLUSION

Overview: Highlight any Disproportionate Adverse Effects of the Project as it pertains to individual Burdened Areas or to the Burdened Areas collectively where the Project SGA intersects; describe the measures the Applicant proposes to address the Disproportionate Adverse Effects; highlight the adequacy of the proposed measures; and add relevant information not otherwise included in this report, as applicable.

APPENDIX A: Indicator Definitions and Sources

The following is a summary of indicators used in MassEnviroScreen (MES). Sources and details of each indicator may be updated over time. For the most recent descriptions and sources of MES indicators see the MES Technical Documentation.

Indicator	Summary Description	Source
PM 2.5	Average annual 24-hour average concentration of particulate matter that is less than or equal to 2.5 micrometers in diameter (PM2.5) measured in micrograms per cubic meter (µg/m3).	U.S. EPA
Ozone	Maximum 8-hour average model predictions of concentrations of ground-level ozone in parts per billion (ppb).	U.S. EPA
Nitrogen Dioxide (NO2)	Average annual nitrogen dioxide (NO2) levels expressed as part per billion (by volume) for 2020 at 1km grid resolution, aggregated to Census Block Groups using mean pixel values.	NASA
Diesel Particulate Matter	Diesel particulate matter (PM) level in air measured in micrograms per cubic meter (µg/m3).	EJScreen 2024.
Drinking Water Non-Compliance	Safe Drinking Water Act (SDWA) compliance performance score of a community water system (CWS) serving a Census Block Group population.	EJScreen 2024
Air Toxics Cancer Risk	Risk of developing cancer due to inhalation exposure to air toxic compounds over a normal lifetime of 70 years, measured in incidents per million people.	U.S. EPA
Respiratory Hazard Index	Non-Cancer Respiratory Hazard Index; ratio of exposure concentration to a health-based reference concentration.	U.S. EPA
Proximity to Heavy Traffic	Heavy traffic proximity impact index.	EJScreen 2024
Pollution Cleanup Score	Weighted count of environmental cleanup sites requiring federal or state oversight for cleanup due to contamination.	US EPA; MassGIS
Groundwater Threats	Weighted count of groundwater threats.	U.S. EPA; MassGIS
Hazardous Waste Generators and Facilities	Weighted count of hazardous waste facilities, and hazardous waste generators within each Census Block Group.	MassGIS
Solid Waste Sites and Facilities	Weighted count of solid waste sites and facilities.	MassGIS
Impaired Water Bodies	Count of pollutants across all water bodies designated as impaired within the area.	MassGIS
Drought	Sum of weekly total percent of an area experiencing a severe, extreme, or exceptional drought (categories D2, D3, or D4), adapted from Colorado EnviroScreen.	U.S. Drought Monitor 2019-2024
Wildfire Risk	Mean wildfire hazard potential.	USDA; USFS
Flood Risk	Percentage of each geographic area where there is at least a one percent chance of flooding annually.	FEMA; MassGIS
Extreme Heat Days	Number of days between May and September from 2015 through 2024 in which daily high temperature was 85 degrees Fahrenheit or higher.	Oregon State University

Indicator	Summary Description	Source
Premature Mortality	Age-adjusted premature mortality rate (per 100,000).	MassDEP
Adult Cancer	Prevalence of cancer (non-skin) or melanoma among adults.	CDC PLACES Health Outcomes
Chronic Obstructive Pulmonary Disease (COPD)	Prevalence of chronic obstructive pulmonary disease among adults.	CDC PLACES Health Outcomes
Coronary Heart Disease	Prevalence of coronary heart disease among adults.	CDC PLACES Health Outcomes
Elevated Blood Lead Levels in Children	5-year average prevalence of elevated (≥5 µg/dL estimated confirmed) childhood blood lead levels in children (ages 9-47 months).	MassDEP
Adult High Blood Pressure	Prevalence of high blood pressure among adults.	CDC PLACES Health Outcomes
Pediatric Asthma	Population-weighted average asthma prevalence (percentage of K-8 enrollment).	MassDEP
Adults without a High School Degree	Percent of people age 25 or older whose education is less than a high school diploma.	US American Community Survey 5-year Estimates for 2019 – 2023
Poverty	Percent of households whose income is less than or equal to twice the poverty level.	US American Community Survey 5-year Estimates for 2019 – 2023
Linguistically Isolated Households	Percentage of limited English-speaking households.	US American Community Survey 5-year Estimates for 2019 – 2023
Housing Burdened Low Income Households	Percent of households that are both low income (making less than 80% of the HUD Area Median Family Income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs).	US Department of Housing and Urban Development
Unemployment	Percentage of the population over the age of 16 that who are unemployed and eligible for the labor force. Excludes retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty.	US American Community Survey 5-year Estimates for 2019 – 2023
Median Household Income	Median household income in the past 12 months (in 2023 inflation-adjusted dollars).	US American Community Survey 5-year Estimates for 2019 – 2023

The MassEnviroScreen documentation further explains the use and rationale of the Indicators.

APPENDIX B: Method for Determining Whether Project Impacts Are Likely to Materially Exacerbate Elevated Indicators

To determine if a negative Project Impact to an Elevated Indicator constitutes a Disproportionate Adverse Effect, the Project must materially exacerbate the condition reflected in the Elevated Indicator causing additional negative Project Impacts. 980 CMR 15.07(1). Factors to consider when determining whether projects materially exacerbate Elevated Indicators include (but are not limited to) the following:

- Likelihood that project construction or operation would result in exceedances of public health, environmental, or climate regulatory standards (e.g., National Ambient Air Quality Standards);

- Perceptibility of impacts: Would a casual observer notice any impacts measured by the Elevated Indicators?

- Measurability: Are impacts to an indicator able to be measured, whether quantitatively, qualitatively, or by level of significance?

- Duration and frequency of impacts: Long-term or frequent impacts are more likely to exacerbate conditions than short-term, infrequent ones.

- Increased geographic extent of impacts: Would a Project's Impact expand a Burden beyond the geographic extent of the baseline Burden exhibited by an Elevated Indicator?

- Resiliency and recovery rate: How would a Project adversely affect the ability of an Indicator to absorb Project-induced disturbances, adapt to maintain essential functions and services, and then recover? For example, extensive tree clearing in an urban environment during a project's construction phase may have immediate impact on localized tree canopy (and the cooling effect from shading) and take years to recover, assuming trees are planted to replace the lost tree canopy cover. However, pruning tree branches during construction instead of clearing trees may yield only minor shading impacts and recover much more quickly.

- Social, economic, and cultural impacts: Would a proposed project be likely to adversely impact the social fabric, economic vitality, or cultural resources of a BA as measured by Elevated Indicators?

- Public health conditions: Would the Project impact the public health condition of a BA as measured by Elevated Indicators?

- Potential for migration of contamination (on-site and off-site by air, ground, or water);
To address these considerations, Applicants should consider these – and other pertinent – factors when evaluating the following issues:

- What is the baseline state (i.e., existing conditions before the introduction of the proposed project) of the Elevated Indicators in question – i.e., MES score, and baseline health, environmental, and climate resiliency states?
- Describe the states of each Elevated Indicator in the BA of concern.
- What are the drivers of Elevated Indicators baseline states – i.e., what are the major reasons for the indicators being elevated – in their baseline state?
- How would the Project impact the baseline state of the Elevated Indicators with respect to the nature, degree, and geographic and temporal extent of impacts?

- What aspects of a proposed energy project construction and operations would (adversely) impact each Elevated Indicator? Include an accounting of the project-related drivers that would likely adversely impact the Elevated Indicators during project construction and operational project phases, including a description of the nature, degree, extent, and duration of impacts.

- What municipal, state, or federal standards apply to the Elevated Indicators in question (list these).
  - Do any of the Elevated Indicators exceed these standards in their baseline state?
  - Would the project likely result in an exceedance of these standards? If so, why?

- What other likely diverse impacts would occur to the Elevated Indicators that are not addressed above?

The Applicant makes these determinations following consultation with Key Stakeholders. The Applicant should leverage the pre-filing engagement process to solicit community input and articulate how Project Impacts may materially exacerbate Elevated Indicators where appropriate.