

980 CMR: ENERGY FACILITIES SITING BOARD

980 CMR 15.00: CUMULATIVE IMPACT ANALYSIS AND STANDARDS FOR APPLYING SITE SUITABILITY CRITERIA

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15.01: Purpose, Scope, Application, and Other General Provisions.

(1) Purpose. The purpose of 980 CMR 15.00 is to implement the provisions from M.G.L. c. 164, §§ 69G, 69T, 69U, 69V regarding Cumulative Impact Analysis (“CIA”) and standards for applying site suitability criteria. The purpose of those provisions is to evaluate existing environmental burdens and related public health consequences in a SGA proximate to a proposed Project location, and to assess whether the Project would result in any Disproportionate Adverse Effects, including environmental and public health impacts, or the effects of climate change.

(2) Scope. 980 CMR 15.00 applies to every Application submitted to the Board for a Clean Energy Infrastructure Facility (CEIF) (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).

(3) Underlying Guidance. 980 CMR 15.00 reflects the “Guidelines and Standards for Cumulative Impact Analysis” issued by the Massachusetts Office of Environmental Justice and Equity pursuant to M.G.L. c. 21A, § 29. See M.G.L. c. 164, §§ 69G, 69T. 980 CMR 15.00 also applies the “Site Suitability Assessments Guidance” developed by the Executive Office of Energy and Environmental Affairs (“EEA”) pursuant to M.G.L. c. 21A, § 30, as applicable. See M.G.L. c. 164, § 69T. The Board shall consider revisions to 980 CMR 15.00, and related CIA implementation documents developed by the Board, in response to future modifications of the “Guidelines and Standards for Cumulative Impact Analysis” or the “Site Suitability Assessments Guidance”.

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- (4) Effective Date. 980 CMR 15.00 takes effect on March 1, 2026, and applies to Applications or petitions to construct filed on or after July 1, 2026.
- (5) Applicability of Earlier Sections. 980 CMR 15.00 relies upon provisions of 980 CMR that by their terms apply to all sections of chapter 980 CMR, unless otherwise noted.
- (6) CIA Report Template and Instructions. The Board shall maintain and update, as appropriate, a document entitled “CIA Report Template and Instructions” (“CIA Report Template”). The CIA Report Template provides guidance to Applicants and other stakeholders engaged in preparation or review of a CIA Report pursuant to 980 CMR 15.00. The Board shall develop the CIA Report Template in accordance with 980 CMR 15.00, the “Guidelines and Standards for Cumulative Impact Analysis” by the Massachusetts Office of Environmental Justice and Equity, and “Site Suitability Assessments Guidance” developed by EEA.

15.02: Definitions.

- (1) Definitions. 980 CMR 15.00 shall be subject to the definitions of 980 CMR 1.01(4): *Definitions*. The following additional definitions shall also apply unless the context or subject matter requires a different interpretation:

Benefit means a positive effect as it pertains to public health, the environment, or in ameliorating the effects of climate change. Benefits include, but are not limited to, access to: clean natural resources, including air, water resources, and open space; constructed playgrounds, outdoor recreational paths, facilities, and venues; clean renewable energy sources; improvement in public health and socio-economic conditions; and environmental enforcement, training, and funding disbursed or administered by EEA. For Benefits to be considered Project related for CIA purposes, such Benefit must have a nexus to areas of overlap between Burdened Area(s) and a Project’s SGA.

Burden means a negative effect such as destruction, damage or impairment of natural resources that is not insignificant, including but not limited to, climate change, air pollution, water pollution, improper sewage disposal, dumping of solid wastes and other noxious substances, excessive noise, activities that limit access to natural resources and constructed outdoor recreational facilities and venues, inadequate remediation of pollution, reduction of ground water levels, impairment of water quality, increased flooding or stormwater flows, and damage to inland waterways and waterbodies, wetlands, marine shores and waters, forests, open spaces, and playgrounds from private industrial, commercial, or government operations or other activity that contaminates or alters the quality of the environment and poses a risk to public health. A Burden can arise from past, present, or future projects or activities.

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Burdened Area means a Census Block Group, which is subject to an existing unfair or inequitable environmental burden or related health consequence. 980 CMR 15.00 identifies Burdened Areas as those areas that have a MassEnviroScreen Score (MES Score) of 75 or greater (i.e., at or above the 75th percentile, statewide), or an annual median household income of 65 percent or less of the statewide annual median household income.

Census Block Group means a statistical subdivision of a census tract used by the U.S. Census Bureau for data tabulation and presentation. It is a collection of census blocks and is the smallest geographic unit for which the U.S. Census Bureau publishes sample data from its household surveys.

Cumulative Impact means the combined effects of past and present private, industrial, commercial, state, or municipal projects, operations, development, and other economic activities, in addition to the effects of the proposed Project on: (1) the environment; (2) public health; and (3) reasonably foreseeable effects of climate change. For purposes of 980 CMR 15.00, Cumulative Impact is determined for the area where a Project's SGA intersects one or more Burdened Area(s).

Cumulative Impact Analysis (CIA) means the process by which Applicants and Petitioners shall identify, consider, and address the Cumulative Impact of a Project, as articulated in 980 CMR 15.00. The Board reviews the Applicant's CIA pursuant to 980 CMR 15.00.

Cumulative Impact Analysis Report (CIA Report) means the written report that an Applicant submits as part of an Application or petition to construct for applicable Projects, pursuant to 980 CMR 15.09: *Contents of CIA Report*.

Disproportionate Adverse Effect means a Project Impact that is likely to materially exacerbate an Elevated Indicator in a Burdened Area intersecting a Project's SGA. As used in M.G.L. c. 164, §§ 69G and 69H, "disproportionate adverse impact" is the equivalent of "Disproportionate Adverse Effect." A Disproportionate Adverse Effect requires consideration of both positive and negative Project Impacts, and results in a net negative impact.

Elevated Indicator means a Specified Indicator that is at or above the 50th percentile statewide in Massachusetts, prior to consideration of additional Project Impacts. 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.

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, such as transmission lines or pipelines, the Facility Boundary shall be the edge of the right of way (ROW).

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Indicator means a statistical measure, which is used to evaluate a Census Block Group's environmental exposures, environmental effects, climate effects, sensitive populations, and socioeconomic factors.

MassEnviroScreen means a GIS-based mapping tool developed and administered by the Office of Environmental Justice and Equity that uses Indicators to produce an MES Score and provide Indicator data for every Census Block Group across the state.

Noticed Alternative Site/Route means a site or route that an Applicant has submitted for review by the Board, in addition to a Proposed Site/Route, and provided Notice to affected abutters and others concerning this site or route.

Project Impact means an effect to the environment, socioeconomic and public health conditions, or climate change resiliency, resulting from construction and operation of the Project. A Project Impact can be either positive or negative.

Proposed Site/Route means the Applicant's preferred location for a Project site or route that it submits for approval by the Board.

Specific Geographical Area (SGA) means an area in which a proposed facility would be located, including the Proposed Site/Route and the Noticed Alternative Site/Route, and is determined based on facility-specific radial distances from the Facility Boundary, as established by the Board in 980 CMR 15.06(1).

Specified Indicators means a group of Indicators that the Board requires an Applicant to evaluate for a particular type of facility in a CIA Report, described in the CIA Report Template.

15.03: Overview of Cumulative Impact Analysis. The following steps set forth the process for an Applicant to determine a Project's Cumulative Impact and prepare a CIA Report:

- (1) For each Proposed Site/Route and Noticed Alternative Site/Route, the Applicant shall determine the applicable SGA consistent with 980 CMR 15.05(1). If the SGA intersects a Burdened Area according to the MassEnviroScreen mapping tool, the Applicant or Petitioner is required to conduct additional CIA review steps below;
- (2) If the proposed Project's SGA does not intersect any Burdened Areas, no further CIA evaluation is necessary. However, a CEIF Project having an SGA that does not intersect a Burdened Area may be required to perform a Site Suitability Assessment, including Site Suitability Scoring, as applicable. See 980 CMR 15.11;
- (3) If any part of the Project's SGA intersects one or more Burdened Area(s), the CIA must assess whether the Project imposes a Disproportionate Adverse Effect within each such Burdened Area, for each Elevated Indicator;

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- (4) To determine whether a Disproportionate Adverse Effect may result from the Project, the Applicant shall evaluate the following for each Burdened Area intersecting the Project's SGA:
 - (a) Whether any of the Specified Indicators are Elevated Indicators;
 - (b) If there are one or more Elevated Indicator(s) among the Specified Indicators, whether the Project is likely to materially exacerbate such Elevated Indicators;
 - (c) If the Project is likely to materially exacerbate one or more Elevated Indicator(s), the Project is deemed to have a Disproportionate Adverse Effect for such Indicator(s), in one or more of the applicable Burdened Areas;
- (5) For a Project deemed to have a Disproportionate Adverse Effect, the Applicant must propose remedial actions that avoid, minimize, or mitigate such adverse effects;
- (6) The Applicant prepares a CIA Report that documents the above steps, as required, and submits the CIA Report as part of its CEIF Application or petition to construct a Facility to the Siting Board.

15.04: Determination of Burdened Areas. The Board, working with the Massachusetts Office of Environmental Justice and Equity, maintains the MassEnviroScreen mapping tool, which differentiates Census Block Groups within the Commonwealth based on their MES Score, and provides other Indicator data relevant to 980 CMR 15.00.

- (1) Burdened Areas. MassEnviroScreen identifies all Census Block Groups within the Commonwealth that are deemed to be Burdened Areas, based on either of the two following criteria:
 - (a) A MES Score of 75 or greater, indicating that the Census Block Group is at or above the 75th percentile of MES Scores in comparison with other census blocks, on a statewide basis; or;
 - (b) Annual median household income in the Census Block Group is 65 percent or less of the statewide annual median household income.
- (2) Indicator Data. The Board shall ensure that the MassEnviroScreen tool relies on data that generally have the following characteristics:
 - (a) Indicator data are publicly available (or otherwise provided in a publicly available manner);
 - (b) Indicator data are collected for all parts of the state at a geographic resolution that allows for meaningful comparison between locations, as appropriate;
 - (c) Indicator data that are specifically identified and quantifiable;
 - (d) Indicator data are generally accepted statistical measurements for the type of Project Impacts they describe; and
 - (e) Indicator data are reasonably current, and updated regularly, as practicable.

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(3) The Board shall work with the Massachusetts Office of Environmental Justice and Equity and MassGIS to ensure that the MassEnviroScreen mapping tool is updated periodically, reliable, and continues to serve the needs of 980 CMR 15.00 implementation, including for Applicants and other stakeholders.

15.05: Identification of Burdened Areas Intersecting the Specific Geographical Area of a Project Site/Route. For all Applications or petitions to construct facilities identified in 980 CMR 15.01(2): *Scope*, the Applicant shall assess for each Proposed Site/Route or Noticed Alternative Site/Route whether the SGA intersects any Burdened Area pursuant to 980 CMR 15.04(1): *Determination of Burdened Areas*. This is a threshold analysis that determines whether the Applicant shall continue with its CIA. The Applicant conducts this assessment by doing the following:

(1) **Identification of the Project SGA.** For each Proposed Site/Route or Noticed Alternative Site/Route, the Applicant shall use the following Facility Boundary and radial distances from the Facility Boundary to determine the SGA:

(a) **Facility Boundary.** The SGA shall rely on 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 ROW;

(b) **Specific Geographical Area.** For Projects that include multiple facility types (such as transmission and distribution lines, and a battery energy storage system), the SGA is determined using the Facility Boundary and the radial distance from the Facility Boundary applicable to each component of the Project, as described in the table below.

Facility Type (or component of a Facility)	Radial Distance from Facility Boundary
Transmission and Distribution Line (part of an LCTDIF or SCTDIF)	1/4 Mile
Clean Energy Storage Facility (LCESF or SCESF)	1 Mile
Substation (Part of an LCTDIF or SCTDIF)	1/2 Mile
Ground-Mounted Photovoltaics (LCEGF or SCEGF)	1/2 Mile
Onshore Wind Facility or Anaerobic Digester (LCEGF or SCEGF)	1 Mile
Liquefied Natural Gas Facility (§ 69J)	1 Mile (no Air permit) 2 Miles (non-Major Air Permit)

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Facility Type (or component of a Facility)	Radial Distance from Facility Boundary
Gas Pipeline (§ 69J)	1/2 Mile
Fossil Generating Facility (§ 69J¼)	2 Miles (non-Major Air Permit) 5 Miles (Major Air Permit)
Gas Compressor Station (§ 69J, as part of a Gas Pipeline)	1 Mile (no Air permit) 2 Miles (non-Major Air Permit)

(2) Determine whether the SGA Intersects with a Burdened Area. The Applicant shall determine whether the SGA of the Project intersects with one or more Burdened Areas.

(3) Implications of the Burdened Area Assessment. If the SGA intersects with a Burdened Area, the Applicant shall comply with the requirements of 980 CMR 15.06. If the Project SGA does not intersect a Burdened Area, the Applicant shall:

(1) conclude the CIA and complete 980 CMR 15.10: Contents of *CIA Report*; and (2) pursuant to 980 CMR 15.11, determine whether a Site Suitability Assessment is required, and, if so, perform a Site Suitability Scoring and include the results in the Project's Application to the Board. Applicants should refer to the CIA Report Template for detailed information regarding the preparation of a CIA Report.

15.06: Assessment of Burdened Areas for Elevated Indicators.

(1) The CIA Report Template provides a list of Specified Indicators that an Applicant must evaluate, as applicable, for its proposed Project. The Specified Indicators include indicators used by MassEnviroScreen to produce the MES Score. The Applicant shall analyze the Specified Indicators for all Burdened Areas that intersect the Project's SGA.

(2) For each Burdened Area intersecting the Project's SGA, the Applicant shall use MassEnviroScreen to identify all Specified Indicators that are also Elevated Indicators. An Applicant shall evaluate whether the Project is likely to materially exacerbate such Elevated Indicators, and therefore produce a Disproportionate Adverse Effect, in accordance with the requirements of 980 CMR 15.07: *Disproportionate Adverse Effect Analysis*.

15.07: Disproportionate Adverse Effect Analysis

The Applicant shall evaluate whether, and to what extent, the Proposed Project site/route and any Noticed Alternative Site/Route(s) are likely to increase or decrease Elevated Indicators identified for Burdened Areas intersecting the Project's SGAs. For purposes of making such assessment, the Applicant may consider the Project Impacts inclusive of any actions to avoid, minimize, or mitigate Project Impacts for which the Applicant has made a firm commitment

to undertake. The Applicant shall use the following methods to identify and, where practicable, quantify such Project Impacts. See the CIA Report Template for additional details.

(1) Determination of Disproportionate Adverse Effect on an Elevated Indicator.

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. A Project that materially exacerbates an Elevated Indicator likely causes additional negative Project Impacts to occur.

(2) Qualitative Assessment Methods. In determining whether a Project materially exacerbates an Elevated Indicator during construction or operation, an Applicant shall first assess qualitatively whether, and how, the Project may impact each Elevated Indicator. Project Impact to an Elevated Indicator may include air emissions, stormwater or wastewater discharges, solid or hazardous waste generation, traffic, climate change effects such as heat, flooding or wildfire risk, impacts to natural resources and habitat, impacts to public health or socioeconomic conditions, among other possible Project Impacts.

(3) Quantitative Assessment Methods. If qualitative assessment methods indicate Project Impacts to one or more Elevated Indicators, the Applicant shall endeavor to provide a quantitative assessment of each such Project Impact. Quantitative methods may include quantification of emissions and other discharges, modeling analysis, detailed assessment of Project Impacts through engineering or construction plan reviews, and other means. See CIA Report Template for examples of quantitative assessment methods.

(4) Applicant's or Petitioner's Analysis and Findings. Based on the qualitative and quantitative information developed, the Applicant shall assess whether the Project is expected to materially exacerbate one or more of the Elevated Indicators and include a narrative and supporting data, as appropriate, in its CIA Report. The Applicant shall also include community input gathered during pre-Filing consultation and engagement pursuant to 980 CMR 16.00 and address that input in its CIA Report.

15.08: Remedial Actions to Avoid, Minimize or Mitigate Disproportionate Adverse Effects.

If the Project is expected to materially exacerbate one or more Elevated Indicators, based on the finding made according to 980 CMR 15.07(4): *Applicant's or Petitioner's Analysis and Findings*, the Applicant shall include in its CIA Report the following:

(1) Evaluation of Remedial Actions for Disproportionate Adverse Effects. A description of any actions the Applicant proposes to undertake to avoid, minimize, or, if Project Impacts cannot be avoided or minimized, mitigate, the Disproportionate

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Adverse Effects of the proposed Project on each Burdened Area, and how those actions address the Project Impacts.

(2) Cumulative Impact Summary. A summary of the Project's Cumulative Impact in light of any avoidance, minimization, or mitigation actions the Applicant or Petitioner proposes to undertake.

15.09: Contents of CIA Report. The Applicant shall describe in its CIA Report its assessment pursuant to 980 CMR 15.06(2): *Determine whether the SGA Intersects with a Burdened Area* and the implications of that assessment under 980 CMR 15.05(3): *Implications of the Burdened Area Assessment.* See CIA Report Template for additional details of contents in a CIA Report.

15.10: Standards for Applying Site Suitability Assessments Guidance. In 980 CMR 15.00, the Board follows the “Site Suitability Assessments Guidance” for CEIF, as issued and updated from time to time by EEA.

(1) Applicability. The “Site Suitability Assessment Guidance” is applicable to LCEGFs, SCEGFs, LCESFs, SCESFs, and to LCTDIF and SCTDIF in newly established public rights of way. Applicants with Projects subject to 980 CMR 15.00, where the Project SGA intersects one or more Burdened Areas and therefore requires a full CIA, shall not be required to perform a Site Suitability Assessment and Site Suitability Scoring.

(2) Pre-filing. Applicants shall share an estimated Site Suitability Score with stakeholders during the pre-filing process, per 980 CMR 16.00.

(3) File with Application. Applicant shall file a Site Suitability Report, including any Formal Score Determination, with its Application for a Consolidated Permit or Consolidated State Permit per 980 CMR 13.00, as applicable.

(4) Consideration by the Board During Adjudication of a Consolidated Permit.

(a) The Board shall consider Site Suitability Assessments in its CIA and route and site scoring analysis. The Board shall consider criteria-specific suitability scores to assess minimization and mitigation of Project Impacts. The Board shall consider the total Site Suitability Score in its decision on whether to grant a Consolidated Permit or Consolidated State Permit, as applicable.

(b) The Board may consider as evidence an agreement between a host municipality and an Applicant regarding social and environmental benefits of Project. The Board may take other evidence for consideration of social and environmental benefits of a Project.

15.11: Board's Findings in its Final Decision.

(1) The Board shall assess the adequacy of the CIA Report, including whether the Applicant, if required to, presented a comprehensive analysis of whether its Project Impacts will result in a Disproportionate Adverse Effect, and make findings based on that review.

(2) Pursuant to G.L. c. 164, § 69H, the Board shall, in issuing a final decision, make findings as to whether the Applicant has given due consideration to the Cumulative Impact of the Project, and whether the Applicant has adequately undertaken actions to avoid, minimize, or mitigate any Disproportionate Adverse Effects from the Project. In making such determinations, the Board may consider:

- (a) The population characteristics such as sensitive populations and socioeconomic factors of the population living within Burdened Areas intersecting the Project's SGA;
- (b) Pollutant exposures and environmental effects, and climate risks;
- (c) The extent, nature, magnitude, duration, and geographic reach of any Elevated Indicators on any of those populations;
- (d) Project Impacts related to the Elevated Indicators identified;
- (e) The extent and efficacy of the obligations the Applicant has undertaken to remediate Project Impacts;
- (f) Any remaining Disproportionate Adverse Effects from the Project on the Burdened Areas within the SGA, in light of the Applicant's plans to avoid, minimize, or mitigate the negative Project Impacts;
- (g) Conditions obligating the Applicant to further address any remaining Disproportionate Adverse Effects from the proposed Project;
- (h) The Applicant's use of a community benefit plan or community benefit agreement to identify community needs and provide benefits for a host community, in accordance with guidance from the Massachusetts Office of Environmental Justice and Equity.

(3) The Board shall consider whether an Applicant has made reasonable efforts to consider and develop a community benefits plan or community benefits agreement.

See 980 CMR 2.02(3).

- (a) If an Applicant has developed a community benefits plan or signed a community benefits agreement, the Board shall give it due weight in the final decision;
- (b) If an Applicant has not developed a community benefits plan or signed a community benefits agreement for a Project in a Burdened Area, then the Board shall consider imposing additional Project approval conditions to address residual Disproportionate Adverse Effects in Burdened Areas intersecting the Project's SGA;
- (c) The Board may add conditions to a final decision that it deems necessary to avoid, minimize, or mitigate impacts to a Burdened Area.

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REGULATORY AUTHORITY

980 CMR 15.00: M.G.L. c. 164, §§ 69G, 69H, 69J, 69J¼, 69T, 69U, 69V.