

Preferential Criteria for Evaluation of Energy Proposals

Effective December 1, 2004

Purpose:

As part of a new process for the development and siting of certain energy facilities established pursuant to Public Act 03-140, the Connecticut Energy Advisory Board (CEAB) must develop preferential criteria (Criteria) that will support and balance energy reliability, environmental and natural resource protection, cost effectiveness and quality of life goals.

CEAB Review Process:

The CEAB's process of issuing an RFP(s) and its subsequent review of proposals will be triggered by two different events. 1) The process will be activated reactively when a proposal is forwarded to the CEAB after an entity has filed an application with the CT Siting Council (CSC). The CEAB is then required to issue a RFP seeking an alternative solution(s). 2) The process will also be activated proactively if the CEAB determines that an energy-related need or problem exists in the state for which it would like to encourage a possible solution(s). The CEAB will then issue a RFP requesting that parties respond with a possible solution(s).

In both cases the range of solutions may include transmission, electric generation, demand-side changes and any other strategy or combination of strategies. Multiple responses to a RFP will be examined simultaneously and reviewed at a macro-level against the Criteria. Different strategies or combinations of strategies will be considered relative to each other. In both cases the CEAB is likely to perform a threshold screening to determine whether a proposal proponent is viable and financially stable and its proposal is reasonably likely to be financed and constructed before moving into the balance of the CEAB evaluation phase.

CEAB Report:

Following its review, the CEAB will submit to the CSC a written report containing the CEAB's commentary on the manner in which the proposal(s) achieves Connecticut's energy policy goals as reflected in the Criteria. The CEAB's commentary will include any information that the CEAB obtained through the conduct of its required RFP process(s) and may identify issues where the CEAB does not have sufficient information to provide commentary. The CEAB report is an advisory document which will be incorporated into the CSC record to provide information to the CSC to consider in its review of energy projects as well as to inform other state agencies of cognizance. As is presently the case, any energy project that receives the CSC's approval will also be required to receive approval by the appropriate state regulatory agencies to ensure that all applicable statutory and regulatory requirements are satisfied.

Preferential Criteria:

Upon submittal to the CEAB, the proposal(s) must at a macro-level identify and purport at a minimum to meet statutory and regulatory standards applicable to such proposals. As is presently the case, through subsequent regulatory proceedings with the appropriate regulatory agencies, the proposal(s) will also be required to receive the applicable statutory and regulatory approvals. The CEAB review process is not a replacement for or otherwise in lieu of the applicable statutory and regulatory approval processes.

I. Energy

CEAB prefers proposal(s) that:

A. Meet identified energy needs.

The CEAB will evaluate the consistency of a proposal with forecasted resource needs as identified by the Regional System Operator, the Connecticut Siting Council, the State Energy Plan and other resources that it deems to be relevant and appropriate

B. Enhance system reliability.

1. Promote reasonable levels of self-sufficiency that is sufficiently independent of or not wholly dependent upon exterior fuel sources to the extent feasible given regional considerations.
2. Engage in the deployment of proven technologies & engineering and design techniques to minimize risks of failure or unsatisfactory performance.
3. Maximize the level of protection of facilities from direct physical risk (includes whether the risk is accidental or intentional; and natural or man made).
4. Develop portions of state's electric system with high quality uninterrupted power (reliability attribute) through use of strategies such as distributed generation.
5. Ensure appropriate diversity of system types (transmission, generation and conservation and load management).

C. Promote diversity of fuel supply (oil, natural gas, nuclear, renewable etc.).

1. Enhance state's ability to meet statutory Renewable Portfolio Standards, Section 16-245a of the Connecticut General Statutes (CGS), (encourage use of "clean energy resources").
2. Electric generation facilities should, if technologically feasible, utilize dual fuel capability and have all required authorizations necessary to operate on short notice.

D. Capitalize on use of existing infrastructure (generation or transmission/distribution) including substitution of newer, more efficient technologies for older systems.

E. Provide a long-term system benefit (minimize use of short-term/ stop gap measures except for emergencies).

F. Ensure consistency with the State Energy Plan.

G. Address consistency with policies of relevant regional entities such as Regional System Operator, Regional State Committee and Regional Transmission Organization among others.

II. Economics

CEAB prefers proposals that:

- A. **Encourage competitive energy market development (including investment in identified short-term needs of the market).**
- B. **Provide cost effective benefits to state's energy consumers (short-term and long-term evaluation- including examination of life-cycle cost).**
- C. **Seek to lower or at least minimize the increase in energy costs to the state's energy consumers thereby enhancing the state's economic competitiveness.**
- D. **Develop portions of state's electric system with high quality uninterrupted power (economic development tool) through the use of strategies such as distributed generation.**
- E. **Serve to enhance government revenues (local and/or state tax impacts).**

III. Energy Efficiency & Demand and Load Management Response

CEAB prefers proposals that:

- A. **Implement demand-side strategies that reduce electric generation/gas delivery capacity requirements by implementing programs to encourage customers to reduce their energy consumption.**
- B. **Implement the management of energy load patterns to better utilize system facilities by shifting load from peak use periods to other periods of the day or year.**
- C. **Implement demand-side strategies that result in the more efficient use of energy resources to perform tasks.**

Note: C&LM efforts being proposed should present information that demonstrates the legitimacy and independence of energy savings that are being proposed.

IV. Environment

Upon submittal to the CEAB, the proposal(s) must at a macro-level identify and purport at a minimum to meet statutory and regulatory environmental standards applicable to such proposals. As is presently the case, through subsequent regulatory proceedings before the Department of Environmental Protection (DEP), the proposal(s) will be required to receive the applicable statutory and regulatory approvals. The CEAB review process is not a replacement for or otherwise in lieu of the applicable statutory and regulatory approval process.

The evaluation of the proposals utilizing the criteria listed below shall be conducted according to the concepts of **avoidance, minimization and mitigation in that respective order**. First, either an identified area or environmental impact should be avoided. Then, where a reasonable and sensible alternative that would avoid the environmental impacts does not exist, impacts should be minimized. Finally, any adverse environmental impacts that cannot be minimized should be mitigated. CEAB prefers proposals that:

Ensure that the natural resource/land-use management impacts allow for protecting and sustaining the health of people, communities and ecosystems. Includes specific guidance provided for both A) Long Island Sound and other Estuarine Waters and Submerged Lands of the State; and B) Upland and Freshwater.

A. Long Island Sound and other Estuarine Waters and Submerged Lands of the State

Avoid:

1. Impacting Long Island Sound¹ when a reasonable and sensible alternative exists.
2. If a reasonable and sensible alternative does not exist, locate, design, construct, operate and maintain facilities and infrastructure in a manner that protects living marine resources and coastal resources as defined in Section 22a-93(7) of the CGS and protects water quality and designated uses consistent with Section 22a-426 and Connecticut's Water Quality Standards.
3. More specifically, if Long Island Sound cannot be avoided then:
 - a. the following areas should be avoided:
 - sensitive coastal resources and habitats (i.e., beaches and dunes, intertidal flats, tidal wetlands, bluffs and escarpments, submerged aquatic vegetation², and other sensitive habitat once classified or determined.³);
 - habitats of federal and state threatened or endangered species;
 - critical habitats and natural area preserves;
 - designated recreational, commercial, and natural shellfish beds;
 - significant geological or archaeological sites;
 - significant long-term research areas; and
 - waterfront parcels unless the proposal is a water-dependent use (CGS Section 22a-93(16)).
 - adverse impacts that have the following effect should be avoided: significant degradation of water quality; wind patterns as needed to sustain existing recreational uses; sediment quality; wildlife, finfish or shellfish habitat; existing circulation patterns of coastal waters; natural patterns of erosion and sedimentation; and drainage patterns;
 - increasing the hazard of coastal flooding;
 - siting a non-water dependent use on a site suited for a water-dependent use (CGS Section 22a-93(16));
 - siting a non-water dependent use on the waterfront that would reduce or inhibit access to the shore or coastal waters; and

¹ Hereinafter the reference to Long Island Sound shall include Long Island Sound and other estuarine waters and submerged lands of the state.

² Submerged aquatic vegetation means rooted vascular plants such as eelgrass (*Zostera marina* in LIS), kelp beds and approximately 25 species such as pondweeds and tapegrass of brackish and tidal freshwaters.

³ As highlighted at the Long Island Sound Bottomlands Symposium, it is possible to develop a classification of LIS habitats, their distribution and abundance. Funding is required for such efforts that could identify an expanded list of sensitive/important submerged habitat types.

- reducing navigational opportunities, recreation activities and commercial fishing activities.

Minimize:

1. Adverse environmental impacts attributable to size, length, number, installation method and timing of construction of energy infrastructure.
2. Adverse environmental impacts to near shore environments by using less impacting techniques or technology such as horizontal drilling.
3. Installation in areas where geologic or other subsurface constraints would result in adverse environmental impacts associated with either larger energy infrastructure or more intrusive installation techniques.
4. Adverse environmental impacts of proposals by giving careful consideration to utilization of/upgrades to existing energy infrastructure as an alternative to totally new construction.
5. To the extent consistent with surroundings, minimize impacts on shoreline through reuse of already developed areas, such as brownfields, existing generating or substation sites and existing rights-of-way, particularly where doing so enables the reuse, conversion and upgrading of existing facilities.
6. Support of development inconsistent with the State Plan of Conservation and Development and the Coastal Management Act
7. Establishment and spread of plant species identified by the Connecticut Invasive Plant Council as non-native invasive plants.

Mitigate:

Any adverse environmental impact that cannot be minimized should be mitigated. Impact should be mitigated to the extent practicable to replace lost resource functions and values impacted.

B. Upland and Freshwater

Avoid:

1. Locating, designing, constructing, operating and maintaining facilities and infrastructure in a manner that adversely impacts natural resources (fish, wildlife, wetlands, surface waters, groundwater, soil, agricultural lands, forests and other wildlife habitats and endangered-threatened-special concern species), notable archeological and historic sites and areas recognized as significant natural communities by the Connecticut Geologic and Natural History Survey, Natural Diversity Database when a reasonable and sensible alternative exists.
2. Fragmenting of existing blocks of habitat and other undeveloped lands.
3. Direct impacts to wetlands and watercourses.

4. Impacts to the quality and quantity of surface and ground waters, public water supply sources and aquifer protection areas; protect the designated uses of these waters as required under Connecticut Water Quality Standards. More specifically, reduce demand or consumption of potable water supply and encourage the use of technologies that maximize opportunity to recycle water to minimize demands on water resources.
5. Diversions or withdrawals from surface waters or ground waters from over-allocated basins or that are identified in Connecticut's *List of Impaired Waters*.
6. Activities that individually or cumulatively will cause unacceptable alteration to stream flows or impede movement of aquatic life.
7. Degradation of the riparian buffer zone along each side of perennial and intermittent watercourses in accordance with the DEP Riparian Corridor Protection Policy.
8. Impacts affecting floodplains, flood flows, flood storage or flood velocities.
9. Except for facilities following existing utility or road corridors, avoid adversely impacting any area designated as a Natural Area Preserve or the Appalachian National Scenic Trail.
10. Hydroelectric generation facilities that do not operate in run-of-river mode (instantaneous, real-time). Avoid block loading modes of reservoir operation except in instances where DEP determines that the block loading is appropriate.

Minimize:

1. Impacts to the resources identified in subsection 1. above.
2. Soil erosion and control sedimentation.
3. Impacts to the visual, biological, geological and recreational qualities of ridgelines and summits.
4. Adverse environmental impacts of proposals by carefully considering the utilization of/upgrades to existing infrastructure as an alternative to new construction.
5. To the extent consistent with surroundings, minimize sprawl as well as impacts on areas through reuse of already developed areas, such as brownfields, existing generating or substation sites, already impacted shorefronts or riparian areas, and existing rights-of-way, particularly where doing so enables the reuse, conversion or upgrading of existing facilities.
6. Creation of field conditions conducive to the establishment and spread of plant species identified by the Connecticut Invasive Plant Council as non-native invasive plants.
7. Adverse impacts upon and actively manage lands, wetland and aquatic habitats within rights-of-ways to maximize their value to fish and wildlife, to prevent the establishment and spread of non-native and invasive plant species, and to reduce or eliminate established populations of non-native and invasive plant species.

8. Disruption of the operation of the State's transportation system, (i.e. highway, lane closures, transit, rail, etc.). If disruption is necessary, provide mitigation plan to address transportation impacts. Any disruption shall be minimized by coordinating planning and construction in existing rights-of-way in a joint-use fashion where practicable in accordance with the policies of the Department of Transportation as well as the policies of other agencies of cognizance.

Mitigate:

Proposal(s) should mitigate any adverse environmental impact that cannot be minimized. Impact should be mitigated to the extent practicable to replace lost resource functions and values impacts.

V. Quality of Life/Community Interests

The listing below outlines local quality of life values and concerns that are not otherwise the primary focus of state statutes and regulations. As part of its review process, the CEAB will give preference to proposals that avoid or minimize (in that respective order) adverse impacts on the following types of community interests:

- Local public health concerns (e.g. exposure to electro-magnetic fields)
- Property values
- Operation of electronic devices
- Economically disadvantaged populations
- Traffic and transportation systems
- Local land use standards
- Aesthetic and visual concerns
- Sensitive public facilities (schools, hospitals, nursing homes, daycare centers, playgrounds)
- Levels of ambient noise or light trespass