Vermont Legislative Research Service

Hydropower

In the state of Connecticut, hydropower projects fall under a category called Section 401, Water Quality Certificate – Federal Energy Regulatory Commission Hydropower Projects. The application's instructions outline several requirements, permits, siting laws, and considerations when building a hydroelectric facility.[5] Depending on where the facility is there may be other applications involved to receive permission to build.

Wind

Wind project permitting is done through the Connecticut Siting Council. In 2014 the Connecticut Siting Council updated its adoption of regulations according to Public Act 14-145, An Act Requiring the Adoption of Regulations for the Siting of Wind Projects.[6] This update includes a detailed outline of regulations regarding the application process for the intent to build a wind facility, requirements outlined for sound, shadow flicker evaluation, and natural resource evaluations. Offshore wind permitting in Connecticut is not discussed in detail on the government website.[7] An announcement was made on November 1, 2023, by Connecticut State Governor Ned Lamont stating that Connecticut is committed to receiving its first offshore wind farm.[8]

Solar

Solar projects in Connecticut may require numerous permits from the Connecticut Department of Energy and Environmental Protection (DEEP).[9] Pre-application assistance is provided by the Connecticut DEEP through a questionnaire that can be filled out by the applicant.[10] CT DEEP also created a stakeholder engagement process for Sustainable, Transparent, and Efficient Practices for Solar Development which helps in the procurement, siting, and permitting of ground-mounted solar systems in Connecticut.[11] There are numerous resources for applicants such as

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[5] Connecticut Department of Energy and Environmental Protection, "Instructions for Completing a Permit Application for a Section 401 Water Quality certificate – FERC Hydropower Projects," CT.gov, accessed December 18, 2023, https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Land_Use_Permits/InlandWPermits/FERC401instpdf.pdf

[6] Connecticut Siting Council, "Regulation of the Connecticut Siting Council," CT.gov, accessed December 2, 2023, https://portal.ct.gov/-/media/sots/regulations/recentlyadopted/EcopyReg6158pdf.pdf?la=en

[7] Connecticut Siting Council, "Regulation of the Connecticut Siting Council."

[8] Connecticut State Website, "Governor Lamont Applauds Ørsted and Eversource's Final Investment Decision to Develop Connecticut's First Offshore Wind Farm," CT.gov, accessed December 27, 2023, https://portal.ct.gov/Office-of-the-Governor/News/Press-Releases/2023/11-2023/Governor-Lamont-Applauds-Orsted-and-Eversource-Final-Investment-Decision

[9] Connecticut Department of Energy & Environmental Protection, "Permit Information for Solar Projects," CT.gov, accessed December 27, 2023, https://portal.ct.gov/-/media/DEEP/Permits_and_Licenses/Factsheets_General/Solar-Permitting-Factsheet.pdf

[10] Connecticut Department of Energy & Environmental Protection, "Permit Information for Solar Projects."

[11] Connecticut State Government, "Steps for Solar Development," CT.gov, accessed December 18, 2023

guidance in siting solar in brownfields in Connecticut[12] and guidance for siting solar on agricultural land.[13] The DEEP stakeholder engagement process for Sustainable, Transparent, and Efficient Practices for Solar Development also holds workshops, stakeholder engagement meetings, and scoping meetings as a resource for applicants within the solar project application process.[14] With many elements need to be considered before building. There is a general fact sheet provided by DEEP outlining the elements in consideration and the restrictions or specific permits and groups involved in permitting (depending on the size or wattage produced by a solar project).[15] The DEEP outline considerations like consulting the Natural Diversity DataBase to ensure the protection of state and federally protected species, avoiding construction and protection to core forests, protect while construction occurs in wetlands and watercourses, protections for disturbances in stormwater, dam safety, flood management, brownfields, and solid and hazardous waste landfills.[16]

Maine

Hydropower

Environmental Protection.[20] Grid-scale developments are defined as being projects that are three or more acres and require a Site Location of Development Act permit.[21] Small-scale projects, categorized as any project less than three acres, must apply for a Sitting Certification and a Natural Resource Protection Act permit.[22] After all necessary permits are obtained, the Maine Department of Environmental Protection then reviews all applications, and after the review process, time is allocated for public comment regarding the proposed project.[23]

Solar

In 2023, Maine changed the solar energy permitting process in the state, the permitting is now overseen by the Maine Department of Agriculture, Conservation, and Forestry.[24] Because of this recent shift, the state does not yet have clear, published guidelines for permitting solar energy projects.

Massachusetts

To construct any type of energy-generating facility in the state of Massachusetts, an application must be submitted to the Massachusetts Energy Facilities Siting Board.[25] Approval for this application looks to see that the proposed project can generate a reliable energy supply, is low in cost, and has low environmental impacts.[26] In addition to the Energy Facilities Siting Board, Massachusetts recently enacted Executive Order 620.[27] This order created the Commission on Energy Infrastructure Siting and Permitting, which is overseen by the Massachusetts Executive Office of Energy and Environmental Affairs. This commission's primary objectisig0(Tc0he)4l(r)-5 (y6 (tisp

applications.[29] The New Hampshire state government recommended reforming this process in their Ten-Year Energy Strategy in 2022.[30] The state authority for this process is the Site Evaluation Committee (SEC), which is made up of nine members and is tasked with reviewing, monitoring, and enforcing compliance in the planning, siting, construction, and operation of energy facilities.[31] When applying for siting permits, developers are only required to submit one application which is then reviewed and ruled on by the SEC.[32]

New York

All electric permitting within the state of New York occurs through Article 10 of the Public Service Law passed in 2011 by the New York State Legislature.[33] The law is commonly known as New York State's Article 10 which is the Siting for Large Scale Renewables Law.[34] Article 10 includes all major electric generating facilities larger than 25 megawatts. Article 10 includes four steps to obtain a permit: The creation and submission of a public involvement program, the creation and submission of a preliminary scoping statement, the submission of the formal application, and the siting board's decision.[35] All processes are explained within Article 10.[36] The application process includes opportunities for stakeholder engagement and environmental considerations.[37] Article 10 was created with the intent to form a singular unified process for the whole state instead of having the developer apply for numerous state and local permits.

Hydropower

New York's Article 10 of the Public Service Law includes details regarding the water withdrc2 (ns)3v /P <</MCID 5 >>BDC -3oc2 (ns)3v / (n)-14 (g)6 BDC -ch tte6 (a)-9.9BDC4te (u)-4(d)5

Guidebook created by the New York Energy Research and Development Authority is provided in conjunction with Article 10. The guidebook contains detailed steps for wind energy site selection, land agreements, local role in planning and permitting for wind projects, bird and negative impact regulations, and community considerations of wind power generating facilities.[40]

Solar

In the state of New York, there are no specific requirements under Article 10 of the Public Service Law for permitting or siting solar facilities. There is a New York State Solar Guidebook available published by the New York State Energy Research and Development Authority containing information, tools, and instructions to local governments in planning solar energy development.[41] For solar project permitting and inspection there is a document titled Solar PV Permitting and Inspecting linked within the Solar Guidebook which outlines the elements required to move forward regarding permitting and siting.[42]

Rhode Island

To construct any type of energy generating facility in the state of Rhode Island an application must be first submitted to the Rhode Island Energy Facility Siting Board.[43] This application requires the applicant's name, construction and operational environmental impacts, facility life cycle management plan, study of alternative sites, and the identification of any municipal state or federal agency that would have licensing authority over the project.[44] After the submission of this application, the Rhode Island Energy Facility Siting Board convenes regarding the application, and any government agency may submit advisory opinions regarding the applicant's proposed project to the board.[45] After the board convenes, there is then time for public comment regarding the applicant's proposed project, and after this, the Sitting Board submits its final decision to approve or deny the proposed project application.[46] The Sitting Board then sends

[40] New York State Energy Research and Development Authority, 2023, "New York State Wind Energy Guide - NYSERDA," New York State Government, https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Siting-Resources/Wind-Guidebook

[41] New York State Energy Research and Development Authority, 2023, "New York State Solar Guidebook - NYSERDA," New York State Government, accessed December 18, 2023, https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Siting-Resources/Solar-Guidebook

[42] New York State Energy Research and Development Authority, "Understanding the solar permitting and inspecting process for local governments and authorities having jurisdiction (AHJ." Solar PV Permitting and Inspecting" New York State Government, accessed December 18, 2023, https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/NYSun/2023-Solar-PV-Permitting-and-Inspecting.pdf

[43] Public Utilities Commission and Division of Public Utilities and Carriers, "Energy Facility Siting Board," Official State of Rhode Island Website, accessed December 2, 2023, https://ripuc.ri.gov/general-information/efsb

[44] State of Rhode Island and Providence Plantations Energy Facility Siting Board, "Rules of Practice and Procedure," Official State of Rhode Island Website, accessed December 2, 2023, https://ripuc.ri.gov/sites/g/files/xkgbur841/files/efsb/EFSB_Rules.pdf

[45] Public Utilities Commission and Division of Public Utilities and Carriers "Frequently asked questions General," May 10, 2016 https://ripuc.ri.gov/sites/g/files/xkgbur841/files/efsb/efsb/GeneralFAQ.pdf

[46] Public Utilities Commission and Division of Public Utilities and Carriers, "Frequently asked questions General,"

their decision to the Rhode Island Legislature to be affirmed by the Speaker of the House, and the President of the Senate.[47]

In addition to the application prospective energy facility stakeholders must submit, the building plans for the project over 10,000 gross feet also must comply with the Rhode Island Green Buildings Act.[48] The Green Buildings Act requires these projects to be LEED certified or the equivalent to a high-performance green building standard.[49]

Vermont

Act 250

Any proposed construction project within the state of Vermont that exceeds ten acres must obtain an Act 250 permit.[50] This means that any proposed energy facility that is planned to exceed ten acres must acquire an Act 250 permit. Act 250 requires projects to show ten set criteria will be taken into consideration during construction, and thereafter. The ten criteria Act 250 requires projects to consider are:[51]

1. Water and air pollution;
2. Water supply;
3. Impact on water supply;
4. Soil erosion;
5. Transportation and traffic;
6. Education services;
7. Local or municipal governmental services;
8. Aesthetics;
9. Land use plan; and,
10. Local or regional plan.

The Act 250 application fee is $6.65 per every $1000.00 of construction for the first $15,000,000 of construction, then $3.25 per every $1000 of construction. The Agency of National Resources also collects an additional $0.75 per every $1000 of construction for the first $15,000,000 of construction costs.[52]

Hydropower

[47] Public Utilities Commission and Division of Public Utilities and Carriers, "Frequently asked questions - General,"
[48] The Green Buildings Act and Green Buildings Advisory Committee (GBAC), "The Green Buildings Act and Green Buildings Advisory Committee (GBAC) | Building Code Commission," (n.d.). https://ribcc.ri.gov/green-buildings-act
[49] The Green Buildings Act and Green Buildings Advisory Committee
[50] State of Vermont Natural Resources Board, and. "Do I Need a Permit? | Natural Resources Board," Natural Resources Board, accessed December 1, 2023, https://nrb.vermont.gov/act250/permit/need-a-permit
[51] The State of Vermont Natural Resources Board, and. "What Are the 10 Criteria? | Natural Resources Board," Natural Resources Board, accessed December 1, 2023, https://nrb.vermont.gov/act250/permit/criteria
[52] State of Vermont Natural Resources Board, and. "Do I Need a Permit?

To obtain a license or permit for a hydroelectric facility in the state of Vermont, large projects fall under federal jurisdiction.[53] In addition to Vermont's Act 250 requirements, the state of Vermont also requires all small hydroelectric projects to meet the Vermont Water Quality Standards.[54] Once the project has proved Vermont's Water Quality Standards have been met,[55] the Vermont Agency of Natural Resources then issues the project a water quality certificate and continues to periodically ensure the project continues to meet these standards throughout operation.[56]

Wind

In the state of Vermont, wind energy projects (exceeding ten acres) must only obtain an Act 250 permit to initiate construction.[57]

Solar

In the state of Vermont, solar energy projects (exceeding ten acres) must only obtain an Act 250 permit to initiate construction.[58]

Additional Project Permitting Legislation

Vermont does not currently have any law like the Rhode Island Green Buildings Act. Act 250 would be the law that governs any construction project exceeding ten acres.[59] For any hydroelectric project, if the project meets the "small" criteria, 46 (er)-1 (i(14 (v)-4 (er)-1 (n)-4 ((4 (e9-1 (c

additional requirements for the permitting of hydropower energy facilities. Each state's approach differs, reflecting its unique regulatory framework.

This report was completed on December 27, 2023, by Grace Sherwood, Helena Zuckerman, and El Medford under the supervision of VLRS Director, Professor Anthony “Jack” Gierzynski and Dr. Jonathan “Doc” Bradley in response to a request from Representative Scott Campbell.

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