# The Evolution of Permitting and Siting Renewable Energy Projects in New York

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# **Outline and Overview**

- Timeline of New York Laws and Renewable Energy Goals
- State Environmental Quality Review Act (SEQRA)
- Article X / Article 10
- Climate Leadership and Community Protection Act (CLCPA) Overview
- 94-c Permitting / Office of Renewable Energy Siting
- Article VII
- Offshore Wind
- Solar Project Siting Considerations
- Questions & Quiz

# Timeline of New York Laws and Renewable Energy Goals

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# Timeline of NY Energy Permitting Laws

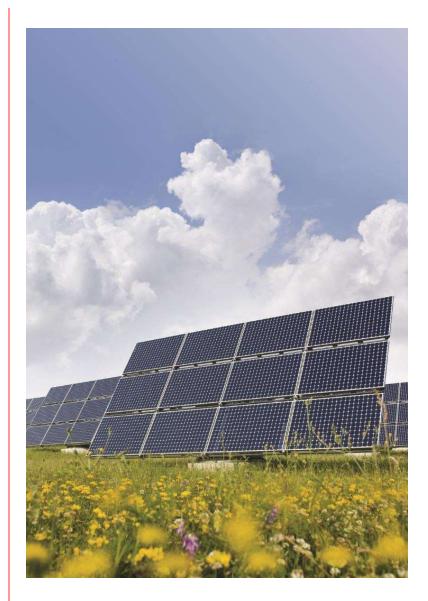
- 1970 current Article VII
  - » First law focused on energy permitting; some streamlining and updates made since
  - » 2021 amendments to expedite certain electric transmission lines
- 1972 1988 Article VIII
  - » Electric power plants >50 MW; State-driven review with Siting Board
- 1975 current State Environmental Quality Review Act (SEQRA)
  - » Environmental Conservation Law Article 8; Title 6 of NY Codes, Rules, Regulations Part 617
- 1992 2003 Article X
  - » State Siting Board returned; uniform State review process; applications >80 MW
- 2011 current Article 10
  - » Updating of prior law (Article X) that expired in 2003; re-established State-led review
- 2021 current Office of Renewable Energy Siting (94-c)
  - » New regulations 19 NYCRR Part 900; accelerate renewable energy application reviews

# **Timeline of NY Renewable Energy** Goals

- 2004: set renewable portfolio standard of 25% renewables by 2013 (baseline of 19%)
- 2010: revised renewable portfolio standard to goal of 30% renewables by 2015
- 2016: set Clean Energy Standard goal of 50% renewables by 2030 (baseline 26%)
- 2019: updated goal to 70% renewables by 2030
  - » More details to come on this later
- 2022: NY-Sun program 10 GW distributed solar by 2030

# State Environmental Quality Review Act (SEQRA)





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# State Environmental Quality Review Act (SEQRA)

#### Authority

» Environmental Conservation Law Article 8; Title 6 of NY Codes, Rules, Regulations Part 617

#### Purpose

- » Consideration of environmental factors into planning and decision-making process
- » Organized review of proposed actions and potentially significant adverse impacts

#### Actions

- » Wide variety of activities from planning and construction to policy making and funding
- » Type I, Type II, or Unlisted action classifications; determine next steps
- » For renewable energy projects, typically involve small scale solar (<25 MW) and/or storage facilities</p>

#### Agencies

- » State or local
- » Interested and Involved Agencies
- » "Lead Agency" may be identified to lead the review; has decisionmaking authority

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# **SEQRA** continued

#### Environmental Assessment Form (EAF)

- » Data gathering for review; not a true application
- » Evaluating whether there are potential adverse environmental impacts
- » Classifies an action
- » Short form typical for unlisted and Type II actions; full form for Type I action

#### Criteria for Determining Significance

- » Adverse changes to the environment
- » Reduction of wildlife habitat
- » Hazard to human health
- » Substantial change in use of land
- » Creating a conflict with adopted community plans or goals
- » Impairment of "community character"

#### Next Steps

- » Negative declaration no EIS needed; SEQRA concludes, back to agencies
  - Typical result for small scale solar applications
- » Positive declaration will require an EIS to be prepared, public hearing(s), decision making and findings



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# **SEQRA Challenges and Resources**

#### Challenges

- » Lead agency experience
- » Local politics
- » Legal challenges; delays

#### There are many resources online from State Agencies (DEC, DOS, DOT)

- » NYSDEC Guide <u>Stepping Through the SEQR Process NYS</u> <u>Dept. of Environmental Conservation</u>
- » SEQR Handbook <u>NYS Department of Environmental</u> <u>Conservation SEQR Handbook</u>
- » NYSDOS Training Course <u>State Environmental Quality</u> <u>Review Act (SEQRA) Basics | Department of State (ny.gov)</u>
- » <u>https://www.nyserda.ny.gov/-</u> /media/Project/Nyserda/Files/Programs/NY-<u>Sun/SEQR-for-Large-Scale-Solar.pdf</u>





# Article X / Article 10

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# Article 10

- Authority
  - » Chapter 388 of the Laws of 2011 enacted Article 10 of the Public Service Law

#### Purpose

- » Siting review of new, repowered, or modified major (>25 MW) electric generating facilities in New York in a unified proceeding
  - Developer / Owner saved from applying for numerous state and local permits adverse impacts

### Projects

- » All major electric generating facilities >25 MW which are not subject to review by the Office of Renewable Energy Siting
- » Last new Public Involvement Plan submitted was in March 2020
- » Most applications (solar facilities) were transferred to ORES

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# **Article 10 continued**

#### Agencies

- » New York State Board on Electric Generation Siting and the Environment (Siting Board)
  - ☑ with reps from DPS, Empire State Development, NYSDEC, NYSERDA, NYSDOH, two ad hoc public members
- » New York State Department of Public Service
- » NYSDEC

### Review Process

- » Public Involvement Program
- » Preliminary Scoping Statement then often Stipulations
- » Formal Application, Completion Review, Trial-type Evidentiary Hearings
- » Siting Board Decision

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# Article 10 Challenges and Resources

- » Too lengthy and cumbersome
  - ☑ Few permits issued
- » Adjudicatory process with hearings just too much
  - ☑ Inefficient; generally disliked by most

### Online Resources

- » Article 10 Law <u>Article 10 Law (ny.gov)</u>
- » Application Queue <u>Active Article 10 Queue (Updated:</u> <u>October 27, 2022) (ny.gov)</u>
- » NYSDPS Siting Board Guides <u>Siting Board Guides</u> (ny.gov)



# Climate Leadership and Community Protection Act (CLCPA) Overview

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# **Climate Leadership & Community Protection Act basics**

#### Climate Act signed into law July 18, 2019

- » One of most ambitious State climate laws in U.S.
- » Representative of ongoing energy transformation

#### Objectives and Goals

- » Roadmap for cleaner air and resilient communities
- » Reduce economy-wide greenhouse gas emissions 40% by 2030 and no less than 85% by 2050 from 1990 levels
- » 70% of State's electricity generated by renewable energy by 2030 a.k.a. "70 by 30"
- » 100% zero-emissions electricity by 2040
- » Up to 40% of benefits directed to underserved communities
- Online Resources
  - » <u>Scoping Plan New York's Climate Leadership and Community Protection Act</u> (CLCPA) (ny.gov)
  - » <u>Climate Action Council New York's Climate Leadership and</u> <u>Community Protection Act (CLCPA) (ny.gov)</u>

# 94-c Permitting / Office of Renewable Energy Siting

# **Context for 94-c Regulations**



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June 2019 adoption of Climate Leadership and Community Protection Act.

April 2020 included the Accelerated Renewable Energy Growth and Community Benefit Act with the adoption of the state budget



March 2021 – Final Article 94-c Regulations Published



Increased the clean energy goal from 50% renewables to 70% renewables by 2030 (the 70 by 30 goal)



11,000 MW of new solar





**NS** 

# Drivers and Milestones for 94-c Regulations

TIMELINE	MILESTONES
June 2019	Adoption of Climate Leadership and Community Protection Act established clean energy goal of 70% renewables by 2030
April 2020	The Accelerated Renewable Energy Growth and Community Benefit Act included with the adoption of the state budget - Executive Law 94-c created the Office of Renewable Energy Siting
September 2020	NYSDPS publishes the Final Supplemental Generic Environmental Impact Statement for the CLCPA evaluating the impacts of achieving 70 by 30 mandate - Reviewed statewide impacts 9 GW OSW, 11 GW large scale solar, ~2 GW of onshore wind, remainder from DG and community solar
September 2020	Draft 94-c Regulations published for public comment
March 2021	Final Article 94-c regulations published
June 2021	First 94c Permit for Major Renewable Energy Facility Issued (Morris Ridge transfer from Article 10)
June 2021	First application for new solar facility filed

### Final Supplemental Generic Environmental Impact Statement for the Climate Leadership and Community Protection Act

Renewable Energy Source	Contribution to 70 by 30 Capacity (MW)	Total New Capacity Under Proposed Action (MW)	Capacity Analyzed in Prior SEQRA Analyses (MW)	Incremental Increase Analyzed in this SGEIS
Existing and Contracted	8,000	N/A	N/A	N/A
Utility-Scale Solar	11,100	9,000 – 13,200	6,865	2,100-6,300
Utility-Scale Onshore Wind	1,900	1,900	5,905	N/A
Offshore Wind	5,800	9,000	4,200	4,800
Distributed Solar	6,000	6,000	3,000	6,000
Total CLCPA-Eligible Renewables	32,800	25,900 - 30,100	19,970	12,900 - 17,100

Exhibit 2-5 Expected Renewable Capacity

Source: NYSERDA. 2019. Clean Energy Standard Annual Progress Report: 2018 Compliance Year Final. December 2019. Accessed April 24, 2020. https://www.nyserda.ny.gov/-/media/Files/Programs/Clean-Energy-Standard/2019/Case-15-E00302-CES-2018-Annual-Progress-Report.pdf.

# Key Differences between Article 10 and 94-c





Shift in jurisdictional authority from DEC to ORES for T&E and wetlands



### Exhibit Requirements replace the Article 10 Stipulations process

### Not adjudicatory

Unless issues are contested

One-

### One-year statutory

schedule with preapplication requirements to encourage "mature" projects Reduced requirements for public involvement, though engagement still required

Uniform Standard Conditions provide a Draft Permit

# Key Differences between Article 10 and 94-c Exhibits

13     REAL PROPERTY     4     REAL PROPERTY       11     PRELIMINARY DESIGN DRAWINGS     5     DESIGN DRAWINGS       15     PUBLIC HEALTH AND SAFETY     6     PUBLIC HEALTH, SAFETY, AND SECURITY       19     NOISE AND VIBRATION     7     NOISE AND VIBRATION       24     VISUAL IMPACTS     8     VISUAL IMPACTS       20     CULTURAL RESOURCES     9     CULTURAL RESOURCES       21     GEOLOGY, SEISMOLOGY, AND SOILS     10     GEOLOGY, SEISMOLOGY, AND SOILS       22     TERRESTRIAL ECOLOGY AND WETLANDS     11     TERRESTRIAL ECOLOGY       23     WATER RESOURCES AND AQUATIC ECOLOGY     13     WATER RESOURCES AND AQUATIC ECOLOGY       24     LAND USE     15     AGRICULTURAL RESOURCES     14       25     EFFECT ON TRANSPORTATION     16     EFFECT ON TRANSPORTATION     16       26     EFFECT ON TRANSPORTATION     16     EFFECT ON NOMENTAL JUSTICE     19       28     ENVIRONMENTAL JUSTICE     19     ENVIRONMENTAL JUSTICE     19       27     SOCIOECONOMIC EFFECTS     20     EFFECT ON COMMUNICATIONS     20     EFFECT ON COMMUNICATIONS       38     ELECTRIC SYSTEM PRODUCTION MOD	#	Article 10 Exhibits	#	94-c Exhibits
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	32	STATE LAWS AND REGULATIONS		
36 GAS INTERCONNECTION	34	ELECTRIC INTERCONNECTION		
	36	GAS INTERCONNECTION		
37 BACK-UP FUEL	37	BACK-UP FUEL		
38 WATER INTERCONNECTION	38	WATER INTERCONNECTION		
39 WASTEWATER INTERCONNECTION	39	WASTEWATER INTERCONNECTION		
40 TELECOMMUNICATIONS INTERCONNECTION	40	TELECOMMUNICATIONS INTERCONNECTION		
41 APPLICATIONS TO MODIFY OR BUILD ADJACENT	41	APPLICATIONS TO MODIFY OR BUILD ADJACENT		



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# 94-c Permitting

#### Authority

» Chapter XVIII, Title 19 of NYCRR Part 900

#### Purpose

- » Consolidated environmental review and permitting of major renewable energy facilities
- » Coordinated and timely review of siting permit applications
- » Help meet the State's renewable energy objectives, while also:
  - ☑ protecting the environment,
  - ☑ considering social economic and environmental factors
  - ☑ Providing opportunity for local participation in the process

#### Projects

- » Major renewable energy facilities >25 MW
- » Any co-located storage system prior to delivery to transmission system
- » All associated appurtenances to electric plants including electric transmission facilities <10 miles in length

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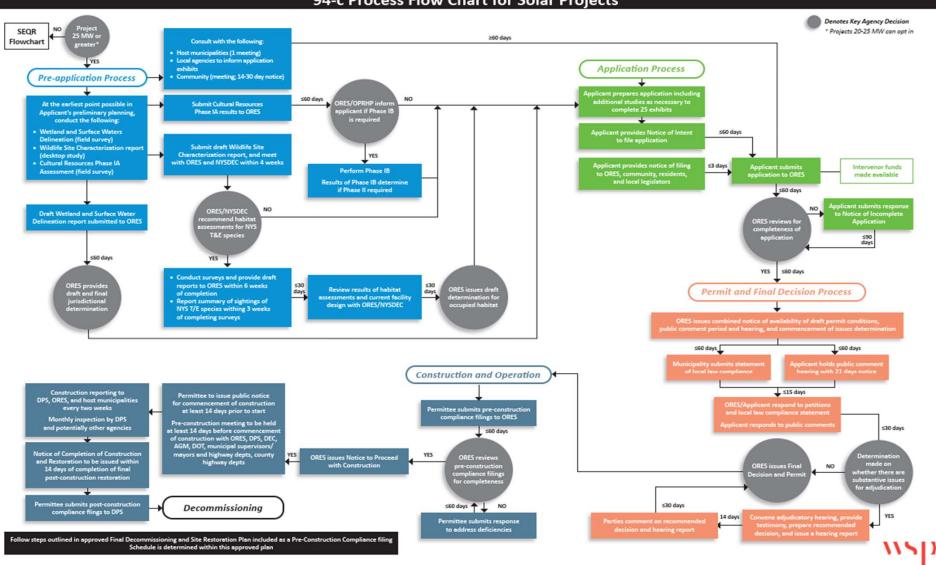
# 94-c Permitting continued

### Agencies

- » Office of Renewable Energy Siting
- » cooperation with other State agencies

#### Review Process

- » Pre-application process
  - ☑ Wildlife site characterization, wildlife surveys, wetland delineations, cultural surveys
  - ☑ Community meetings
- » Application process
  - ☑ Notice of intent to file; submit application; ORES completeness review
- » Permit and Final Decision process
- » See next slide for flow chart for solar projects



#### 94-c Process Flow Chart for Solar Projects

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# 94-c Permitting Challenges and Resources

### Challenges

- » Initially had staff hiring challenges during pandemic
- » New agency still finding their way
- » It's still New York State; more difficult than elsewhere
- » Impacts and mitigation for wetlands, T&E species and agricultural land
  - ☑ One application denied recently for potential wetland impacts
- » T&E mitigation bank not established yet, and doesn't seem close
- » Faster and still rigorous & thorough, but fast enough for 70 by 30?

#### Online Resources

- » <u>Regulations | Office of Renewable Energy Siting (ny.gov)</u>
- » Permit Applications | Office of Renewable Energy Siting (ny.gov)
- » <u>Resources | Office of Renewable Energy Siting (ny.gov)</u>

# **Key Aspects of NYS Threatened and Endangered Species Requirements**



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# **Key Aspects of Wetland/Stream Requirements**

Aquatic Ecology



#### **Increased Predictability?**



Uniform Standard Conditions- Alternative Analysis /Avoidance & Minimization (A&M) processes are better defined

Temp vs. Permanent impacts?

Jurisdictional extent?

Reliance on functional assessments!



#### Exhibit 14 - Wetlands

A&M and impact accounting includes wetland and Adjacent Area (AA) functions

Mitigation costs more predictable

Requires functional uplift in regulated Adjacent Areas!



#### Mitigation Table "Unmapped > 12.4 Acres"

How far ORES will take wetland jurisdiction/classification is slowly becoming clearer with each application...

Unmapped features - "Definable map features" as a viable solution...?

Still no allowance for multi-class wetlands...



Mitigation - In-kind culverts; Field data on

A&M emphasis: least impactful crossing

methods prioritized; Clearing & grading

1st order streams (solar & fences allowed); Flow

minimized; Fill for Access roads only

regimes are now critical –Article 15

locations and conditions critical

#### Mitigation Options

Mitigation Bank Credits or Applicant responsible options only No in Lieu Fee option for wetlands! HUC 8 scale; Contiguous mapped DEC features or < 50m of a NYSDEC mapped feature.

Streams - Applicant responsible mitigation options only; Culvert focused on in-kind stream class (e.g., T or T(s) streams)

Definition of Creation for no fill activities; plant trees/shrubs! Wetland functions as a metric of mitigation. Methodology?

# 94-c Lessons Learned – Exhibit 14 Wetlands

Avoid schedule delays from revisions to wetland delineation report or the ORES JD with comprehensive wetland delineations for potential change in the layout



Temporary versus

Permanent up-ended by ORES with influence from DEC, requesting scrubbing of the term "temporary" ORES takes jurisdiction of >12.4 acres whereas in Article 10, DEC must follow a regulatory process to take jurisdiction

On-site mitigation for temporary impacts in addition to the standard restoration Use of HDD to the maximim extent practicable pushed through application comments; more explanation of design approach

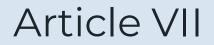
Site Specific Conditions could address de minimus temporary impacts

#### **Table 1 Wetland Mitigation Requirements**

#### Class III & IV Class I Class II Unmapped >12.4 acres FWW FWW Feature/Activity FWW AA AA AA Major Activities Wind Turbines X A(M3)\*\* A(E)\* A(M3) A X X A(E)\*\* A(M2) A(E)\* A(M3) A Solar Panels X A(M3)\*\* A(E)\* **Energy Storage** Х A(M3) A Access Roads A(M1) A(E)\* A(M2) A(E)\* A(M3) A Power interconnections (including A(M1) A(E)\* A(M2) A(E)\* A(M3) A clearing for interconnections) Х A(M3)\*\* A(M2) A(E)\* **Clearing of forest** A(M3) A Other activities and structures integral A(M3)\*\* Х A(M2) A(E)\* A(M3) A to the project involving placement of fill **Intermediate Activities** Security fence Х A(E)\* A(M3) A Α Α X Clearing and manipulation of A(E)\* A(M3) A A(M3) A undisturbed herbaceous vegetation A(E)\* A(M3) Other activities integral to the project X A A(M3) A involving grading **Minor Activities** Grading and manipulation of disturbed X A(E)\* A(M3) A(E) A A areas (active hay/row crops, existing commercial/industrial development) Selective cutting of trees and shrubs A A A A A A \*No enhancements or mitigation required with 75 foot or more setback \*\* 75-foot setback from wetland boundary required in undisturbed adjacent area

# 94-c Wetland Mitigation





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# **Article VII**

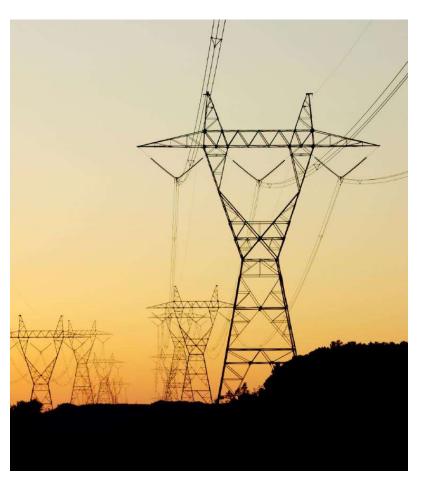
- Authority
  - » Article VII of the Public Service Law; 16 CRR G 85

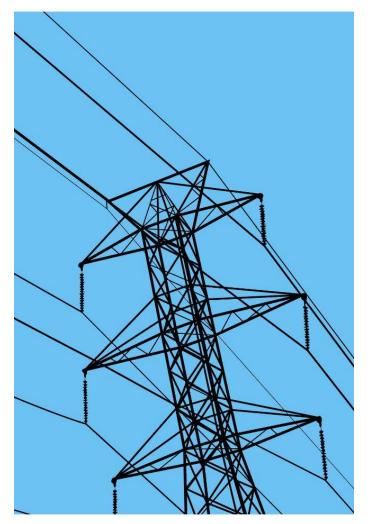
#### Purpose

» Establish a single forum for reviewing the need for and environmental impact of *major electric and gas transmission facilities* 

#### Projects

- » Electric transmission facilities > 125 kV for 1+ mile or > 100 kV for 10+ miles
- Natural gas pipelines at least 1,000 ft at pressures
   >125 PSIG, with some exceptions
- Agencies
  - » New York State Public Service Commission (PSC)
  - » New York State agencies, municipalities, community stakeholders involved





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# **Article VII continued**

#### Review Process

- » Pre-application agency meetings, public notice to file
  - ☑ Public Involvement Program strongly encouraged
- » Article VII Application, public meetings
  - ☑ Deficiencies or deemed complete
- » Hearings and Decision Phase
  - ☑ PSC makes decision on whether to issue Certificate of Environmental Compatibility and Public Need
- Environmental Management and Construction Plan (EMCP) submitted for public comment, review, approval
- » Other permits typically needed for DOT, DEC, USACE, FAA, etc.

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# Article VII Challenges and Resources

- » Lengthy and many stakeholders
- » Adjudicatory process with hearings

### Online Resources

- » Article VII Law <u>New York Public Service</u> <u>Law Article 7 - Siting of Major Utility</u> <u>Transmission Facilities</u>
- » Active, Certified and Filed Cases <u>Article VII Major Electric and Gas</u> <u>Transmission Facilities (ny.gov)</u>
- » PSC Siting Board Guide <u>Article VII</u> <u>Guide.pdf (ny.gov)</u>



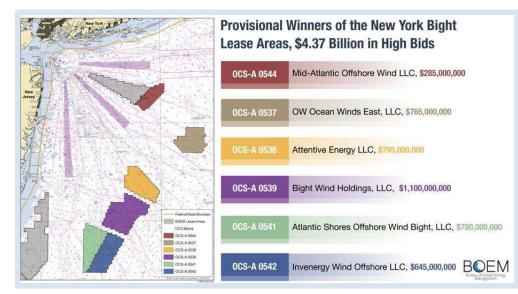




# Offshore Wind



# **Offshore Wind Investment & Market Overview**

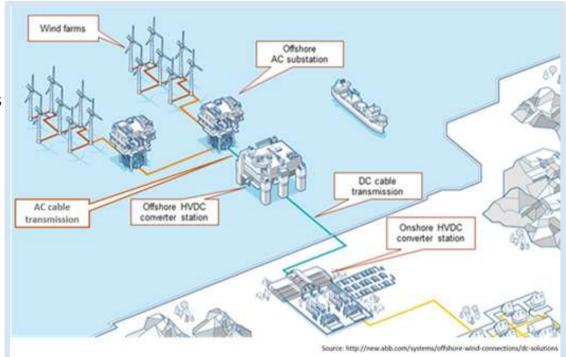


- » Federal goal of deploying 30 gigawatts of offshore wind energy generation by 2030 – would power 10M homes and support 77,000 jobs
- » NY Clean Energy Standard Offshore wind will help New York with its goal to generate 70% of its electricity from renewable sources by 2030
- » Bureau of Ocean Energy Management (BOEM) issued \$4.3 billion auction in NY Bight
- » Governor Hochul recently signed a nationleading \$500 million solicitation for Offshore Wind Infrastructure Investment

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# **Offshore Wind**

- Permitting
  - Most proposed projects would be in federal waters (more than 3 nautical miles from shore), requiring federal and state permitting processes
  - » Bureau of Ocean Energy Management (BOEM) is most involved agency and completes the National Environmental Policy Act (NEPA) review
  - Transmission component (NY) through Article VII



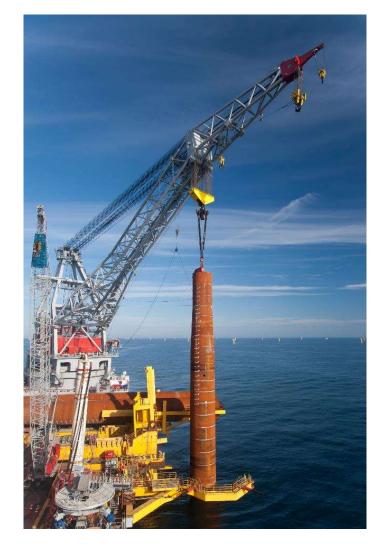
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## **Offshore Wind**

#### Other Involved Federal Agencies besides BOEM

- » **NOAA** -fisheries, marine mammals
- » **USFWS** -endangered species, onshore actions
- » Advisory Council on Historic Preservation
- » USACE subsea cables, Clean Water Act
- » U.S. Coast Guard -navigational lighting
- » **Department of Defense** -siting consultation
- » FAA -siting consultation
- » **EPA** -air quality and pollution prevention
- Involved New York State Agencies
  - » **Public Service Commission** -transmission permit, coastal impacts
  - » **NYSDEC** -coastal environmental impacts
  - » **NYSOGS** underwater cables
  - » NYSDOS coastal management review
  - » NYSDOT State-owned roads





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## **Offshore Wind permitting continued**

### BOEM Federal Review Process

- » Commercial lease acquisition
- » Site Assessment Plan (SAP)
  - ☑ How the lessee will conduct resource assessment and technology testing
- » Construction and Operations Plan (COP)
  - ☑ How the lessee will construct and operate project
- » Facility and Design Report
- » Fabrication and Installation Report
- » Other consultations and permits

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# Offshore Wind Challenges and Resources

### Challenges

- » New for U.S.
- » Some inconsistency in SAPs and COPs submitted, approved to date

### Online Resources

- » <u>Permitting Requirements for Offshore Wind -</u> <u>NYSERDA</u>
- » <u>Regulatory Framework and Guidelines | Bureau of</u> <u>Ocean Energy Management (boem.gov)</u>
- » <u>KW-CG-Broch.pdf (boem.gov)</u>



# Solar Project Siting Considerations

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## **Solar Project Siting Considerations**

- Land availability; interested landowners
- Proximity to transmission (existing or proposed)
- Civil site design basics
- Potential wetlands impacts
- Potential for T&E species presence
- Potential agricultural production impacts
- Potential historical/archaeological sites
- Setbacks





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# Solar Project Siting Considerations (cont'd)

- Eligibility Criteria for NYSERDA Renewable Energy Standard RFPs
  - » <u>Solicitations for Large-scale Renewables –</u> <u>NYSERDA</u>
  - » Wildlife Site Characterization
  - » Draft Desktop Wetlands and Water Resources Delineation
    - ☑ New York has a lot of wetlands!
  - » Phase 1A Archaeological Desktop Survey

## **Preapplication Strategies – NYSERDA Solicitations**



**2021 and 2022 Solicitations** expanded environmental requirements significantly:

-Desktop Phase 1A Cultural Resources Surveys

-Desktop Wetland Delineations with field verification

-Detailed Permitting Plans

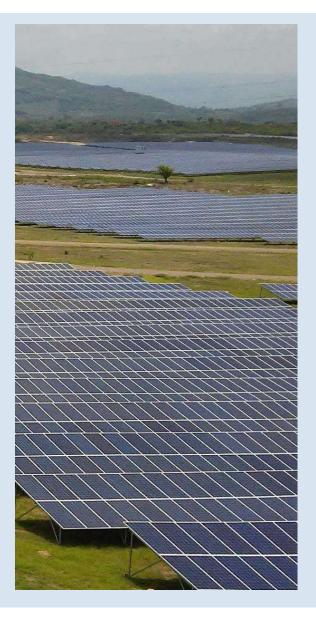
Smart Solar Siting Scorecard introduced



Mitigation cost calculation for Mineral Soils Groups 1-4

# wsp







# Quiz

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## **Quiz Question 1**

### What New York permitting pathway is used for smaller scale solar (<25 MW) projects?</li>

- A. Article 10
- B. State Environmental Quality Review Act (SEQR)
- С. 94-с
- D. Article VII

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## **Quiz Question 2**

### What New York permitting pathway is used for electric transmission lines?

- A. Article 10
- B. State Environmental Quality Review Act (SEQR)
- С. 94-с
- D. Article VII

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## **Quiz Question 3**

- Which New York permitting pathway did 94-c essentially replace for "major" renewable energy projects (>25 MW) ?
  - A. Article 10
  - B. State Environmental Quality Review Act (SEQR)
  - С. 94-с
  - D. Article VII

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## **Quiz Question 4**

- How is permitting handled for a typical Offshore Wind project that is greater than three nautical miles from shore and requiring new transmission to New York shoreline?
  - A. Federal
  - B. State
  - C. Federal and State
  - D. Presidential Permit
  - E. An Act of God

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## **Quiz Question 5**

### Which of the following are important considerations for siting a proposed solar energy project?

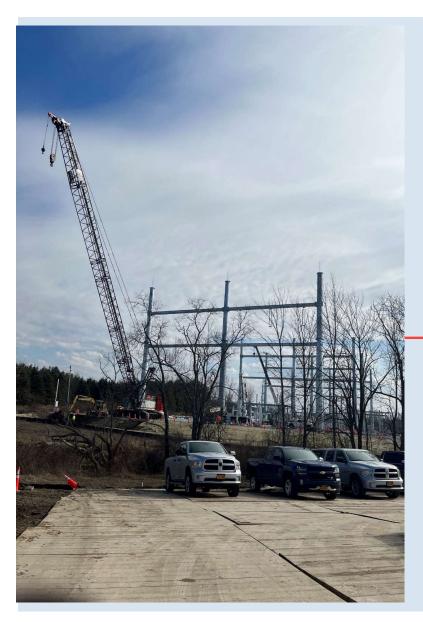
- A. Interested landowners
- B. Minimizing wetlands impacts
- C. Proximity to transmission
- D. All of the above

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## **Quiz Question 6 - Bonus**

- What is the name of the newly established State agency?
  - A. Climate Leadership and Community Protection Act
  - B. Office of Renewable Energy Siting
  - C. New York Green Bank
  - D. Bureau of Ocean Energy Management





# Questions