

Environmental Technical Working Group (E-TWG)

A Stakeholder Engagement and Advisory Process to Advance the Environmentally Responsible Development of Offshore Wind Energy for New York State

First meeting, 3 May 2018

New York, NY

Welcome and Introductions



E-TWG Meeting: Contacts

Contacts:

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Facilitation Support: Kearns & West - Jason Gershowitz





Introductions

In <60 seconds: who are you and why are you here?

- Developers: where are your project(s), and what is the current status?
- eNGOs: describe a current project, or your organization's interests related to offshore wind development.
- Where can we learn more? (project website, discussion in person, etc.)





Big Picture Rationale

- Technical Working Groups
 - General good practice to develop offshore wind responsibly
 - Advance common understanding among stakeholders
- E-TWG mission: advise the state on environmentally responsible development of offshore wind energy
 - Avoid, minimize, and mitigate anticipated impacts to the ecosystem and wildlife during offshore wind energy development and operation activities
 - Reduce risk for both development and wildlife



Meeting Objectives

- Convene E-TWG and Discuss Related Activities
- Review New York Activities
- Discuss & Advance E-TWG Framework & Operations
- Initiate planning for Specialist Committee activities



Agenda Review

Time	Agenda Item
10:00 – 10:30 AM	 Welcome and Introductions Round robin introductions
10:30 – 10:45 AM	Agenda & Meeting Objectives • Ground rules
10:45 – 11:45 AM	 Review of New York Activities Presentation & Discussion 2017 informal interviews The Offshore Wind Master Plan and contributing reports State and Federal activities / processes

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Agenda Review

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11:45 – 12:00 PM	Break (Set up for working lunch)		
12:00 – 12:15 PM	Working Lunch: The New York State Procurement Process Presentation		
12:15 – 12:45 PM	Working Lunch: E-TWG Framework Recap Presentation		
	E-TWG, Specialist Committees, and State of the Science Workshop		
12:45 – 1:00 PM	Break (Clear up from lunch)		
1:00 – 3:00 PM	 E-TWG Framework & Operations Presentation & Discussion Presentation: Highlights and questions from convening interviews Facilitated discussion: E-TWG Operations 		
3:00 – 3:15 PM	Break	ORK NITY.	NYSERDA

Agenda Review

3:15 - 5:00 PMSpecialist Committee Planning Facilitated Discussion Considerations for selecting topicsBrainstorming exercise: Identifying topics 5:00 - 5:30 PMWrap Up & Next Steps Review action items from the day's discussions Planning for future calls / meetings	Time	Agenda Item
5:00 – 5:30 PM • Review action items from the day's discussions • Planning for future calls / meetings	3:15 – 5:00 PM	 Specialist Committee Planning Facilitated Discussion Considerations for selecting topics Brainstorming exercise: Identifying topics
	5:00 – 5:30 PM	 Wrap Up & Next Steps Review action items from the day's discussions Planning for future calls / meetings
5:30 PM Close	5:30 PM	Close

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Ground rules

- "Honor" the Agenda
- Participate actively and respectfully
- Focus comments and speak concisely
- Speak in order; facilitator will mind the queue
- Speak clearly into the microphone
- Limit side conversations or take them outside
- Cell phones off/silent





Review of New York Activities



2017 Informal Interviews



2017 Informal Interviews

- Oct.-Dec. 2017
- Conversations and loosely structured interviews
- Focus on BMPs
- >50 stakeholders from state and federal agencies, developers, eNGOs, environmental consulting firms



2017 Informal Interviews

- A standing working group could:
 - Identify and develop consensus-driven BMPs
 - Build trust and collaboration
- A "state of the science" workshop to review existing BMPs and New York State activities.
- Concern with the term "BMPs"
- Potential pitfall: BMPs that are too prescriptive

www.briloon.org/ offshorewindny/ archive



Archive

Related Links:

Wildlife and Offshore Wind Main Page

NYSERDA Offshore Wind Energy Program

New York Offshore Wind Master Plan

NYSERDA Environmental Research Program Plan: Marine Wind and Wildlife Final Report

Advancing Environmentally Responsible Development of Offshore Wind in New York: Final Report Our archive page is a repository of information about this effort. Information on meetings and other events will be posted here as it becomes available.

2018 Events and Documents

Stakeholder Interviews

To obtain stakeholder feedback on the development of best management practices for wildlife and offshore wind energy, 24 informal interviews with 51 stakeholders were conducted in October-December, 2017. Click here for a summary of those discussions.



New York State Offshore Wind: Progress on the Master Plan

New York Clean Energy Standard



New York State will commit to building:

up to 2,400 megawatts of offshore wind power by 2030, which will generate enough power for up to 1.2 million homes.



Offshore Wind Master Plan

A comprehensive state roadmap for advancing development of offshore wind in a cost-effective and responsible manner

Key Elements

- Identifies the most favorable areas for potential offshore wind energy development
- Describes the economic and environmental benefits of offshore wind energy development
- Addresses mechanisms to procure offshore wind energy at the lowest ratepayer cost
- Analyzes costs and cost-reduction pathways
- Recommends measures to mitigate potential impacts of offshore wind energy development
- Identifies infrastructure requirements and assesses existing facilities
- Identifies workforce opportunities





Charting a Course to 2,400 Megawatts of Offshore Wind Energy

NYSERDA Report 17-25

Master Plan Supporting Studies and Surveys

Environmental

- Marine Wildlife Survey
- Analysis of Multibeam Echo Sounder and Benthic Survey
- Birds and Bats
- Environmental Sensitivity
 Analysis
- Fish and Fisheries
- Marine Mammals and Sea Turtles
- Preliminary Wind Resource
 Assessment
- Sand and Gravel Resources
- Consideration of Potential Cumulative Effects

Social and Regulatory

- Aviation and Radar Assets
- Health and Safety
- Shipping and Navigation
- Cultural Resources
- Cable Landfall Permitting
- Marine Recreational Uses
- Visual Threshold Study

Economic and Infrastructure

- Pipelines, Cable, and Other Infrastructure
- Ports and Supply Chain
- Workforce Opportunities in New York
- Jones Act Compliant Vessels
- Project Cost Projections
- Offshore Wind Injection Assessment



Outreach and Engagement

- Commercial and Recreational Fishing
- Consumer Advocates
- Elected Officials
- Indigenous Nations
- Labor and Business
- Long Island and New York City Communities
- Non-Governmental Organizations
- Offshore Wind Energy Industry
- State and Federal Agencies
- Submarine Cables and Offshore
 Infrastructure Owners





Identifying Additional Areas for Responsible and Cost-Effective Development



Existing Regional BOEM Lease Areas



NEW YORK STATE OF OPPORTUNITY.

Initial Offshore Wind Zones for Consideration



NY's Area for Consideration: Supporting Studies and Surveys

Environmental

- Marine Wildlife Survey
- Analysis of Multibeam Echo Sounder and Benthic Survey
- Birds and Bats
- Environmental Sensitivity
 Analysis
- Fish and Fisheries
- Marine Mammals and Sea Turtles
- Preliminary Wind Resource
 Assessment

Sand and Gravel Resources

Consideration of Potential
 Cumulative Effects

Social and Regulatory

- Aviation and Radar Assets
- Health and Safety
- Shipping and Navigation
- Cultural Resources
- Cable Landfall Permitting
- Marine Recreational Uses
- Visual Threshold Study

Economic and Infrastructure

- Pipelines, Cable, and Other Infrastructure
- Ports and Supply Chain
- Workforce Opportunities in New York
- Jones Act Compliant Vessels
- Project Cost Projections
- Offshore Wind Injection Assessment





Consideration Example: Shipping and Navigation



Consideration Example: Undersea Cables





Consideration Example: Fishing Outreach



NYSERDA

Consideration Example: Environmental Sensitivity





Outreach and Engagement

- Commercial and Recreational Fishing
- Consumer Advocates
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Area for Consideration



October 2017

New York State identified an **Area for Consideration** and requested that the federal Bureau of Ocean Energy Management identify and lease at least four new Wind Energy Areas within the area, each capable of supporting at least 800 MW of offshore wind.



BOEM Call Areas and NY Initial Study Zones



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BOEM Call Areas and NY Initial Study Zones





Renewable Energy Process: From Call to Auction



BOEM Call Areas and NY's Area for Consideration



Comments on the New York Bight Call Areas can be provided to BOEM online at: <u>https://www.boem.gov/NY-</u> <u>Bight/</u>

Comments are due May 29th



Path: MVNew_York_City/NYSERDA_Offshore/Maps/MXD/Requests/2018_04_12_CallAreas_and_origAreas/VY_CallAreas_and_NYS_AreaConsideration_20180426_rev3.mxd 108P17A.0034.01

New York State's Ongoing Activities to Advance Offshore Wind


Summary of Ongoing Activities

Public Service Commission Proceeding

-(later in the agenda)

- Supply Chain Development
- Quarterly Public Updates
- Ongoing/Future Studies and Analysis
- Research and Development
- Technical Working Groups





Continued Outreach and Engagement

- Commercial and Recreational Fishing
- Consumer Advocates
- Elected Officials
- Indigenous Nations
- Labor and Business
- Long Island and New York City Communities
- Non-Governmental Organizations
- Offshore Wind Energy Industry
- State and Federal Agencies
- Submarine Cables and Offshore
 Infrastructure Owners



Open Houses:

Webinar; May 1st East Hampton; May 7th Melville; May 8th



Future Studies and Analysis



- Improve characterization of • the wind, wave and ocean current environment.
- Useful in refining project layouts and reducing project uncertainty.
- Explore undertaking a detailed assessment of the air quality and health impacts of achieving New York's 2030 goals.
- · Refine the understanding of the hourly impacts of offshore wind generation in relation to the demands of the grid.
- Collaboration with appropriate federal and state agencies, universities and scientists to collect baseline data.
- Map seasonal patterns to • assist the identification of important habitat areas and predict future areas of high use.

- · Collaborate with industry to
- study how New York can best support the OSW supply chain.
- Analyze technical challenges to envision a path forward for the broader US industry.



Metocean Measurements to Support Offshore Wind Energy Development

- RFP 3855; proposals due May 31, 2018
- Making up to \$5,000,000 available
- Deploy two systems for 2 or more years
- Possibility of moving the buoys after 1-year
- Coordination and instrumentation with regional scientists encouraged







NYSFRDA

Marine Wildlife Aerial Survey





Completing second year of 3-years of quarterly surveys



Research and Development





- Component design
- Systems design
- Operational controls
- Monitoring systems
- Manufacturing processes

Seeking to invest\$20,000,000+Kicking off in 2018



Technical Working Groups

Environmental

Commercial and Recreational Fishing

Maritime

Jobs and Supply Chain



- Development of Wildlife Best Management Practices.
- Coordination for adaptive management.
- Identification of research needs and coordination.
- Lead: NYSERDA



- Development of Fisheries Best Management Practices.
- Identification of research needs and coordination.
- Development of a framework for understanding commercial fishing impacts.
- Improved Communications



- Development of Maritime Best Management Practices.
- Define strategies that could help members engage effectively with OSW development.
- Commitment to smart development



- Facilitate the connection of local manufacturers with global OSW developers and equipment manufacturers.
- Ensure certification and training requirements are clear and readily available.
- Lead: NYSERDA

Lead: NYSDOS

Jobs and Supply Chain Technical Working Group

Jobs and Supply Chain





*Steering Committee is ideal structure, though alternative models could be considered depending on ability to consolidate representation of stakeholder groups.

**Specialist Committees will be co-chaired by State Agencies.

Maritime Technical Working Group

Maritime



- New York is home to the largest port on the East Coast
- Navigation in the New York Bight requires a thoughtful approach to reduce risks from new projects
- Focus on developing best practices
 - Engaging members of the maritime industry (pilots, tug/barge operators, others)
 - Coordinating with agencies (BOEM, Coast Guard, Port Authority)
 - Soliciting input from OSW developers
- Commitment to smart development
 - New ideas, lessons learned from Europe



Fishing Technical Working Group

Commercial and Recreational Fishing



- Will provide **advice and guidance** while protecting the State and region's valuable fisheries and fishing communities
- Develop fisheries Best Management Practices
- Identify research needs for fishers and OSW developers
- Develop a framework for understanding impacts to fishing and mitigation of these impacts
- Develop a Commercial and Recreational Fisheries
 Communications Plan



Environmental Technical Working Group (E-TWG)

A team of offshore wind energy developers, technical eNGOs, government agencies, and other subject matter experts who advise the State of New York regarding the environmentally *responsible development* of the State's offshore wind energy resources.

Environmental



Overarching objectives include:

- Improving our understanding of, and ability to manage for, potential • effects of offshore wind energy development on wildlife;
- Developing transparent, collaborative processes for identifying and addressing priority issues relating to wildlife monitoring and mitigation; and,
- Reducing permitting risk and uncertainty for developers by improving clarity in expectations and processes for wildlife monitoring and mitigation.



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E-TWG Topics

Identified in the Offshore Wind Master Plan:

- Development of Wildlife Best Management Practices (BMPs)
- Coordination regionally for adaptive management.
- Identification of research needs and regional coordination
- Creation of an "Environmental Conservation Fund"
- Other topics identified by the E-TWG (e.g. communications)





E-TWG Scope

- Geographic scope
 MA to VA
- Topical scope
 - Biological and physical environment
 - Overlap with fisheries TWG: fish populations/biology
 - Includes land-based issues around cable landfall
 - Does not include viewshed, archaeological issues, fisheries issues

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State and Federal Activities and Processes Status







BOEM - Public Input Opportunities

Comments can be provided to BOEM online at: https://www.boem.gov/NY-Bight/

Comments are due by May 29th



Planning and Analysis

Task Force and Public Information Meetings

Federal Agency BOEM BUREAU OF OCEAN ENERGY MANAGEMENT (BOEM)

- Request for Interest (RFI) and/or Call for Information and Nominations (Call)
- Notice of Intent to Prepare a NEPA Document
- Public Scoping Meetings for NEPA Document
- Notice of Availability of a NEPA Document (NOA)
- Public Meetings during Draft NEPA Document Comment Period



Leasing

- Task Force and Public
 Information Meetings
- Proposed Sale Notice (PSN)

Site Assessment and Characterization

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 Task Force and Public Information Meetings



Commercial Development

- Task Force and Public
 Information Meetings
- NOI
- Public Scoping Meetings for NEPA Document
- NOA
- Public Meetings during Draft NEPA Document Comment Period







New York State - Public Input Opportunities

Comments can be provided online at: <u>http://documents.dps.ny.gov/</u> (Case #: 18-E-0071)

DGEIS Comments are due by **May 9th** SAPA Notice comments are due **June 4**

New York State Examples of opportunities for public input as part of the state permitting process:



NYSERDA

- Master Planning Process
- Open Houses
- Quarterly Webinars
- Technical Working Groups
- Workshops

Department of Public Service

 Certificate of Environmental Compatibility and Public Need under Article VII for transmission facilities

- OSW Policy Options Paper Notice
- GEIS for Procurement



Department of State

 Federal Consistency Certification under the Coastal Zone Management Program

Office of General Services

 State Submerged Lands Easement under the NY Public Lands Law Other potential engagement opportunities may be available

opportunities may be available for specific offshore wind projects



Public Construction and Development



State and Federal Process Crosswalk with the E-TWG

- Identify and prioritize future State supported environmental research
 to inform permitting
- Development of wildlife best management practices
- Pathways to an Environmental Conservation Fund to protect wildlife
- Improved communications and coordination:
 - Regional adaptive management
 - Workshops
 - Shared issues and concerns among E-TWG members



Break (set up for working lunch)





New York State Offshore Wind Procurement Process

Issue solicitations in 2018 and 2019 to develop

at least

35

WWW.

of offshore wind projects



Public Service Commission Proceeding

A proceeding is underway which will culminate in an Order defining the logistics of New York's offshore wind program.

The proceeding is guided by two principal documents:

- 1. A Generic Environmental Impact Statement (GEIS)
- 2. A Notice published by the Department of Public Service, which leverages NYSERDA's Offshore Wind Policy Options Paper

Both documents are subject to a public comment process:

- GEIS comments are due May 9
- Notice comments are due **June 4**



Offshore Wind Policy Options Paper

- NYSERDA filed an Offshore Wind Policy Options Paper on January 29, 2018
 - Public Service Commission Case 18-E-0071
 - Technical Conference in New York City on March 8, 2018
- The Options Paper provides an assessment of alternatives for addressing a wide range of policy issues pertinent to the successful deployment of a first phase (800 MW) of offshore wind
- Components include:
 - Procurement and Contracting
 - Seven options for contract structures
 - Schedule of future procurements
 - Methods to ensure ratepayer protection
 - Funding mechanisms through Load Serving Entity Obligations
 - Transmission and Interconnection strategies
 - Cost and benefit analysis





Benefits of OSW in New York



NYSERDA projects that the carbon benefits alone could justify the costs of the State's commitment to 2.4 GW of OSW, even before accounting for other anticipated benefits.



Procurement Options

- 1. Fixed REC. NYSERDA's large-scale renewable procurements under the Renewable Portfolio Standard employ this structure. Projects receive a fixed REC price throughout the contract lifetime but face unhedged energy and capacity.
- 2. Bundled PPA. Provides a bundled hedge against commodity electricity price risk, unlocking reductions in a project's cost of finance. Projects receive an all-in, fully-hedged revenue stream for commodity value and RECs.
- **3.** Utility-Owned Generation. Developers develop and build facilities. Once completed, project ownership is transferred to a utility. Low costs of capital may be available as the investments could be rate-based.
- 4. Split PPA. Pairs a Fixed REC procurement with a fixed-price energy and capacity procurement by a utility. A developer would see a fully-hedged revenue stream, identical to a Bundled PPA. The effective cost premium associated with the REC component would depend on the level of fixed commodity value offered by the utility.
- 5. Market OREC. NYSERDA provides a payment to projects based on the net difference between the project's bid price (expressed as an all-in revenue amount) and the actual revenue the project was able to achieve from its commodity sales. This option delivers a perfect commodity hedge.
- 6. Index OREC. NYSERDA provides a payment to projects based on the net difference between the project's bid price (expressed as an all-in revenue amount) and the average commodity market price as expressed in a market index or composite of indices. This option delivers a nearly perfect hedge.
- 7. Forward OREC. Projects receive a fixed payment for each two-year period of the contract that reflects the difference between an all-in strike price and two-year energy and capacity price forecasts or forward indices.



Cost/Benefit Results

The structures that offer perfect or near-perfect hedges show substantially lower program costs than approaches that offer a more limited hedge. The low-cost options include Bundled PPA, Index OREC, and Utility-Owned Generation. Other options could be low-cost solutions, but are subject to significant dependencies and uncertainties.

Phase I Cost Indicator	1. Fixed REC	2./4. Bundled/ Split PPA	3. Utility-Owned Generation	5. Market OREC	6. Index OREC	7a. Forward OREC, Conservative	7b. Forward OREC, Aggressive
Incremental Program Cost	\$1.2B cost	\$0.3B cost	\$0.2B benefit	\$0.2B cost	\$0.3B cost	\$1.0B cost	\$0.4B cost
Incremental Bill Impact	0.76%	0.19%	-0.16%	0.14%	0.18%	0.60%	0.26%
Long-Term Cost Indicator	1. Fixed REC	2./4. Bundled/ Split PPA	3. Utility-Owned Generation	5. Market OREC	6. Index OREC	7a. Forward OREC,	7b. Forward OREC, Aggressive
						Conservative	
Gross Program Cost	\$4.6B cost	\$1.9B cost	\$0.7B cost	\$1.9B cost	\$2.1B cost	Conservative \$3.9B cost	\$2.5B cost
Gross Program Cost Carbon Benefit	\$4.6B cost \$1.9B benefit	\$1.9B cost \$1.9B benefit	\$0.7B cost \$1.9B benefit	\$1.9B cost \$1.9B benefit	\$2.1B cost \$1.9B benefit	\$3.9B cost \$1.9B benefit	\$2.5B cost \$1.9B benefit



Open Comment Period: Notice

In response to the published SAPA Notice, Staff seeks stakeholder feedback on:

Phase 1 Competitive Solicitations

• Who should the soliciting entity be?

Phase 1 Project Eligibility

• Including - location; vintage and minimum distance from shore.

Phase 1 Scoring Criteria

• What is the relative weighting on which bids will be ranked?

Phase 1 Procurement Option

- What is the best method based on associated benefits, costs, legal risks?
- Options beyond those highlighted in the Options Paper.

Phase 1 Funding Options

• Each option assumes an LSE obligation as the source of funding. Is there a better method?



NY State Public Input Opportunities

New York State Examples of opportunities for public input as part of the state permitting process:



NYSERDA

- Master Planning Process
- Open Houses
- Quarterly Webinars
- Technical Working Groups
- Workshops



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SAPA Process

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Office of General Services

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other potential engagement opportunities may be available for specific offshore wind projects







E-TWG Framework Review

Mission statement for the E-TWG (proposed)

The E-TWG serves as an advisory body to the State of New York, providing advice and guidance to help steer the State's efforts to advance offshore wind development in environmentally responsible ways.



Topics in the Offshore Wind Master Plan

- Development of Wildlife Best Management Practices (BMPs)
- Coordination regionally for adaptive management
- Identification of research needs and regional coordination
- Creation of an "Environmental Conservation Fund"







<u>State Agencies</u>: NYSERDA,NYSDEC, NYSDOS RI CRMC, MA CZM, NJ DEP, etc.

<u>Federal Regulators</u>: BOEM, USFWS, NOAA

Developers:

Knowledgeable representatives from companies with offshore wind leases in the region.

<u>Environmental NGOs</u>: Knowledgeable representatives from science-based environmental NGOs with an interest in offshore wind

development in the region.

Subject Matter Experts (SMEs): Individuals with relevant experience drawn from any of the these groups as well as from academia or other institutions.

Support staff:

Knowledgeable support team of biologists, outreach specialists, professional facilitators, etc.

General mission statement for the SCs (proposed)

69

Inder the direction of New York State and the E-TWG, topically-focused Specialist Committees bring together science-based subject matter expertise to develop collaborative guidelines or other products that inform or advance the environmentally responsible development of offshore wind.

Specialist Committee operations

- Specialist Committees are formed by the State to develop collaborative guidelines or other products
 - Both E-TWG and SCs report directly to the State
 - SC members may carry out their committee charge themselves, or provide oversight for subcontractors
- The E-TWG helps focus NYS decisions based on the best available information, and identifies and prioritizes gaps; the SCs fill those gaps
- The E-TWG "bookends" and helps guide SC activities
 - The E-TWG suggests goals for committees and experts to participate
 - The E-TWG provides input and recommendations on products
- Need to further define interactions b/n E-TWG and SCS NYSERDA

State of the Science Workshops

 Regional coordination of research studies, guidelines development, and other efforts



- 2. Promote collaboration
- 3. Expert information exchange and discussion
 - Inform E-TWG and Specialist Committee activities
 - Build an understanding of the state of the science with scientists, developers and regulators
- 4. Public engagement and education about ongoing efforts to understand, minimize, and mitigate environmental impacts from offshore wind energy development

State of the Science Workshop: initial ideas

- Oct-Nov. 2018, 2-day meeting
- Technical sessions (target: ~75 attendees) and public open house

General agenda						
Day 1	10 am - 5 pm	Technical sessions	Panels and presentations			
Day 1	6 - 7:30 pm	Public open house	Poster session, NYSERDA presentation, and "meet the scientist" opportunity for public engagement			
Day 2	9 am - 12 pm	Technical sessions	Panels and presentations			
Day 2	12 pm - 3 pm	Technical sessions	Split into work groups to ID priorities and opportunities to leverage other efforts			
Technical session ideas: Presentations

- Technological developments for monitoring/mitigation
- Taxon-specific research and monitoring
 - State of knowledge
 - Ongoing studies
- Knowledge from other industries

- European experience: current science and applications for conservation
- Environmental baseline research related to the OWMP
- Assessing indirect impacts on wildlife and food webs



Technical session ideas: Panels/Discussions

- Developer forum on permitting
- "What we've learned so far"
- How to incorporate best science into each step of permitting and regulatory process

- How changes in turbine tech affect conservation and permitting
- Fostering regional
 information exchange
- Priorities for research
- Priorities for guideline
 development





E-TWG activities and time commitment

- ~9 days/year total:
 - Attend up to four in-person meetings per year in New York
 - Participate in 2-4 conference calls per year
 - Participate and provide leadership at "State of the Science" conference in NYS
 - Document review
- Specific tasks:
 - Review agendas, meeting summaries, and other documents for the E-TWG
 - Advise NYS on priority topics and information needs
 - Identify candidates with technical expertise to serve on Specialist Committees
 - Help direct SC efforts
 - Review the products developed by the SCs, and provide the State with recommendations and feedback
 - Disseminate information about the effort to other stakeholders



E-TWG Support

- Financial (NYSERDA)
 - Support staff, meeting costs, ,etc.
 - As needed support to subcontract SC activities and provide travel support
- Technical (BRI)
 - Meeting agendas and presentations, meeting minutes and summaries, project webpage, reports and other documents.
 - Carry out activities as directed by the E-TWG and SCs
 - Provide expertise to the E-TWG and SCs
- Logistics (BRI/NYSERDA)
 - Coordination and management of E-TWG and committees
- Meeting Facilitation (Kearns & West)
 - Advice on group management and decision making
- Communications and Outreach (BRI/NYSERDA)



2018 timeline (proposed)

Activity	Brief Descriptions	Timeline
E-TWG conference call	 If needed to follow up on specific items from 1st meeting 	~June 2018
Second E-TWG meeting	 Finalize E-TWG framework, function, and goals Review and discuss potential priority topics for SCs Provide recommendations on stakeholder communications/outreach Discuss planning for the first "State of the Science" workshop 	Summer 2018
State of the Science workshop	 Review lessons learned and identify key data gaps Present results from E-TWG meetings Discuss priorities for Specialist Committees Provide input on potential participants and goals for Specialist Committees 	Fall 2018
Third E-TWG meeting	 Debrief "State of the Science" Workshop Review and advance Specialist Committee convening 	Fall 2018
Form SCs	 NYSERDA extends invitations and advances convening of SCs Coordination of Specialist Committee activities and timelines 	Dec. 2018





Questions from convening interviews



Decision making and communications

- How will E-TWG input and recommendations be communicated (to the state, constituents, and the public)?
- How will the state use E-TWG input and recommendations to make decisions?
- How will the state communicate back to the E-TWG how input was used in decision making?





TWG Decision Making: Discussion

- How are feedback/input/recommendations on SC products transmitted to the State?
 - NYSERDA, NYSDEC, and NYSDOS listen to E-TWG conversations
 - Level of consensus on recommendations/input is recorded during meetings
 - Meeting summaries that describe areas of agreement and range of perspectives/comments
 - E-TWG provides written commentary/editorial to accompany SC reports?



Other Selected Questions

- Capacity
- Funding for travel reimbursement
- Planning for future changes to E-TWG
- Involvement of other organizations
- Handling of E-TWG materials
- Public outreach and communications



Communications and outreach

Communications Methods	Informed	Other	General
	Stakeholders	TWGs	Public
Direct involvement in E-TWG or SCs	\checkmark	√?	
Public email list serv	\checkmark	\checkmark	\checkmark
Meeting summaries	\checkmark	\checkmark	\checkmark
Website with news and a document archive	\checkmark		\checkmark
Quarterly NYSERDA webinars		\checkmark	\checkmark
State of the Science workshops	\checkmark		\checkmark
Reports and guidance documents	\checkmark	\checkmark	
Communications documents		\checkmark	\checkmark
Coordination of meetings/activities b/n TWGs		\checkmark	

• Other questions?

E-TWG Operations



Foundation & Considerations for E-TWG Operations

- Incorporating the Framework
- Outcomes with flexibility to evolve
- Maintaining diverse scientific and technical expertise
- Emphasize transparency, building trust and sharing information
- Ensure safe space if needed for sensitive member discussions
- Ensure clarity in decision-making roles and responsibilities
- Ensure clarity in how products and recommendations will be applied (especially to previously permitted projects)
- Communications with the media and stakeholders

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Supporting E-TWG Operations

- What do we need to support E-TWG Operations?
- Proposal: Develop a charter that
 - Incorporates the E-TWG Framework
 - Establishes ground rules / guiding principles
 - Adds nuances from interview feedback
 - Incorporates today's discussions









Specialist Committee Planning

Considerations for Selecting Topics





Possible topics

- Offshore Wind Master Plan
 - Wildlife BMPs
 - Regional coordination for adaptive management
 - Identification of research needs
 - Framework for a conservation fund
- Other ideas
 - Communications



Possible topics for BMPs

- High priority risks and/or high priority species
- Cumulative impact assessments
- Risks to migratory species
- Impact assessments for large whales (NARW)
- Gap analysis for BMPs
- Understanding and predicting risk
- Assessing effectiveness of mitigation
- Avian collision vulnerability
- Monitoring and mitigation for terrestrial migrants

Considerations

- Scale
 - Baseline/ regional vs. site specific

Focus

Avoidance vs. minimization/ mitigation



96

Considerations

- May have different types of priorities:
 - Information sharing vs. identifying concrete impacts and outcomes to be achieved
 - A poorly defined problem we are trying to understand, vs. trying to formulate a course of action to improve outcomes, or apply ideas within a regulatory framework
 - Short, medium, and long-term priorities
- What information from other locations/industries is relevant, and how does that influence identified data gaps and priorities? NEW YORK | NYSERDA



Brainstorming Exercise: identify possible priority topics



Possible criteria for priority topics

(from March 2018 convening interviews)

• Need

- Importance for permitting
- Importance for species conservation
- Urgency of need

Opportunity for impact

- Potential for impact ability of E-TWG to support advancing the issue
- Ability to define concrete impacts and outcomes
- Lack of relevant information from other locations or industries

Scale

- Regional scale of study (as opposed to site-specific)
- Importance for regional coordination/connectivity for east coast
- Study timeline relative to development timelines

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99

Identifying Topics

- Popcorn: Quick topic suggestions
 - No bad ideas
 - No need to prioritize
 - Only new ideas
- Review & Calibration: Review considering possible overlap and challenges / opportunities in advancing the topic
- Recap & Continued Planning: Review evolved topics list and discuss next steps for continued refinement

OPPORTUNITY.



Wrap Up and Next Steps

Action items from discussions



State of the Science Workshop

- Input on agenda (session topics, speakers, etc.)
- Chair a session?
- Participate in public open house?
- Involvement in workshop planning committee?

General agenda						
Day 1	10 am - 5 pm	Technical sessions	Panels and presentations			
Day 1	6 - 7:30 pm	Public open house	Poster session, NYSERDA presentation, and "meet the scientist" opportunity for public engagement			
Day 2	9 am - 12 pm	Technical sessions	Panels and presentations			
Day 2	12 pm - 3 pm	Technical sessions	Split into work groups to ID priorities and opportunities to leverage other efforts			

Future calls and meetings

Activity	Brief Descriptions	Timeline
E-TWG conference call	 If needed to follow up on specific items from 1st meeting 	~June 2018
Second E-TWG meeting	 Finalize E-TWG framework, function, and goals Review and discuss potential priority topics for SCs Provide recommendations on stakeholder communications/outreach Discuss planning for the first "State of the Science" workshop 	Summer 2018
State of the Science workshop	 Review lessons learned and identify key data gaps Present results from E-TWG meetings Discuss priorities for Specialist Committees Provide input on potential participants and goals for Specialist Committees 	Fall 2018
Third E-TWG meeting	 Debrief "State of the Science" Workshop Review and advance Specialist Committee convening 	Fall 2018
Form SCs	 NYSERDA extends invitations and advances convening of SCs Coordination of Specialist Committee activities and timelines 	Dec. 2018

- Questions?
- Parting comments?



Thank you!



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Homework

- Before the next meeting, identify your top 3-5 priorities:
 - What are the first SCs you would like to see convened?
 - What specific goals or outcomes would you like to see for each topic area?
 - Why is each topic a priority?
- How do we want to present/discuss these priorities at the next meeting?

