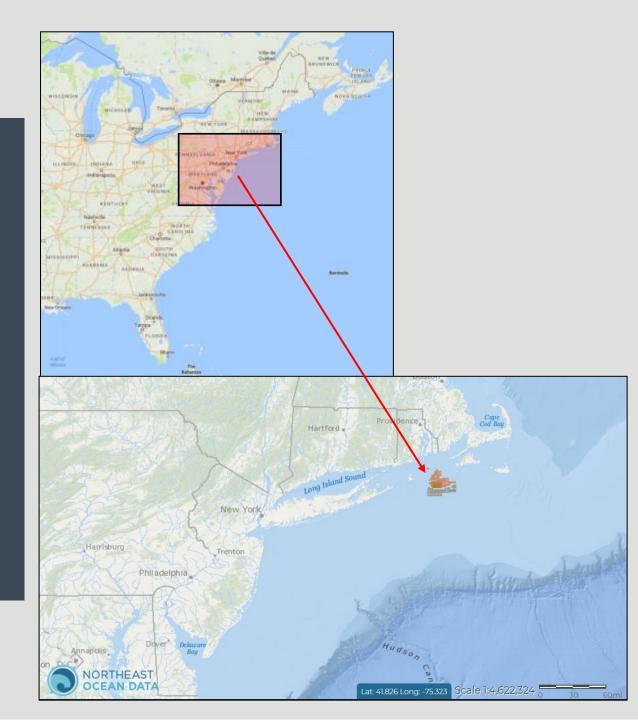


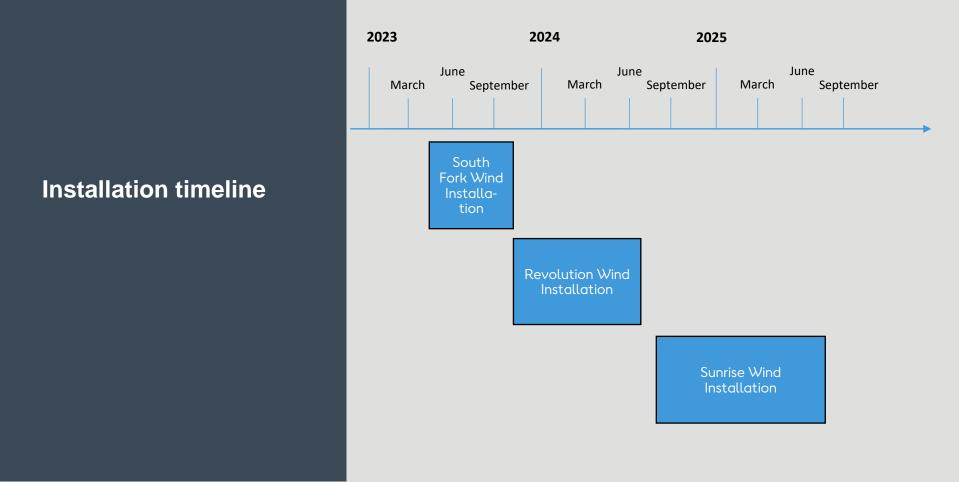


# **Overview presentation**

#WTG	161	Туре	SG 11.0-200 DD
Total MW	South Fork Wind: 132 MW / 12 WTGs Revolution Wind: 704 MW / 65 WTGs Sunrise Wind: 924 MW / 84WTGs		
Owner	Orsted and Eversource		
Location	Located in North East US-Federdal waters between Montauk, New York and Martha's Vineyard, Massachusetts.		
Scope	Connec	ticut	arbor: New London, narbor: Quonset Point, Rhode

# **Project location**





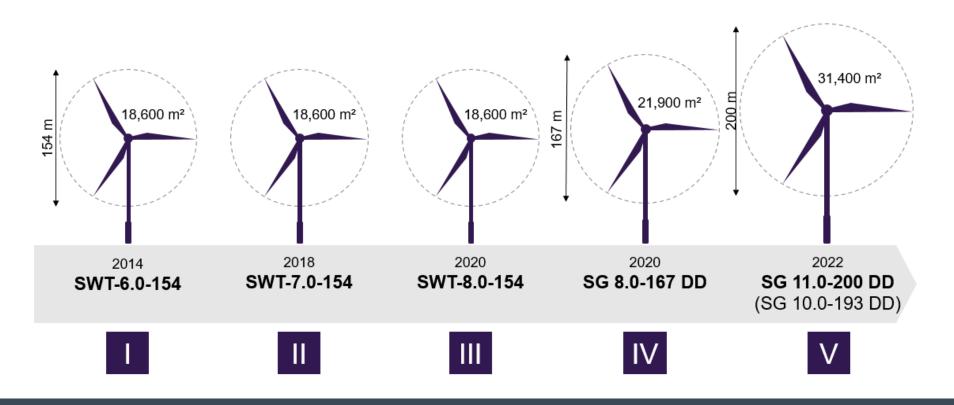
**WTG** introduction





#### Experience

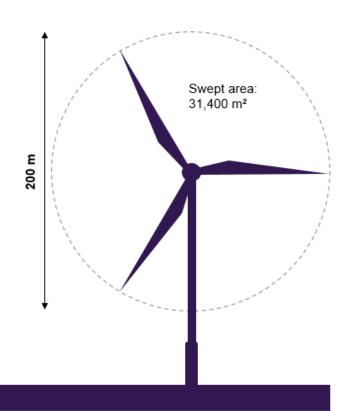
### **Five generations of Offshore Direct Drive**



Trusted technology

### Our turbine in a nutshell

SG 11.0-200 DD		
IEC class	I, S	
Nominal power	11,000 kW	
Rotor diameter	200 m	
Blade length	97 m	
Swept area	31,400 m <sup>2</sup>	
Hub height	Site specific	
Power regulation	Pitch-regulated, variable speed	



# The upgrade from B94 to B97 is done by extending the outer part of the blade by 3.5 meters





#### Inner part (up to 70 meter) kept similar:

- Same root, leading edge and trailing edge
- Same structure with very minor updates to accommodate extension
- Same geometry and sweep (x-y axis) as B94



#### New in outer part (+70 meter):

- Tip geometry (B94 + 3.5-meter length)
- Enablers for the blade extension:
  - Higher pre-bend (+1 meter bent "into" wind direction (z-axis))
  - Beam reinforcement in outer part
  - Structural reinforcements in outer part



### The SG 11.0-200 DD design specifications



Upgrades: Blade, hub, generator, nacelle,

converter and transformer.

**New:** Blade material and air foils.



50/60 Hz markets.



66 kV.



Power Boost and High Wind Ride Through.



Pipe fitter

Infrastructure companies for preps at site.

SGRE are looking for local supplier in the following areas:

Sewer systems

Iron workers

**Electricians** 

**Carpenters** 

Waste Management

Infrastructure companies for preps at site.

SGRE are looking for local supplier in the following areas:

Ad hoc suppliers

Cleaning

Taxi, car rental, shuttlebus services

Accommodation (Hotel B&Bs, Motel, etc.)

**Food services** 

# Construction/Installation

SGRE are looking for local supplier in the following areas:

**Equipment** 

**Cranes** 

Loaders

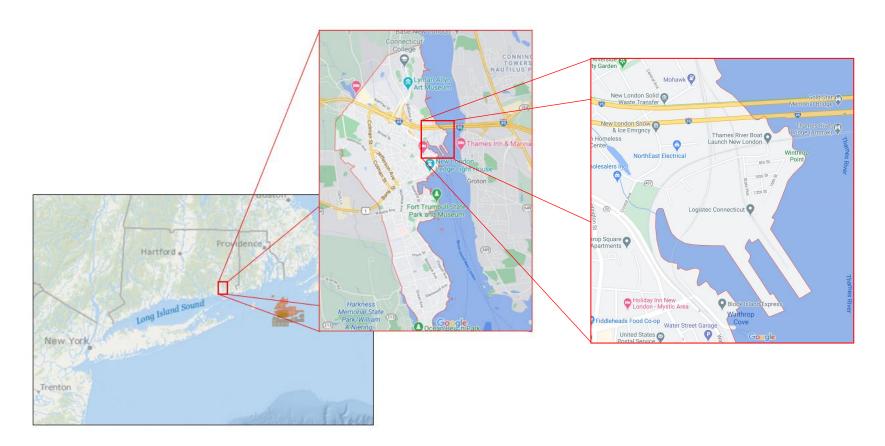
**Local shops** 

**Local hires** 

**Construction / Site** introduction

## Pre-Assembly Concept New London, CT

~60km from Offshore Site

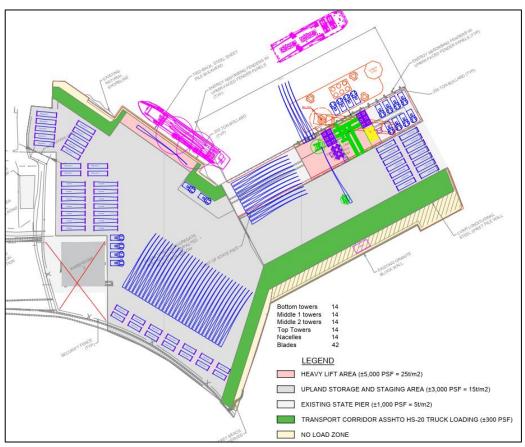


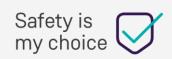


## Pre-Assembly Concept New London, CT

~60km from Offshore Site

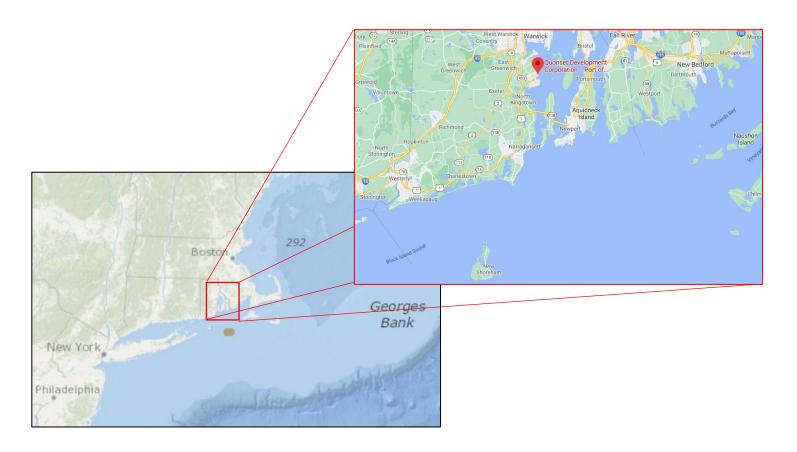


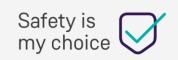




# **Commissioning and Commissioning Harbor concept Commissioning Harbor**

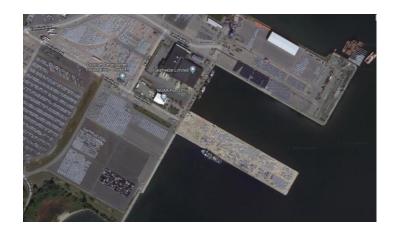
~90km from Offshore Site





# **Commissioning and Commissioning Harbor concept Commissioning Harbor**

~90km from Offshore Site







MS Forms Local supplier's input

