

DOCKETED

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PIER WIND

Suzanne Plezia, P.E.

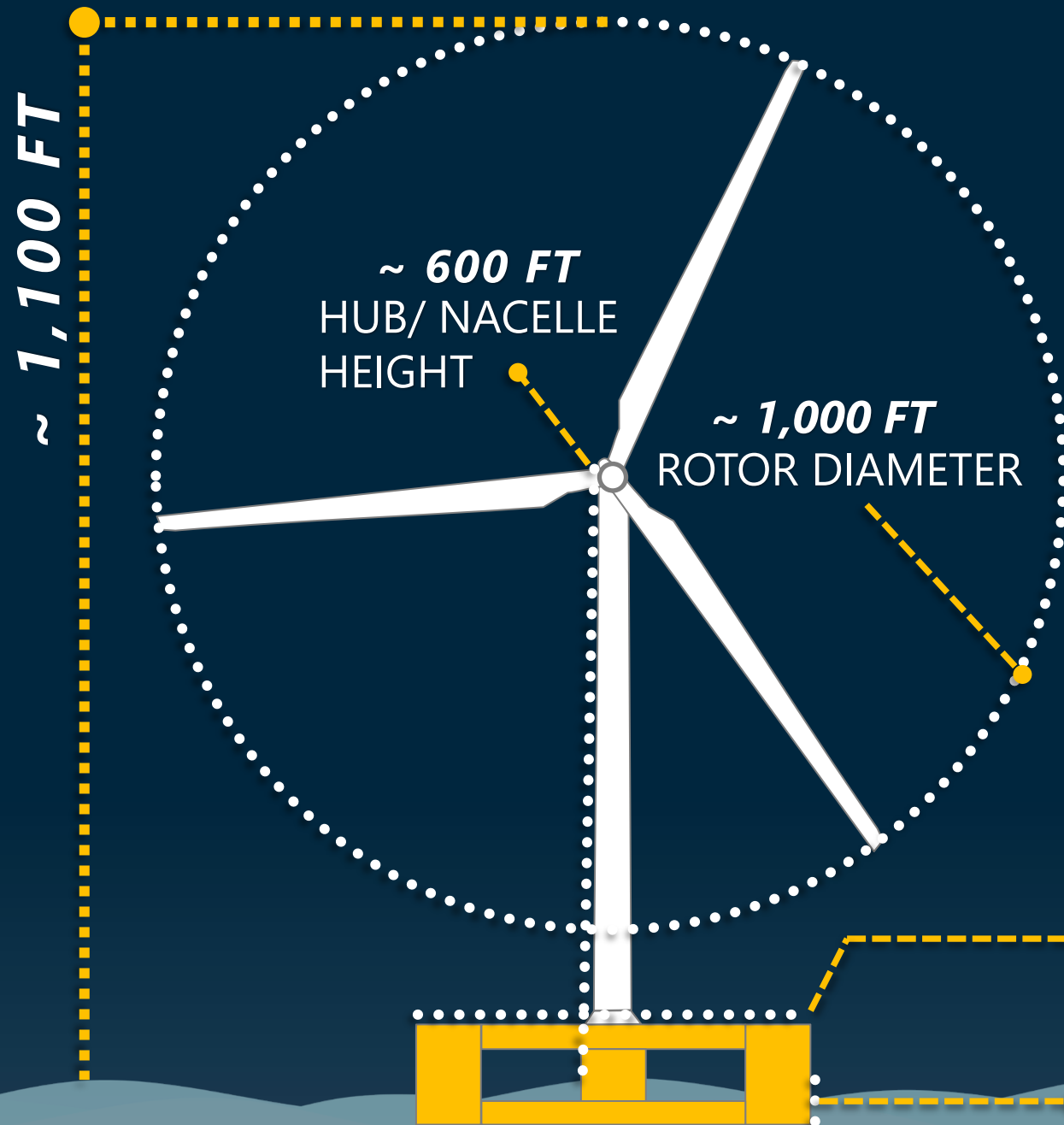
Senior Director, Chief Harbor Engineer



Port of
LONG BEACH
THE GREEN PORT

PLANNING FOR FUTURE --- INNOVATION

The background image shows an offshore wind farm under construction. Several large yellow and white wind turbine foundations are visible in the water. In the foreground, a large blue ship with yellow cranes is positioned near one of the foundations. The sky is a clear, pale blue, and the water is a deep blue with some ripples.



APPROXIMATE DIMENSIONS

20-25 MW FLOATING OFFSHORE WIND
TURBINE SYSTEM DIMENSIONS

- + Efficiencies
- + Economies of Scale
- + More Energy in WEA with fewer WTGs to Maintain

= Less Sea Space, Less Impacts
and Lower LCOE

~ 425 FT x 425 FT
FOUNDATION BEAM / WIDTH

~ 20 - 50 FT *
DRAFT

* Plus under keel clearance for towing

FOUNDATION



Source: Principle Power

TIER 1 MF

FLOATING OFFSHORE WIND TURBINE ASSEMBLY & SUPPLY CHAIN



**TOW OUT TO
INSTALLATION SITE**

**One per week
per S&I site**



Credit Photos: LM Wind Power, Vestas, Journal of Commerce, Principle Power, Maritime Cyprus, fotocommunity.de, Port of Monroe, Dock90, Euractiv, Wind Plus

AB525 STRATEGIC PLAN – PORT REQUIREMENTS

- Staging and Integration (S&I) Sites are the Most Critical Need (Establishes the other Port Needs in Multiport System)
- Additional S&I Sites beyond Humboldt are needed
- Infeasible / impractical to build new port in Central California (regulatory, cost, time, environmental impact)
- Only Pier Wind can meet the need



STATE'S LARGEST SKILLED
MARINE, MANUFACTURING,
AND CONSTRUCTION
WORKFORCE

PART OF LARGEST
INDUSTRIAL PORT
COMPLEX IN THE
NATION

FEDERAL
BREAKWATER

HARBOR DISTRICT

-40' to -70'
DEEP

NO AIR HEIGHT
RESTRICTIONS

-76' MAIN CHANNEL

UNIQUE QUALITIES OF PORT OF LONG BEACH

CENTER OF US SUPPLY
CHAIN
WITH EXTENSIVE
ROAD, RAIL, AND MARINE
TRANSPORTATION
NETWORKS AND SUPPLY
CHAIN LOGISTICS

INDUSTRY LEADER IN
DEVELOPING LARGE
MARINE INFRASTRUCTURE



WET STORAGE

SINKING BASIN

FIXED PIERS

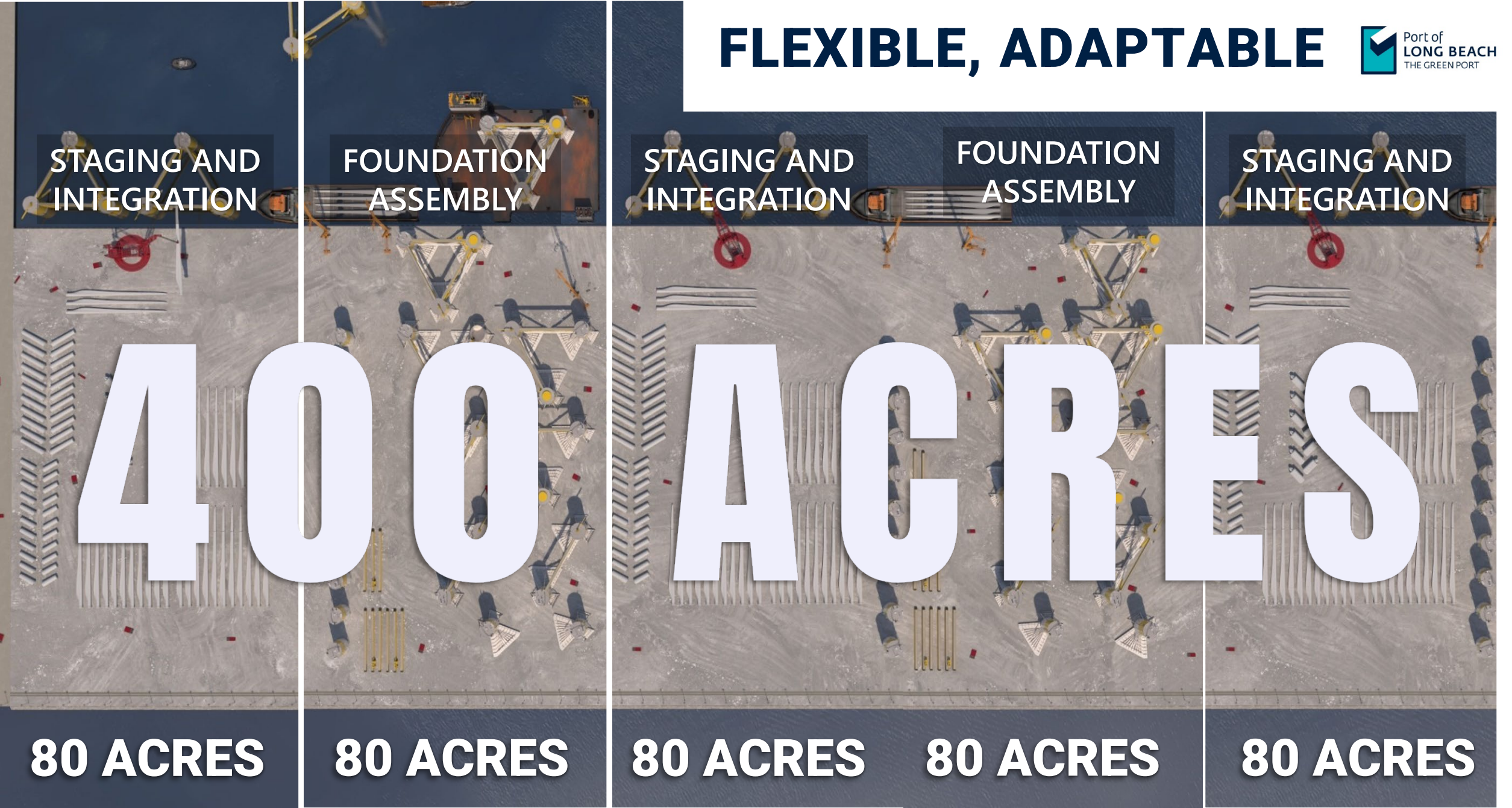
-76' MAIN CHANNEL

**7,500 FT HEAVY LIFT
CAPACITY WHARF**

WET STORAGE

CONCEPT DESIGN

FLEXIBLE, ADAPTABLE



STAGING AND
INTEGRATION

FOUNDATION
ASSEMBLY

STAGING AND
INTEGRATION

FOUNDATION
ASSEMBLY

STAGING AND
INTEGRATION

400 ACRES

80 ACRES

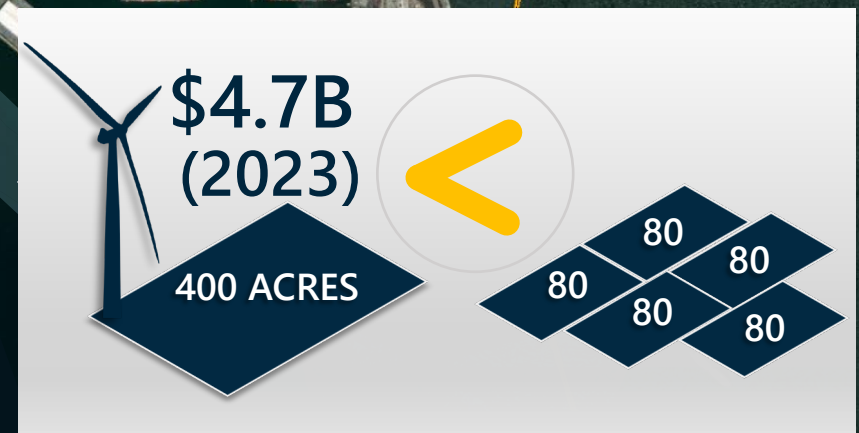
80 ACRES

80 ACRES

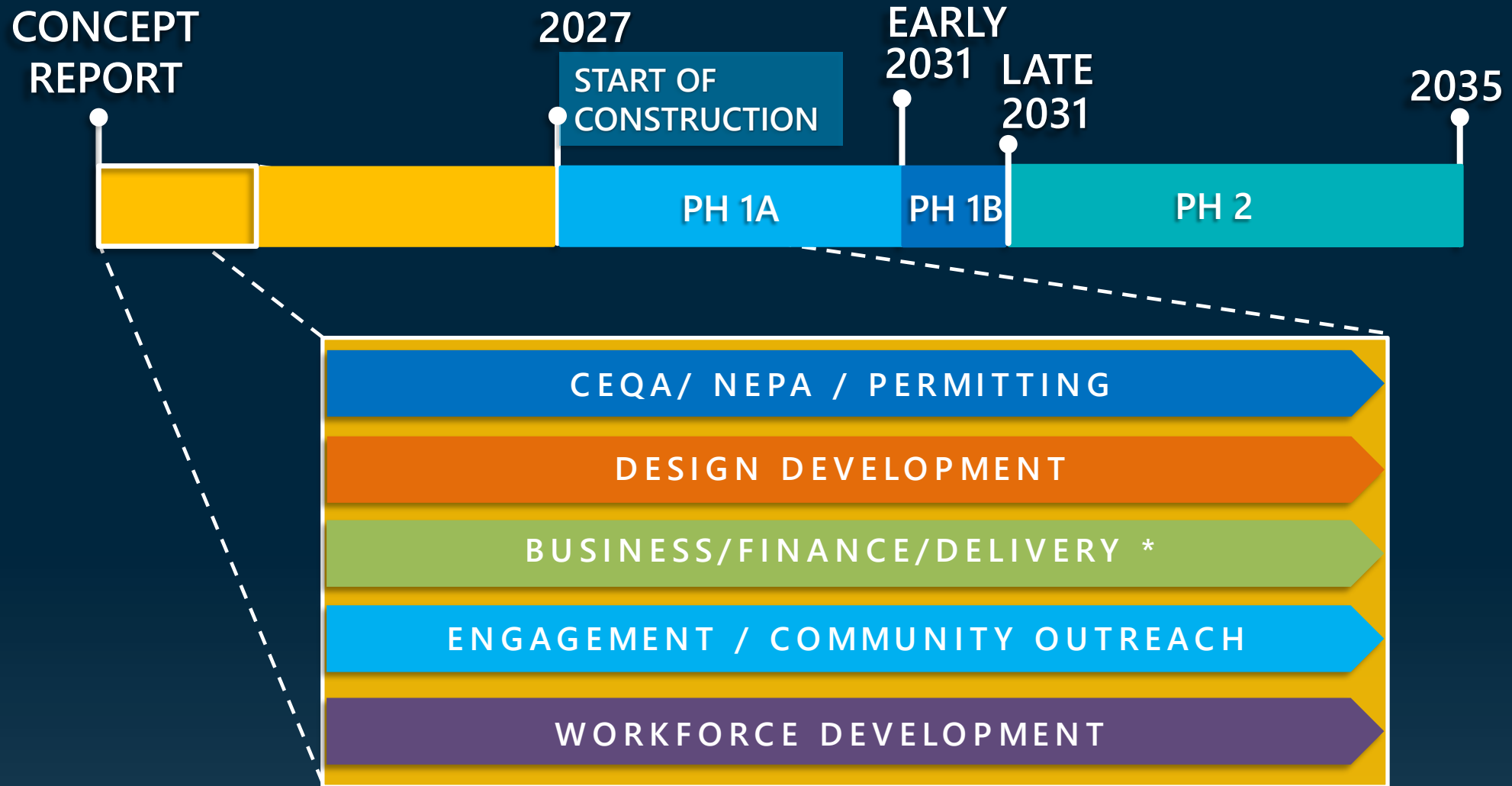
80 ACRES

80 ACRES

SCHEDULE AND COST



STATUS UPDATE



BENEFITS SUMMARY

Positions California and the United States to be at the forefront of floating offshore wind innovation and development

US Goal of 15 GW BY 2035

CA Goal of 25 GW BY 2045

LARGEST PURPOSE-BUILT OFFSHORE WIND FACILITY

SCALE



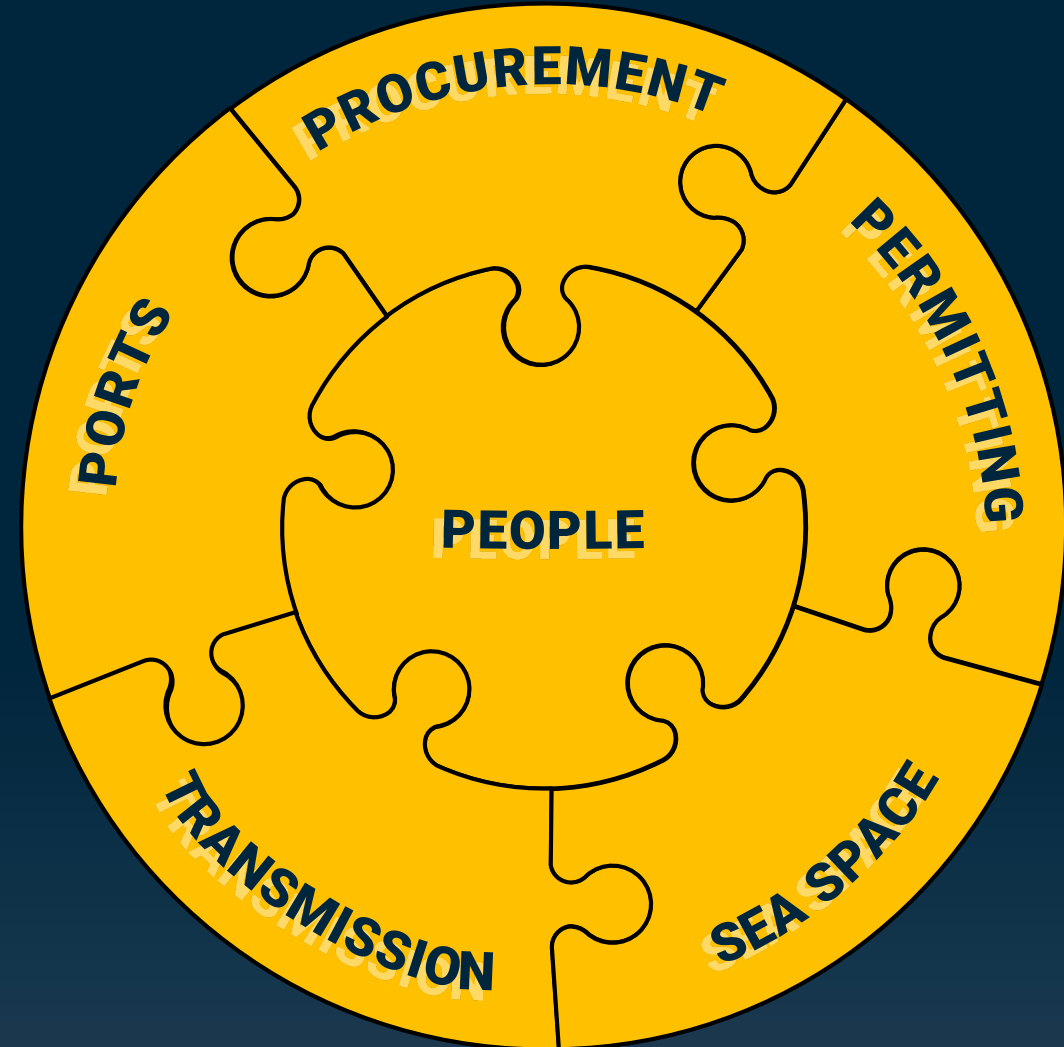
Greenhouse Gases
Cost of Energy

Industry Supply Chain



HOLISTIC STRATEGY

-  Environment
-  Energy
-  Economic
-  Equity





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