# Research Needs for Offshore Wind

Robert Collier

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### Many questions to be answered

- Research commissioned by BOEM and CEC: important progress, especially environmental questions
- But other research needs some apparent, some less so.
- Apparent: Humboldt port, electrical infrastructure, LCOE
- Not apparent: Workforce + employment



#### Research on workforce needs

- NREL study (Speer et al 2016) good start but much more detail needed
- What % of Humboldt workforce will be imported?
- How much local hire and training?
- Need high-skills workforce. Details depend on extent of local supply chain.
- Rhode Island: Project Labor Agreement led to state-certified apprenticeship and training programs.



## Research on jobs quality

- What quality of jobs? Wages, benefits, stability?
- Diversity in workforce. Who is being hired demographics? Retention?
- Full data is not easy to obtain. Many sources.
- Research results on California solar, wind, and High Speed Rail in Kern, Riverside, San Bernardino counties: Measurable effect in diversifying workforce, career track skills.
- Best practices: Project Labor Agreements and Community Workforce Agreements, with hiring pipelines for local communities.



#### **Robert Collier**

(415) 298-5726

robert.collier@berkeley.edu

http://laborcenter.berkeley.edu/climate

