

Figure 1 of the report <https://www.nrel.gov/docs/fy24osti/89642.pdf> shows the best region is south of Corpus Christi. The other areas have winds that are too lite for making OSW economical and this means the areas the government is offering north east of this best area will not be economical (enough). The naval air station at Corpus Christi prevents OSW in that area. In order to make the OSW economical south of Corpus Christi it will need to be near to shore to limit transmission costs, possibly two miles off shore so that lower voltage cables can be run to 345 kV ties on shore. There are more than two problems. One is that the ERCOT transmission system cannot support more OSW wind power in that area. It would require a major CREZ type investment in new 345 kV lines to move the power injected in the Valley area northward. ERCOT is making minimal investments for grid reliability, i.e. barely enough transmission. The other problem is hurricanes. A major hurricane could destroy wind farms anywhere in the Gulf of Mexico. Then there are environmental problems as well as land owners and protection of the national sea shore for wind close to shore. If you put the OSW far off shore the transmission costs make the wind not economical. I suggest that the ERCOT system needs to build more lines for CREZ and even nuclear projects in the valley, but the idea that OSW is going to make a major energy contribution to the US electric energy supply is wishful thinking not backed up by engineering studies.

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