

Interactive comment on “Pathways to bring the costs down of floating offshore wind farms in the Atlantic Area” by Juan José Cartelle-Barros et al.

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RECOGNICED VALUES.-

- 1.- This work is part of a European project Project Interreg ATLÁNTICA AREA involving up to 15 partners, who have different aspects.
- 2.- Specifically, this paper studies the real costs of a real telescopic semi-submersible concrete platform (TELWIND[®] platform), suitable for medium-high depths to those of the future market. In addition, nine locations are studied on the Spanish coast. I understand that this same study can be extended to any other location, only by varying the input data.
- 3.- The costs are studied in all phases of the project. From the beginning conception

and definition to its final Dismantling, through the design and development, manufacturing, installation and commissioning and exploitation. Collect up to 938 entries, obtained from other phases of the project, made by other European project partners.

4.- It is concluded that the highest difference in maintenance costs (reaching 54 million euros) is due to the distance between the farm and the base port, from where maintenance, repairs and final dismantling are carried out.

5.- The results show that the difference in the values of the Levelized Cost of Energy of the farm (LCOE) can be doubled, depending on the location. This is the case of Huelva (exceeding € 180 / MWh) compared to the Baiona-A Guardia (€ 99.73 / MWh).

6.- The influence of the variation of the electricity tariff, representative of scenarios that have been given or that can be expected, is analyzed to see its effect on economic parameters of farm operation. It is concluded that the operating results depend a lot on the electricity tariff.

7.- It also allows you to quickly study the influence of other park parameters such as the number of generators in the park, size, distance between turbines, etc.

8.- In summary, I think it represents a useful tool to study different alternatives. It provides valuable economic information that can help the governments of each country to establish their policy of future investments in offshore wind power for renewable electricity generation, objective of the Paris agreement of 2015 (COP21) and possibly enhanced in the commitments adopted in the one in Madrid (COP25 - December 2019).

In summary, I recommend the publication of this work.

MINOR FIXES

1.- In line 145 reference error appears about section of the work. It must be corrected.

2.- In graphs 8 and 9 (that I attached), the titles of locations are superimposed on the

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scale of the vertical axis, making it difficult to read. It must be corrected.

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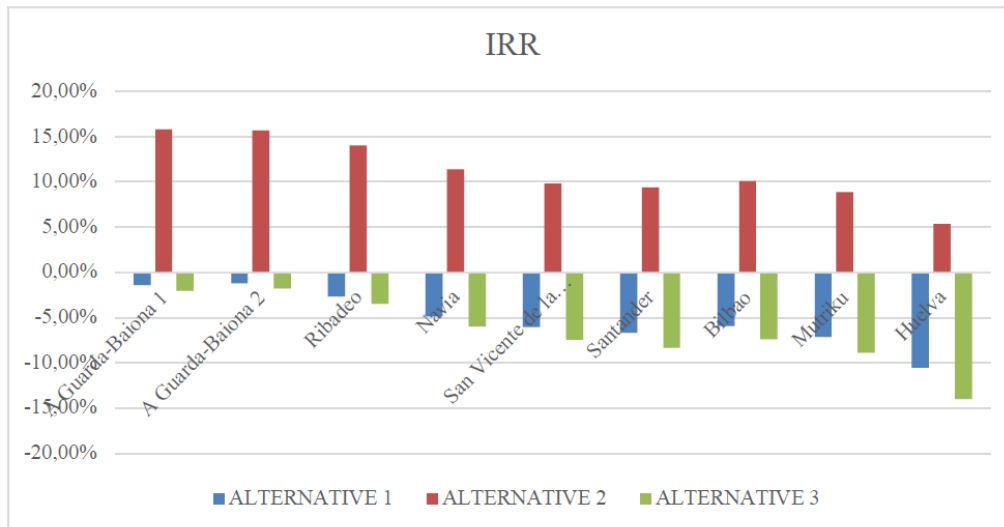
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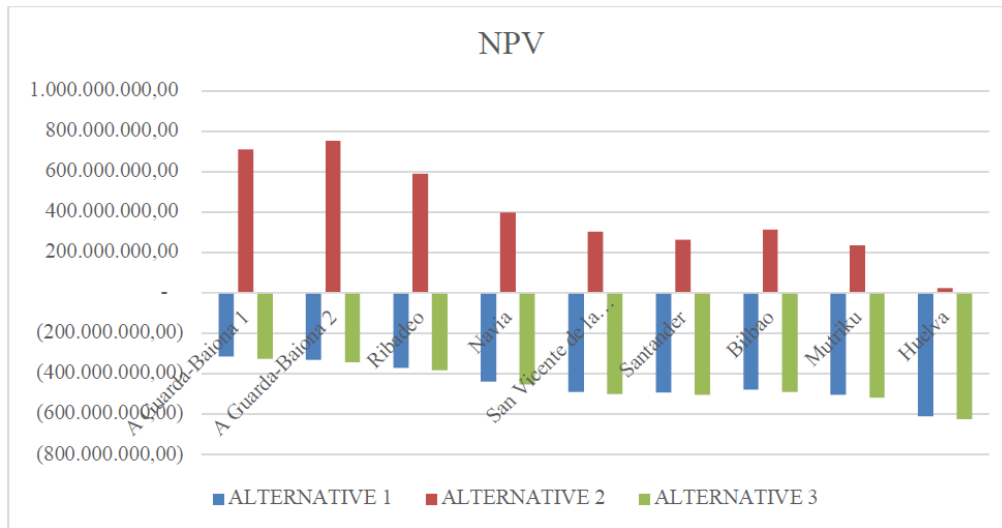
Figure 8: IRR results.

Fig. 1.

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160 Figure 9: NPV results.

Fig. 2.

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