

This is an interesting paper that deals with the use of hydraulic transmission systems to enable centralised conversion of wind power into electricity in offshore wind farms. A key advantage of this approach is the significant reduction in the nacelle weight. The paper is relevant and very timely given the present drive by industry to develop larger and heavier rotors. The following is a summary of the main comments that need to be addressed by the authors before the paper may be published:

1. Figure 5 may be deleted without affecting the quality of the paper.
2. Table 1: It is also convenient for the reader to include the rated power of the motors
3. Page 6: The process of matching the pump, motor and Pelton turbine to the available wind turbine should be elaborated in further detail.
4. Page 9: specify the aerofoil data used in plotting Fig. 7.
5. Fig. 14: for ease of comparison, the two plots should have the same colour scale for the mechanical efficiency.
6. Figure 15: Possible design amendments to the system to enhance the overall conversion efficiency should be elaborated in further detail.

Minor comments:

1. Figure 1 should ideally be presented on the same page where it is being referred to in the text.
2. Page 6, line 13 – remove coma after ‘in such a way’.
3. Eqn. (11) may be deleted as derived of Eqn (12) is well known.
4. Page 12, line 9 – remove coma after ‘into the system’.