

Review report of wes-2020-15 in title *“Revealing system variability of offshore service operations through systemic hazard analysis”*.

Overall comments:

The authors have addressed my previous comments and made big modifications to the paper.

Well, there still few issues that need to be concerned. Among them, there are two major issues.

1. The objective of the paper is not well formulated.

see following texts from the abstract.

“The objective of this paper is twofold. First, we perform a systemic hazard analysis by the STPA method for three phases of SOV operation: when transiting and maneuvering within a windfarm, interfacing with turbines, and launching or recovering daughter crafts. This gives us sets of scenarios containing potentially hazardous interactions between various system components. Such scenarios reflect the complexity and potential for necessary and unwanted variability in the system. Second, we use these results to compare the three operational phases in terms of a proposed systemic indicator – the system variability.”

Both in the abstract and the introduction part, the authors only stated that “the objective of the paper is twofold” without specifying what are the objectives. The texts afterwards actually just a description of what you did (research process). The authors need to specify your research objective clearly.

In my opinion, the objective in previous version is better at least it specified what you want to achieve.

You also need to write your conclusion properly based on your objective.

2. The author changed previous quantification to another systemic indicator-variability for quantification. The authors did not highlight why such a quantification (or measuring variability) is necessary or interesting for what. This should be the motivation of introducing quantification. Such motivation should be highlighted in the beginning of the paper.

In my understanding, the general purpose of using STPA is to identify hazards and then to develop detailed control measures, so that people are not interested in quantification.

If the authors want to introduce quantification or measure systemic variability of each phase, a reason should be given.

In your conclusion part, you stated that “Knowledge where the system variability is highest, gives an opportunity to improve both performance (efficiency) and safety”, Such can be a reason of why you want to introduce quantification of the systemic variability of different operational phases.

Minor comments

1. The 3rd paragraph in the introduction part, “(section 2)” should be (section 3).

2. Section 7 is missing in the last paragraph of the introduction part where describe how the paper is organized.
3. The citation format in the second paragraph in Related work part does not seem right, see following texts:

“The reviewed literature focuses on collision (ship to ship, ship to turbine), reliability issues with technology (DP, gangway, and other systems) and human factors (Presencia and Shafiee, 2018), (Dong et al., 2017), (Rollenhagen, 1997; Sklet, 2006), (Rokseth et al., 2017), and (SgurrEnergy, 2014).”

The citation format needs to be check across the whole paper, I saw similar issues in many other places in the paper as well.

4. Some texts are too small in Figure 4 and Figure 7.
5. Figure 5 is a table or a figure? It seems to be a table.
6. The font in the paper is not the unified in the paper. Some figures have different fonts.
7. Language needs to be checked and refined again. Such as “Davit operator” or “David operator”? especially in Table 4, the verbs should be in plural or singular form?