

**Review Form 1.7**

Journal Name:	<b>Journal of Engineering Research and Reports</b>
Manuscript Number:	<b>Ms_JERR_118593</b>
Title of the Manuscript:	<b>Material and Design Considerations for Improved Buoy Reliability in Wave Energy Converter Systems</b>
Type of the Article	<b>Research Paper</b>

**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li><b>Yes; comprehensive design for reliability analysis of buoy structures used in ocean energy converters</b></li> <li><u>Present:</u> Material and Design Considerations for Improved Buoy Reliability in Wave Energy Converter Systems ✓ <b>Proposed: Optimization of Design Parameters for Improved Buoy Reliability in Wave Energy Converter Systems</b></li> <li><b>Yes</b></li> <li><b>Yes</b></li> <li><b>Yes as per submitted information</b></li> <li><b>Yes, sufficient</b></li> </ol> <ul style="list-style-type: none"> <li>✓ <b>Increasing the number of ribs has some setbacks, such as the proportional increase in the weight of the buoy. This added weight can impact the buoy's overall performance, including its buoyancy and ease of deployment</b> <ul style="list-style-type: none"> <li>- <b>How in your study optimize buoy design will ensure that the buoy can withstand the cyclic loads</b> – If any validation in this regards (Please add in the manuscript)</li> </ul> </li> <li>✓ <b>HDPE exhibits lower ductility compared to LDPE, as evidenced by maximum strain values of 0.024 and 0.027.</b> <ul style="list-style-type: none"> <li>- <b>Discuss in brief about buoy design and performance optimization for material selection.</b></li> </ul> </li> </ul>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<ul style="list-style-type: none"> <li>- Proof reading is required for appropriate corrections</li> </ul>	
<p><b>Optional/General</b> comments</p>	<ul style="list-style-type: none"> <li>- Accept with above minor corrections</li> </ul>	

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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