

## Review Form 1.7

Journal Name:	<b>Journal of Engineering Research and Reports</b>
Manuscript Number:	<b>Ms_JERR_98991</b>
Title of the Manuscript:	<b>PMSM Speed Control Using an Enhanced State Feedback Controller and Linear Quadratic Regulator for effective Drive System.</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljerr.com/index.php/JERR/editorial-policy> )

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**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> <p>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive?</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b> <b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>To a certain level</p> <p>yes</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>Yes</p>	
<p><b>Optional/General</b> comments</p>	<p><b>Major revision is required</b></p> <p>1. Maximum Speed is 78.5 rad/sec, but in figure 6 and figure 7 shows around 110 rad/sec.</p> <p>2. Figure 8 shows negative torque, how torque is applied to the motor externally, and what is its value.</p> <p>3. The net torque in Fig 8, shows negative value.</p> <p>4. Using the mathematical equations the torque has to be estimated and compared with the simulation results</p> <p>5. Figure 10 and figure 11 shows negative value of output power</p> <p>6. Figure 11, power spelling is wrong</p> <p>7. Calculation of steady state error is not shown, figure 6 and figure 7 almost show same value of speed, there is change in the settling time, whereas in section 4, it is mentioned as with SFC it is 24.17% and with PI it is 38%.</p> <p>8. Torque calculation is not shown</p> <p>9. It is mentioned that performance index is marginally stable, justification for this statement need to be given.</p> <p>10. In abstract is shown as PID controller whereas in the work it is shown as PI controller</p> <p>11. In abstract it is mentioned as optimal performance indices are determined, where as in the paper it was not shown.</p> <p>12. keyword Regulator spelling is wrong</p> <p>13. comparison with the existing other mathematical models to be done for validating the results.</p>	

**PART 2:**

	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>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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