

# Review of: "Mathematical Assessment of the Reliability in a Complex Deregulated Power System"

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**Potential competing interests:** No potential competing interests to declare.

1. State space diagram is missing.
2.  $\lambda_1$  &  $\lambda_2$  are undefined. Likewise, many unknown symbols used in the matrix formulation., without any clarity.
3. The assumption of summation of all the probabilities and equating to unity, would be invalid, as the same deals with both failure transition intensities and repair transition intensities.
4. It is an invalid statement that, the events are independent.
5. Assuming that the methodology is intact, there is no numerical evidence provided to substantiate the formulation.
6. There are various variables used in the formulation. It is not shown, how these values are obtained.
7. The title is about 'assessment'. In RAMS domain, assessment is to be carried out with actual data obtained from field. This aspect is not detailed.
8. Matrix D cannot be solved without numerical data. Source and method for obtaining those data are not shown.
9. Solving for all the variables required 'n' number of simultaneous equations. This has to be addressed.
10. In summary, lot many works are to be carried out so as to ensure that the article brings out some justifiable outcome.