

**AUTHOR REVISION REPORT**

*Note: For comments/questions/Answer/Revisions, use the language according to the language used in the manuscript (English or Bahasa Indonesia).*

**I. Manuscript Identity**

|                                               |                                                                                                                                               |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                         | "Optimization Objective Function Corona Discharge Acoustic Using Fuzzy c-Means (FcM ) As the First Step of Detection Early Isolation Failure" |
| Manuscript number                             | 63601                                                                                                                                         |
| Article Type                                  | Research article / <del>Review Article</del>                                                                                                  |
| First Submission date                         | 2023-03-07                                                                                                                                    |
| Recommendation on First Submission Manuscript | Reviewer 1 (RV1) : <b>Minor Revisions</b><br>Reviewer 2 (RV2) : <b>Major Revisions</b>                                                        |
| Revision Submission Date                      | 2023 - 08 - 21                                                                                                                                |

**II. Reviewer's Comments****2.1. General Impression**

|                                         | Reviewers (R1 & R2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Authors                                                                                                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | Comments/Questions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Comments/Answers/Revisions in the Manuscript                                                                                                                                                                                    |
| General comprehension of the manuscript | Similarity check by Turnitin shown high number, total 39% without references. One of the sources is up to 16%, the other 5% and less. Please revise the manuscript, cite the sources, and paraphrase them in the revised manuscript. Many figures are not well prepared, huge revision is needed for the figures to be more informative. The introduction is too long, please make it concise. The research position and article contribution are not stated clearly and explicitly in introduction, please add them. | In the script, there has been paraphrasing. Similarity check by Turnitin is now only 15% without references. The research position and contribution of the article have been stated clearly and explicitly in the introduction. |
| Language/style/Grammar in general       | Many figures need updated as written in Bahasa Indonesia. Fig 2, Fig 5, Fig 6, Fig 8, There is no explanation of term use in mathematical formula, please add them.                                                                                                                                                                                                                                                                                                                                                   | English has been used to update the figures. Fig 2, Fig 5, Fig 6, Fig 8, Fig 2, Fig 5, Fig 6, Fig 8, there are mathematical formula with information.                                                                           |
| Structure                               | Introduction and method part need to be revised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Immediate advantages of research and Immediate benefits of research have been added to the introduction and methodology section.                                                                                                |

|                     |                                                                                                                                  |                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Level of enthusiasm | Low as the current manuscript is not well prepared, especially figures in results section. Authors are encourage to revise them. | The revision has been carried out according to the instructions. |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|

## 2.2. Revision on Major Comments

|                                | Reviewers (R1 & R2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Authors                                                                                                                                                                                                                                                                                                             |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | Major Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Answers/Revisions in the Manuscript                                                                                                                                                                                                                                                                                 |
| <b>Abstract</b>                | 1. Abstract is clear and concise.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1. In the abstract section has been show Immediate benefits of research                                                                                                                                                                                                                                             |
| <b>Introduction</b>            | 2. There are two Fig 1 in introduction, please recheck the numbering format. The title of the second of Fig 1, perhaps could be revised to perhaps "impact of corona discharged in 20kV cubicles."<br>3. It seems Fig 1 corona on SUTET insulator is taken from external source, please make sure cite the ref.<br>4. The introduction is too long, please make it concise.<br>5. Please make sure similar study of early warning corona detection from existing methods are cited in the introduction, then explain the gap dan the contribution of proposed study. | 2. The numbering format has been changed from figure 1 to figure 2 and the title of figure 2 has been changed from "Corona discharge in a 20 kV cubicle" to "Impact of corona discharged in 20kV cubicles"<br>3. Ref has been added to figure 1<br>4. The introduction has been concise<br>5. It has been explained |
| <b>Methodology</b>             | 6. It seems that 1.1 to 1.4 is part of methodology.<br>7. Please add units used in Fig 3, to help the reader understand in detail the schematic diagram of the proposed study.                                                                                                                                                                                                                                                                                                                                                                                       | 6. Sections 1.1 to 1.4 have been grouped into the methodology section in chapter 2.<br>7. The units has been added in figure 3                                                                                                                                                                                      |
| <b>Results and Discussions</b> | 8. Please redraw Fig 6 – Fig 9 to make the figures clear and easy to follow. Make all figures intuitive by clear axis and title.<br>9. Please increase the resolution and explain the behavior or pattern of the results.                                                                                                                                                                                                                                                                                                                                            | 8. The captions and arrows in Figures 6 through 9 have been improved.<br>9. The resolution has been improved and the pattern of results has been explained according to the revision                                                                                                                                |
| <b>Conclusions</b>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                     |

## 2.3. Revision on Minor Comments

|                                | Reviewers (R1 & R2)                                                                                      | Authors                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------|
|                                | Minor Comments/Questions                                                                                 | Comments/Answers/Revisions in the Manuscript |
| <b>Style/Grammar</b>           |                                                                                                          |                                              |
| <b>Consistency/Terminology</b> |                                                                                                          |                                              |
| <b>References</b>              | 10. Please check the reference format. Some refs have all capital letters for authors the others do not. | 10. The reference format has been revised    |
| <b>Tables</b>                  |                                                                                                          |                                              |

|                                        |                                                                                                                                 |                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Figures</b>                         | 11. Low resolution Fig found, please increase the resolution<br>12. Typos of Bahasa Indonesia found in Fig, please revise them. | 11. Resolution Fig found has been update in hinh resolution.<br>12. English has been used to update the figures |
| <b>References, tables, and figures</b> |                                                                                                                                 |                                                                                                                 |

**\*\* Add a yellow background to the revised/improved manuscript, according to the results of the review.**