

## Milestones

1. The algorithm is tested and evaluated on a real world cross-voltage grid.
2. A parameter study was conducted.
3. The algorithm uses cross-voltage information. Potentially benefiting transformer modification on low-voltage level is considered.
4. Load flow violations will be considered in form of penalty terms in the cost function.
5. The type of the used lines and can be chosen by the user. (Different electric properties)
6. Reduction of overall runtime of the algorithm. TODO: add comparison!
7. Algorithm can use already existing lines at zero cost. The length of new lines can be estimated using the road network of open street map.
8. Interception and classification of corner cases, which lead to faulty network structures.

### Done:

- Reduction of overall runtime of the algorithm.
- Load flow violations will be considered in form of penalty terms in the cost function
- The type of the used lines and can be chosen by the user. (Different electric properties)

### Mai:

- |         |   |
|---------|---|
| 1. week | Algorithm can use already existing lines at zero cost. The length of new lines can be estimated using the road network of open street map |
| 2. week | Interception and classification of corner cases, which lead to faulty network structures.   |
| 3. week |   |
| 4. week | The algorithm uses cross-voltage information. Potentially benefiting transformer modifications on low-voltage level are considered.       |

### June:

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|---------|---|
| 1. week |   |
| 2. week | The algorithm is tested and evaluated on a real world cross-voltage grid. Add comparison of runtime |
| 3. week |   |
| 4. week | A parameter study was conducted.  |

### Juli:

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|---------|---|
| 1. week | Writing of the thesis!  |
| 2. week | Writing of the thesis!  |
| 3. week | writing of the thesis! Ask for feedback (typos, smaller changes of content) |
| 4. week | Writing of the thesis and incorporate feedback!                             |