

## DAFTAR ISI

|  |      |
|--|------|
| <b>LEMBAR PERNYATAAN</b> .....   | i    |
| <b>LEMBAR PENGESAHAN</b> .....   | ii   |
| <b>KATA PENGANTAR</b> .....  | iii  |
| <b>DAFTAR ISI</b> .....  | v    |
| <b>DAFTAR TABEL</b> .....  | vii  |
| <b>DAFTAR GAMBAR</b> .....   | viii |
| <b>DAFTAR LAMPIRAN</b> .....   | ix   |
| <b>ABSTRAK</b> .....   | x    |
| <b>BAB I PENDAHULUAN</b> .....   | 1    |
| 1.1. Latar Belakang .....  | 1    |
| 1.2. Rumusan Masalah .....   | 6    |
| 1.3. Tujuan Penelitian .....   | 6    |
| 1.4. Batasan Masalah .....   | 7    |
| 1.5. Sistematika Penulisan .....   | 7    |
| <b>BAB II TINJAUAN PUSTAKA</b> .....                                     | 9    |
| 2.1. Konsep dan Teori .....  | 9    |
| 2.1.1. Pompa .....   | 9    |
| 2.1.2. Pompa Sentrifugal.....  | 9    |
| 2.1.3. Pemeliharaan ( <i>Maintenance</i> ) .....                         | 11   |
| 2.1.4. Tujuan Pemeliharaan.....  | 11   |
| 2.1.5. Jenis-Jenis Pemeliharaan .....                                    | 12   |
| 2.1.6. <i>Total Productive Maintenance (TPM)</i> .....                   | 14   |
| 2.1.7. Delapan Pilar TPM.....  | 16   |
| 2.1.8. <i>Overall Equipment Effectiveness (OEE)</i> .....                | 17   |
| 2.1.9. Penilaian Skor <i>Overall Equipment Effectiveness (OEE)</i> ..... | 20   |
| 2.1.10. <i>Six Big Losses</i> .....                                      | 21   |
| 2.1.11. Diagram Sebab Akibat ( <i>Fishbone Diagram</i> ) .....           | 23   |
| 2.2. Penelitian Terdahulu .....  | 25   |
| 2.3. Kerangka Pemikiran.....   | 30   |
| <b>BAB III METODE PENELITIAN</b> .....                                   | 31   |
| 3.1. Jenis Penelitian.....   | 31   |
| 3.2. Jenis Data dan Informasi.....                                       | 32   |

|   |  |           |
|---|--|-----------|
| 3.3.  | Metode Pengumpulan Data.....   | 33        |
| 3.4.  | Metode Pengolahan Data.....  | 33        |
| 3.5.  | Langkah-langkah Penelitian.....                                      | 34        |
| <b>BAB IV PENGUMPULAN DAN PENGOLAHAN DATA .....</b> |  | <b>36</b> |
| 4.1.  | Pengumpulan Data.....  | 36        |
| 4.1.1.  | Gambaran Umum Perusahaan.....  | 36        |
| 4.1.2.  | Sejarah Berdiriny PLTU JPR OMU.....                                  | 40        |
| 4.1.3.  | Struktur Organisasi PLTU JPR OMU.....                                | 41        |
| 4.1.4.  | Visi dn Misi PLTU JPR OMU.....                                       | 42        |
| 4.1.5.  | Proses Pembangkitan Listrik PLTU JPR OMU.....                        | 42        |
| 4.1.6.  | Pengelolaan Lingkungan PLTU JPR OMU.....                             | 45        |
| 4.2.  | Pengolahan Data.....   | 49        |
| 4.2.1.  | Data <i>Downtime</i> .....   | 49        |
| 4.2.2.  | Data Proses Produksi Pompa A IWWTP.....                              | 51        |
| 4.2.3.  | Data <i>Planned Downtime</i> .....                                   | 54        |
| 4.2.4.  | <i>Standard Speed</i> .....  | 54        |
| 4.2.5.  | <i>Actual Speed Operation</i> .....                                  | 54        |
| 4.2.6.  | <i>Output</i> .....  | 54        |
| 4.2.7.  | Perhitungan Nilai <i>Availability</i> .....                          | 55        |
| 4.2.8.  | Perhitungan Nilai <i>Performance</i> .....                           | 56        |
| 4.2.9.  | Perhitungan Nilai <i>Quality</i> .....                               | 58        |
| 4.2.10.   | Perhitungan Nilai <i>Overall Equipment Effectiviness (OEE)</i> ..... | 59        |
| 4.2.11.   | Perhitungan Nilai <i>Six Big Losses</i> .....                        | 61        |
| 4.2.12.   | Diagram Pareto Chart.....  | 68        |
| <b>BAB V HASIL DAN PEMBAHASAN.....</b>              |  | <b>70</b> |
| 5.1.  | Analisa Hasil Perhitungan OEE.....                                   | 70        |
| 5.2.  | Analisa Hasil Perhitungan <i>Six Big Losses</i> .....                | 72        |
| 5.3.  | Analisa <i>Fishbone Diagram</i> .....                                | 74        |
| 5.4.  | Usulan Perbaikan.....  | 79        |
| <b>BAB VI KESIMPULAN DAN SARAN .....</b>            |  | <b>83</b> |
| 6.1.  | Kesimpulan.....  | 83        |
| 6.2.  | Saran.....   | 85        |
| <b>DAFTAR PUSTAKA.....</b>                          |  | <b>86</b> |
| <b>LAMPIRAN.....</b>                                |  | <b>89</b> |