DAFTAR ISI

LEMBAR PENGESAHAN .................................................................................. iii
ABSTRAK ....................................................................................................... iv
KATA PENGANTAR ..................................................................................... v
DAFTAR ISI .................................................................................................... vii
DAFTAR GAMBAR ....................................................................................... x
DAFTAR LAMPIRAN ..................................................................................... xi
BAB I PENDAHULUAN .................................................................................. 1
  1.1 Latar Belakang ...................................................................................... 1
  1.2 Perumusan Masalah ............................................................................. 2
  1.3 Batasan Masalah .................................................................................. 2
  1.4 Tujuan Kerja Praktek .......................................................................... 2
  1.5 Waktu dan Lama Kerja Praktek ............................................................ 3
  1.6 Ruang Lingkup Kerja Praktek ............................................................... 3
  1.7 Sistematika Penulisan .......................................................................... 4
BAB II GAMBARAN UMUM PERUSAHAAN .............................................. 6
  2.1 Sejarah Perkembangan Perusahaan .................................................. 6
    2.1.1 Makna Logo PT PLN (Persero) ....................................................... 6
    2.1.2 Sejarah Singkat PT PLN (Persero)
        Distribusi Jawa Timur ................................................................. 8
    2.1.3 Sekilas Wilayah Usaha PT PLN (Persero)
        Distribusi Jawa Timur ................................................................. 12
<table>
<thead>
<tr>
<th>Bab</th>
<th>Judul</th>
<th>Halaman</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.4</td>
<td>Sekilas Tentang PT PLN (Persero)</td>
<td>16</td>
</tr>
<tr>
<td>2.2</td>
<td>Visi dan Misi</td>
<td>18</td>
</tr>
<tr>
<td>2.3</td>
<td>Struktur Organisasi</td>
<td>19</td>
</tr>
<tr>
<td>2.4</td>
<td>Personalia APD Jawa Timur</td>
<td>20</td>
</tr>
<tr>
<td>BAB III</td>
<td>LANDASAN TEORI</td>
<td>32</td>
</tr>
<tr>
<td>3.1</td>
<td>Pengenalan SCADA</td>
<td>32</td>
</tr>
<tr>
<td>3.2</td>
<td>Fungsi Dasar SCADA</td>
<td>33</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Telemetering (TM)</td>
<td>33</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Telesinyal (TS)</td>
<td>33</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Telekontrol (TC)</td>
<td>33</td>
</tr>
<tr>
<td>3.3</td>
<td>Fungsi Utama SCADA</td>
<td>34</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Akuisisi Data</td>
<td>34</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Konversi Data</td>
<td>34</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Pemrosesan Data</td>
<td>34</td>
</tr>
<tr>
<td>3.3.4</td>
<td>Supervisory Data</td>
<td>35</td>
</tr>
<tr>
<td>3.3.5</td>
<td>Pemrosesan Event dan Alarm</td>
<td>35</td>
</tr>
<tr>
<td>3.3.6</td>
<td>Tagging (Penandaan)</td>
<td>35</td>
</tr>
<tr>
<td>3.3.7</td>
<td>Post Mortem Review</td>
<td>35</td>
</tr>
<tr>
<td>3.4</td>
<td>Bagian-Bagian SCADA</td>
<td>36</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Remote Terminal Unit (RTU)</td>
<td>36</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Telekomunikasi</td>
<td>37</td>
</tr>
<tr>
<td>3.4.3</td>
<td>Master Station</td>
<td>39</td>
</tr>
<tr>
<td>3.4.4</td>
<td>Peralatan Pendukung (Peripheral)</td>
<td>40</td>
</tr>
</tbody>
</table>
3.5 Perkembangan SCADA .............................................................. 40

BAB IV PEMBAHASAN ............................................................................. 43
4.1 Identifikasi Masalah ................................................................. 43
4.2 Pembahasan ................................................................................. 44
   4.2.1 Implementasi SCADA pada PLN APD Jatim .............. 44
   4.2.2 Komponen SCADA ..................................................... 46
   4.2.3 Proses Aliran Informasi SCADA ................................. 48
   4.2.4 Software SCADA ......................................................... 51
   4.2.5 Sistem Proteksi ............................................................. 54

BAB V PENUTUP ........................................................................................ 63
5.1 Kesimpulan................................................................................... 63
5.2 Saran ............................................................................................. 63

DAFTAR PUSTAKA ................................................................................... 65