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Office of the Director General (MIRAD)

2<sup>nd</sup> Floor, WAPDA Offices Complex

Hussainabad, Hyderabad

No. CEO/HESCO/DG(MIRAD)/ 1479-38

Dated: 27.01.2023

✓ The Registrar,

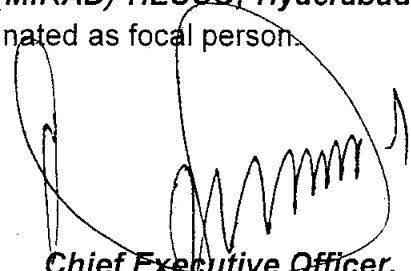
National Electric Power Regulatory Authority (NEPRA),

NEPRA Tower, Ataturk Avenue (East), G5/1,

Islamabad.

Subject:- **APPLICATION FOR GRANT OF AN ELECTRIC POWER SUPPLY LICENCE TO HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO) AS SUPPLIER OF LAST RESORT.**

1. It is to apprise that HESCO is Deemed Licensee for Supply of Electric Power as per proviso to Sub-Section (1) of Section 23E of Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 (Published on 02 May, 2018) for period of five years which will expire on May 01, 2023.
2. As per proviso to Sub-Section (2)(b) of Section-3 of NEPRA Licensing (Electric Power Supplier) Regulations, 2022 notified vide SRO No.466(1)/2022 dated March 28, 2022, a Deemed Licensee has to make an application to the Authority / NEPRA at least ninety (90) days before expiry of the period of 5-years (i.e. 02.05.2018 to 01.05.2023).
3. Accordingly, in pursuance of Section-3(1) of NEPRA Licensing (Electric Power Supplier) Regulations, 2022 and in accordance with Section-3 of the NEPRA Licensing (Application, Modification, Extension, and Cancellation) Procedure Regulations, 2021, ***please find attached herewith an application for kind consideration of the Authority for grant of Electric Power Supply Licence to HESCO.***
4. The HESCO BOD through Circulation has authorized the undersigned for filing an Application before NEPRA for Grant / Renewal of an Electric Power Supply Licence and take all the necessary actions regarding thereto.
5. Consequently, I Engr. Muzaffar Ali Abbasi, Chief Executive Officer HESCO is hereby request the honorable Authority for grant of an Electric Power Supply Licence to Hyderabad Electric Supply Company (HESCO) as Supplier of Last Resort for 20 years or more as deemed appropriate.
6. For any clarification or additional information or any other matter relating to this application ***Mr. Muhammad Roshan Otho, Director General (MIRAD) HESCO, Hyderabad*** (Cell No. ***0333-3700021***, email: ***damirad@hesco.gov.pk***) is designated as focal person.

  
**Chief Executive Officer,**  
**HESCO, Hyderabad.**

1. Checklist as per Regulation 3(1) of the NEPRA Licensing (Application, Modification, Extension, and Cancellation) Procedure Regulations, 2021 and all supporting documents thereto.
2. Cross Cheque of National Bank of Pakistan Cheque No. 2029836 dated

30.01.2023 amounting to **Rs.2,819,115/-** (Two Million Eight Hundred Nineteen Thousand One Hundred Fifteen only) in favor of Registrar NEPRA (***In Original***).

3. Board Resolution of the Company.
4. Affidavit of the CEO HESCO (Authorized Officer) on Non-Judicial Stamp Paper worth Rs.100/- regarding the correctness, authenticity and accuracy of the application, documents and information. (***In Original***).
5. Affidavit of the CEO HESCO (Authorized Officer) on Non-Judicial Stamp Paper worth Rs.100 /- regarding other Licences granted under the Act (***In Original***).

Copy to: -

1. GM (Tech) HESCO, Hyderabad for information.
2. GM (Op.) HESCO, Hyderabad for information.
3. DG / HR & Admn Director HESCO, Hyderabad for information.
4. Chief Engineer (P&E) HESCO, Hyderabad for information.
5. Chief Financial Officer HESCO, Hyderabad for information.
6. Chief Engineer (Dev) PMU HESCO, Hyderabad for information.
7. Chief Commercial Officer HESCO, Hyderabad for information.
8. Company Secretary HESCO, Hyderabad for information.
9. Addl. DG (L&L) HESCO, Hyderabad for information
- Master file.



# HYDERABAD ELECTRIC SUPPLY COMPANY

Office of the Company Secretary HESCO

Phone No.022-9260017

Exch.022-9260161/172

Fax No.022-9260361

Email:csecretary@hesco.gov.pk

HESCO Headquarters, 3<sup>rd</sup> floor, Room No.301,  
WAPDA Offices Complex, Hussainabad, Hyderabad

No. HESCO/BoD/CS/Notifications/Vol.III/91/ 283-86

Date: 27 / 01 / 2023

## **BOARD RESOLUTION BY CIRCULATION NO.18**

(Under Article 66 of the Articles of Association of the Company)

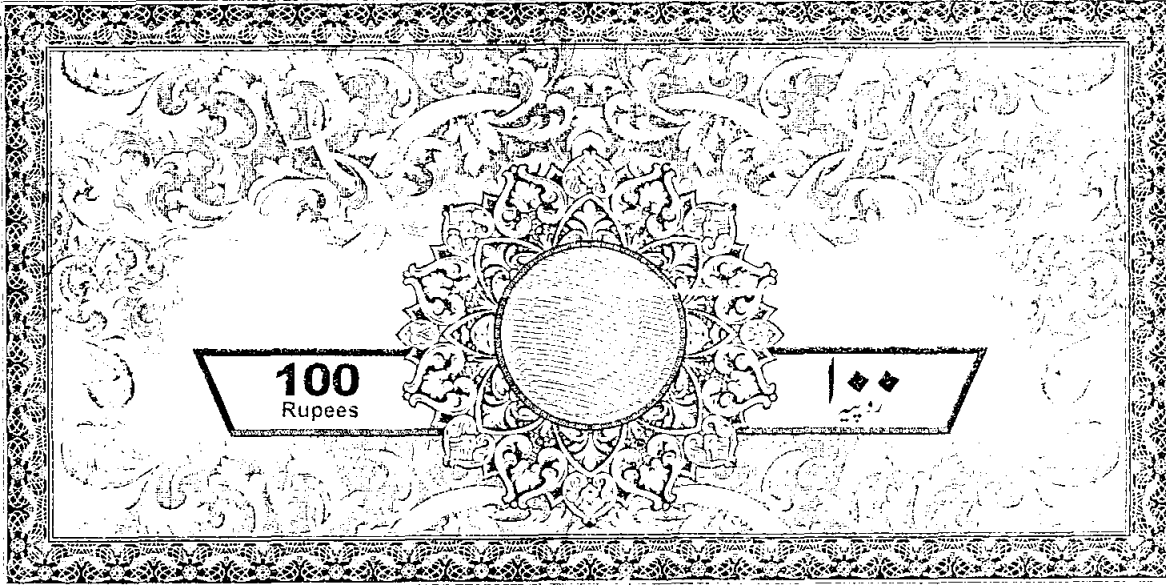
|          |                                                                                                                                                                                                                                                                  |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subject: | APPLICATION TO THE AUTHORITY IN ACCORDANCE WITH THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY LICENSING (APPLICATION, MODIFICATION, EXTENSION AND CANCELLATION) PROCEDURE REGULATIONS, 2021 FOR GRANT / RENEWAL OF AN ELECTRIC POWER SUPPLY LICENSE TO HESCO) |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Resolution:** The Board of Directors HESCO through Resolution by Circulation No.18 dated 26.01.2023 has **RESOLVED** to authorize CEO HESCO for filing an application before NEPRA for grant / renewal of the Electric Power Supply Licence, going to expire on May 01, 2023, and to do all acts and approvals and applications ancillary to the matter.

  
**Faizullah Dahr**  
Company Secretary

### **DISTRIBUTION:**

1. The Chairman / Members BoD HESCO, for information.
2. CEO HESCO, for information.
3. DG MIRAD, HESCO, for information and f/n action.
4. SO DISCOs-III, Power Division, for information/record.



H.E.S.C.O.

M. NOMAN GURESHI  
GOVT. STY. VENDOR  
No. 1554, Date: 27/8/23  
Seal: Hyderabad

AFFIDAVIT

I, **MUZAFFAR ALI ABBASI S/o GHULAM SARWAR**,

Designation **Chief Executive Officer**, Hyderabad Electric Supply Company (HESCO) bearing CNIC No. **43102-6658135-9**, having its office at WAPDA Offices Complex, Hussainabad, Hyderabad, being duly authorized by HESCO BoD, do hereby solemnly affirm and testify that the following Licence has been granted to HESCO by the honorable Authority:

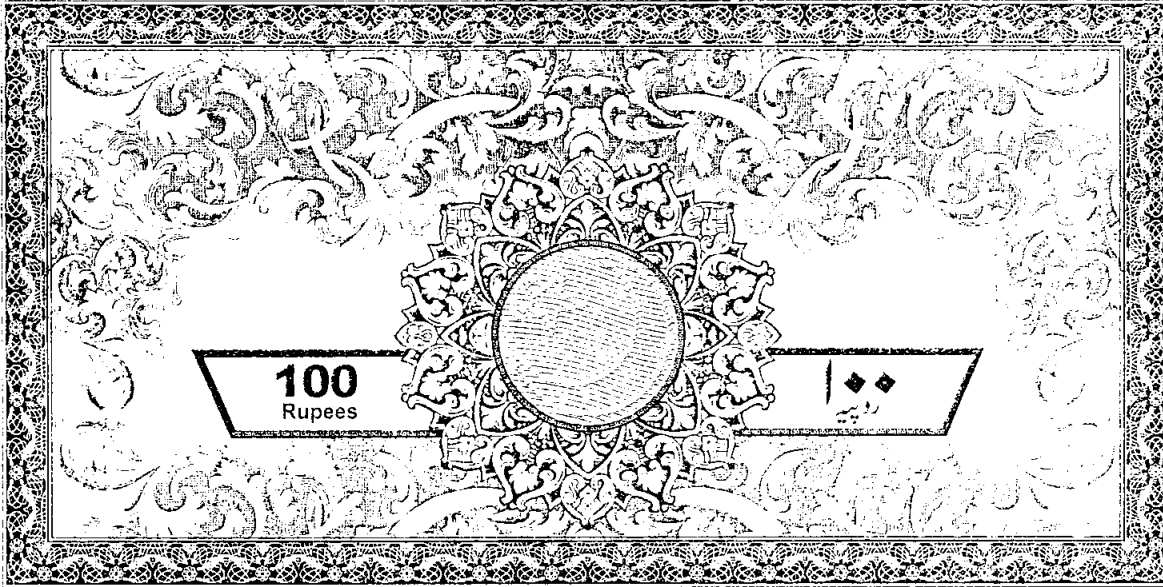
"Distribution Licence No.05/DL/2002 dated April 23, 2002 expired on **April 22, 2022** and provisionally Renewed by Authority vide letter bearing No.NEPRAR/DG(Lic)/LAD-08/23517 dated 13.12.2022 for a period of six (06) months i.e. April 30, 2023".



(Signature)  
(**MUZAFFAR ALI ABBASI**)  
Chief Executive Officer,  
HESCO, Hyderabad.

ATTESTED

SYED ABID ALI SHAH  
Advocate High Court  
& District Commissioner  
Hyderabad



M. Noman Qureshi  
GOVT STAFF VENDOR  
Licence No. 228  
Session Court, Hyderabad.  
No: 1554 Date: 27/01/23

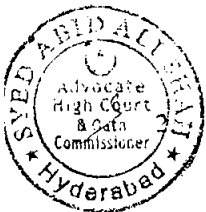
H.O. S. C. O

### AFFIDAVIT

I, **MUZAFFAR ALI ABBASI S/o GHULAM SARWAR**, Designation **Chief Executive Officer**, Hyderabad Electric Supply Company (HESCO) bearing CNIC No. **43102-6658135-9**, having its office at WAPDA Offices Complex, Hussainabad, Hyderabad, being duly authorized by HESCO BoD, do hereby, solemnly affirm and testify that the contents of the application for Grant of Electric Power Supply Licence as Supplier of Last Resort are in accordance with Section-3(1) of NEPRA Licensing (Electric Power Supplier) Regulations, 2022 and Section-3 of the NEPRA Licensing (Application, Modification, Extension, and Cancellation) Procedure Regulations, 2021 and that the Annexed documents are true and correct to the best of my knowledge, belief on the basis of provided confirmations by the concerned formations put before me; and further declare that:

- I. I am the Chief Executive Officer of the Hyderabad Electric Supply Company (HESCO) and fully aware of the affairs of the Company particularly to endorse application for Grant of Electric Power Supply Licence.

Whatsoever stated in the application and accompanied documents is true and nothing has been concealed.



(**MUZAFFAR ALI ABBASI**)  
Chief Executive Officer,  
HESCO, Hyderabad.

ATTESTED

**SYED ABID ALLEHAH**  
Advocate High Court  
& District Commissioner  
Hyderabad.

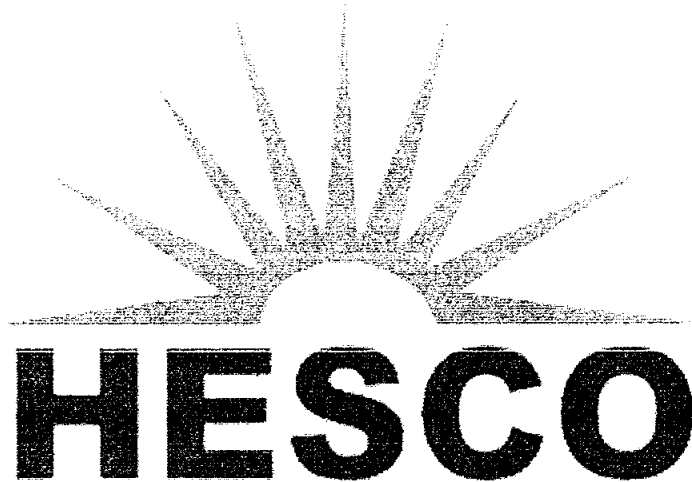
**Checklist as per Section-3 of NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021.**

| <b>Sr. No.</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>HESCO Remarks</b>                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1              | The type or category of licence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Electric Power Supply Licence as Supplier of Last Resort.                                                                                                                                                                                                                                                                                                                                                  |
| 2              | The proposed time period of extension                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Proposed time period is 20 years starting from May 01, 2023 to 30 April, 2043.                                                                                                                                                                                                                                                                                                                             |
| 3              | Prospectus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Attached as <b>Annexure-A</b> .                                                                                                                                                                                                                                                                                                                                                                            |
| 4              | Certified copies of:<br>(a) certificate of incorporation.<br>(b) memorandum and articles of association.<br>(c) annual reports of the company.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Attached as <b>Annexure-B</b> .                                                                                                                                                                                                                                                                                                                                                                            |
| 5              | Last annual return of the Company submitted in compliance of section 130 of the Companies Act.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Attached as <b>Annexure-C</b>                                                                                                                                                                                                                                                                                                                                                                              |
| 6              | Evidence of adequate financial and technical resources available to the applicant for the purposes of undertaking related electric power services for which application for grant of license has been filed, including evidence of cash balances held in reserve by the applicant, along with bank certificates; details of charges or encumbrances attached to the applicant's assets, if any; latest audited financial statements of the applicant; expressions of interest to provide credit or financing along with sources and details thereof, documents describing the net worth and the equity and debt ratios of the applicant, as on the date of the audited balance sheet accompanying the application. | Audited Financial Report for FY 2021-22.<br>Attached as <b>Annexure-D</b>                                                                                                                                                                                                                                                                                                                                  |
| 7              | Detailed profile of the applicant and the applicant's senior management, technical and professional staff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Summary abstract (Name, Designation, Experience, Qualification) of Management Officers attached as <b>Annexure-E</b> .                                                                                                                                                                                                                                                                                     |
| 8              | Application fee as set out in Schedule-II (Fees for Grant, Extension of Term or Modification of License)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Cross Cheque of National Bank of Pakistan vide Cheque bearing No. <b>21029836</b> dated: <b>30-01-2023</b> amounting to <b>Rs. 2,819,115/-</b> (Two Million Eight Hundred Nineteen Thousand One Hundred Fifteen only) in favour of Registrar NEPRA is attached, being the net of 8% tax withheld of the gross amount <b>Rs. 3,064,255/-</b> as set out in schedule II of the Regulation as applicable fee. |

|   |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 | Applicable documents in support and information set out in Schedule III for Electric Power Supply. | <p>Following attached as <b><i>Annexure-F</i></b>;</p> <ul style="list-style-type: none"> <li>i) Relevant feeder maps, Number of consumers and expected load.</li> <li>ii) Consumer class / category, sub-category on the basis of sanctioned load and voltage level.</li> <li>iii) Tariff categories of consumer classes to be served.</li> <li>iv) Demand and consumption pattern on different time periods.</li> <li>v) Procurement Plan for meeting expected loads.</li> <li>vi) 12-month projections on expected load, number of consumers and expected sale of units for each consumer category.</li> <li>vii) Training and development procedures and manuals.</li> <li>viii) Information relating to: <ul style="list-style-type: none"> <li>a) Proposed service territory.</li> <li>b) Billing and collection procedures (including provisions for remote metering).</li> <li>c) Emergency provisions and protocols.</li> </ul> </li> </ul> |
|---|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**HYDERABAD ELECTRIC SUPPLY COMPANY**

**PROSPECTUS**





**Introduction:**

Hyderabad Electric Supply Company (HESCO), incorporated as a Public Limited Company on 23th April 1998, is responsible for the delivery of electricity to over 1.19 million consumers of 13 districts of province of Sindh, Pakistan as set out in HESCO's Distribution License No. 04/DL/2002, granted by NEPRA under the NEPRA Act on April 04, 2002, as a result of the restructuring of WAPDA's Power Wing, HESCO assumed its official operations and is since then being headed by a Chief Executive Officer (CEO). HESCO pays a power purchase price (in Rs/kWh energy charge & Rs./MW capacity) for the electricity it procures through the Central Power Purchasing Agency (CPPA), which would include the generation and transmission charges regulated by NEPRA. In line with the Vision and Mission statements of the Company, the major objectives of the company include ensuring adequate, quality, uninterrupted and stable power supply to all its customers along with state-of-the-art customer care as well as establishing and operating reliable electricity distribution networks

Currently, HESCO has over 7196 active employees, employed in eight directorates, 9 Circles (4 Operations, 1 Construction, 1 GSO, 1 GSC & 2 M&T), 15 Divisions, and 69 Sub-Divisions; and is responsible for distributing electricity to over 1.19 million consumers. The consumer mix comprises approximately 67 % domestic consumers (0.97 million) including residential consumers in both urban and rural areas, 14.5% commercial consumers (0.17million) including business consumers such as markets, plazas, and offices in both urban and rural areas, 1.3% industrial consumers (0.0153 million) consisting of large and small industrial loads, 1% agricultural consumers and 1% others. The sales mix consists of 67% domestic, 7% commercial, 23% industrial, 5% for agricultural and other consumer's category.

**Vision, Mission and Core Values of the Company:**

All actions and efforts of HESCO team are guided by its Vision and Mission embodying the Core Values, as detailed below, at the heart.

**Vision Statement of HESCO:**

To become the leading Electric Power Utility in Pakistan and maintain that position.

**Mission Statement of HESCO:**

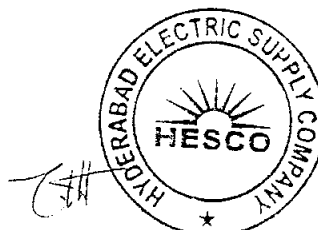
To maintain a high level of Safety and provide excellent customer services as an Electric Power Utility matching the standards set forth by the Regulator, while making profits and ensuring sustained growth. Infuse contemporary technology into our infrastructure and modernize it regularly.

**Core Values of HESCO:****Ethics:**

We are committed to maintaining high professional standards of conduct and personal integrity in our daily activities.

**Leadership:**

Our seniors take responsibility for their people. They provide the direction, the means and tools for their success.





They remain devoted to developing, stimulating, encouraging and empowering individuals.

**Teamwork:**

Sound strategy and execution require diverse talents to work in unison where people work together towards common objectives. We emphasize ability to listen, observe and understand each other.

**Culture of excellence:**

Our organizational culture reflects an environment where leadership, innovation and achievements are encouraged and rewarded at all levels. We foster trustworthiness through open dialogue with our employees, sharing of information, knowledge, experience and mutual respect.

**Courtesy:**

We are courteous with our customers, stakeholders, and towards each other and encourage open communication.

**Responsibility:**

We are responsible as individuals and as teams for our work and our actions. We welcome scrutiny, and we hold ourselves accountable.

**Integrity:**

We have integrity as individuals and as teams our decisions are characterized by honesty and fairness.

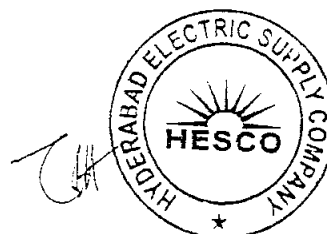
**Strategic Positioning:**

As the Pakistan Power Sector (PPS) undergoes another set of continued reforms, HESCO is all set to add value to the evolving wholesale competitive electricity market in line with Competitive Trading Bilateral Contract Market (CTBCM) regime.

Towards this end, moving ahead of the single territorial electric power service provider within service territory; HESCO, as per envisaged CTBCM, has initiated transformation as multirole service provider as "Electric Power Supplier" and "Power Distributer". As per regulation, HESCO shall, however, continue to be "Supplier of Last Resort" to ensure continued, uninterrupted, reliable and adequate power supply to any and all the customers at all times, within the Service Territory.

As Power Distributor, i.e., the Distribution Network Operator (DNO), HESCO pledges to provide interconnection facility and open access to its system for all intending Users (Market Participants) including, but not limited to, the eligible Generation Companies, Bulk Power Consumers, Traders, Competitive Electric Power Suppliers, Distributed Generation etc. at reasonable and affordable prices, without any favor or, otherwise, discrimination or restrictions. Taking natural monopoly wire-business role, the DNO, we are well aware that the position requires us to ensure embedding principles of impartiality, non-discrimination and arm's length transaction even while dealing with Power Supplier arms of our own company.

As Power Supplier, HESCO is all set to take the daunting task of facing competition at wholesale market level and, thus gearing up to ensure retention of base load Bulk Power Consumers (BPC). We also clearly understand our commercial priorities shall not undermine the rights of embedded regulated customers.



## The Company's Baseline

### General Information

#### History:

Earlier in 1960s, the Govt. of Pakistan (GoP) had decided to set up an independent and autonomous Authority to deal with all available water resources and power system network including power generation, transmission and distribution. The department was formed and named as Water and Power Development Authority (WAPDA), the 2nd biggest department in Pakistan after Pak Army. In 1980s, the power distribution network of WAPDA was sub-divided into eight Area Electricity Boards (AEB), HYDERABAD was one of the AEBs among said Area Electricity Boards dealing with power distribution system.

In 1998, WAPDA was dis-integrated into two main sectors PEPCO and WAPDA. Where, WAPDA was restricted to only deal with water resources as well as hydro power generation and PEPCO (Pakistan Electric Power Company) was formed as overall in-charge / Company of Thermal Power Generation (GENCOs: Generation Companies), Transmission (NTDC: National Transmission & Dispatch Company) and Distribution (DISCOs: Distribution Companies). PEPCO was formed as temporary in-charge Company of Pakistan Power Sector reforms, currently the PEPCO has been renamed as Power Planning and Monitoring Company (PPMC) Pvt. Limited to take macro monitoring and planning roles while leaving the micro-management of the affairs of individual companies to the respective Managements and the BODs of each company.

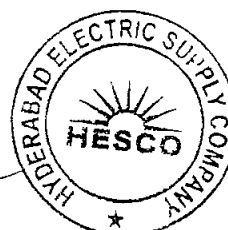
Hyderabad Electric Supply Company Limited (HESCO) has been setup over the area of jurisdiction and electrical network of former Area Electricity Board, which was created in early 80s. At the time of corporatization, it encompassed the areas of existing districts of Hyderabad, Nawab Shah, Mirpurkhas, Jamshoro, Badin Thatta, Sangarh, Sujawal, Tando Allah Yar, Tando M Khan, Umer Kot, Thar parker and Matiari.

HESCO was incorporated on 23<sup>th</sup> April 1998 and obtained certificate for commencement of business on 5<sup>th</sup> June, 1998. The Management and the Administration is entrusted to its Board of Directors (BOD) nominated by Ministry of Energy (Power Division), Islamabad after approval of Federal Cabinet headed by the Prime Minister of Islamic Republic of Pakistan under the umbrella of regulator i.e., National Electric Power Regulatory Authority (NEPRA).

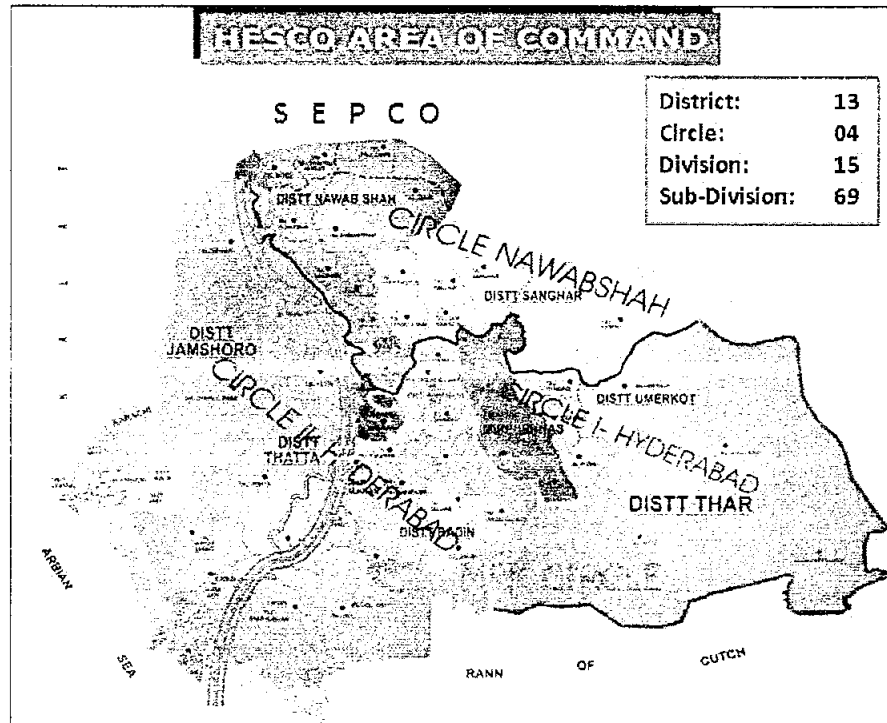
HESCO has about 1.19 million connections with average monthly collection for the year 2021-22, approximately 22.61 Billion Rupees (including taxes, YTD Jul-21 to Dec-21).

### Geographic Coverage

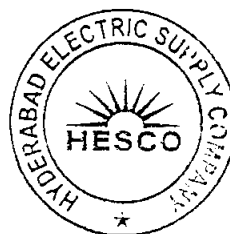
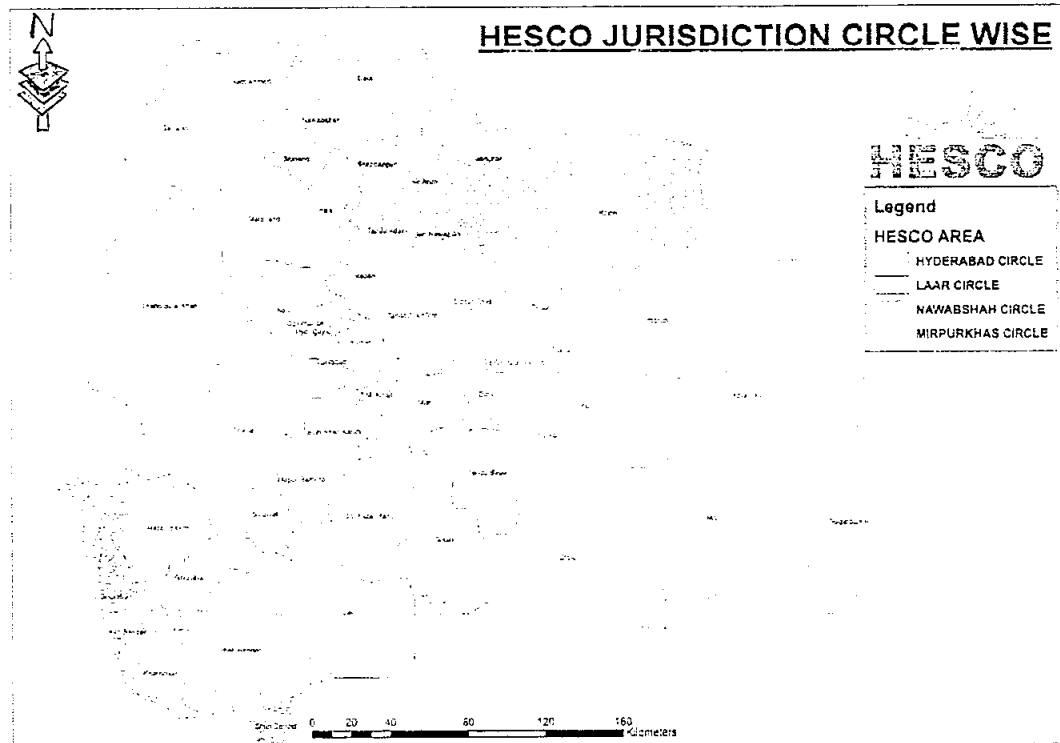
The network of Hyderabad Area Electricity Board (HAEB) of WAPDA was transferred to HESCO after its incorporation. HESCO's service area comprises of 13 civil districts of Sindh Province, spanning a total service area of 77,160 sq.km and 1.19 million consumers.



# Location of HESCO/Licensee Area Wise

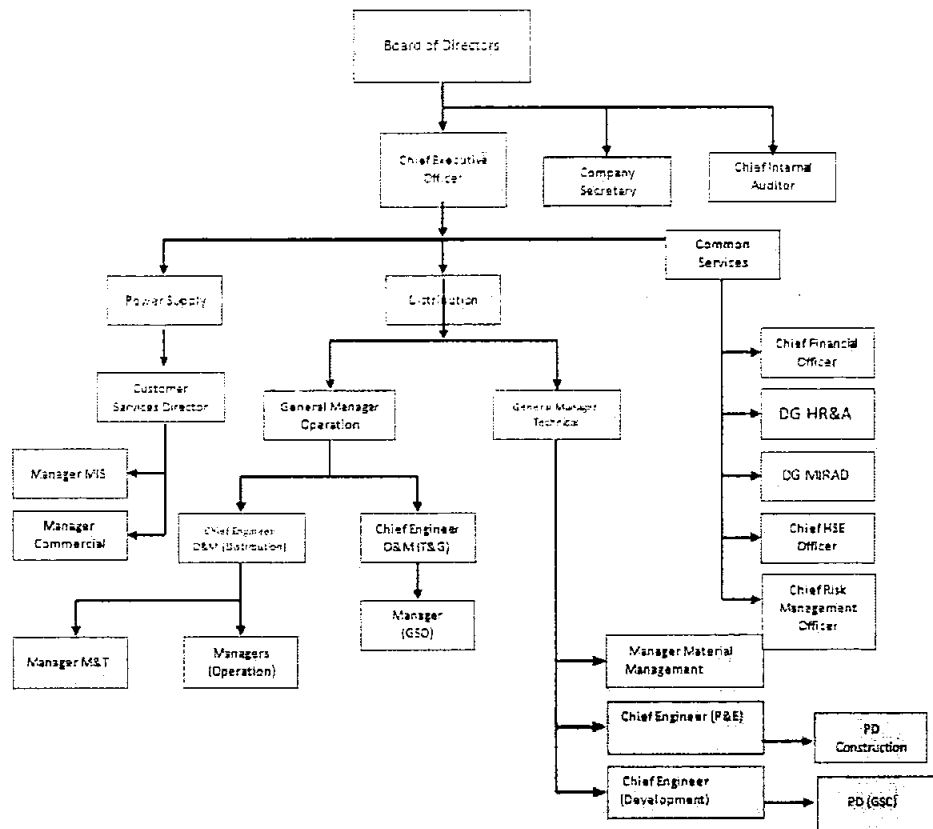


Location of HESCO/Licensee Circle Wise



### Company's Structure

The Organizational structure of the Company under upcoming wholesale (CTBCM) scenario is as under:



### Human Resource and Corporate Governance:

To execute, control, maintain the network and provide better services round the clock to our valued customer, As on March 2022, HESCO consists of 7409 skilled and energetic professionals.

| Description | Officers |          | Officials |          | Grand Total |
|-------------|----------|----------|-----------|----------|-------------|
|             | Tech     | Non-Tech | Tech      | Non-Tech |             |
| Sanctioned  | 253      | 125      | 5494      | 5000     | 10872       |
| Working     | 174      | 60       | 3778      | 3184     | 7196        |
| Vacant      | 79       | 65       | 1716      | 1816     | 3676        |
| Vacant %    | 31.2     | 52       | 31.2      | 36.3     | 33.81       |

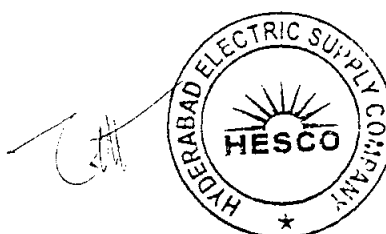
### Existing Operation System of HESCO

The existing operation of the Company is comprising upon the following structure:

| Formation    | Circles | Divisions | Subdivisions |
|--------------|---------|-----------|--------------|
| Operation    | 4       | 15        | 69           |
| Construction | 1       | 4         | 12           |
| GSO          | 1       | 4         | 19           |
| GSC          | 1       | 4         | 9            |
| M&T          | 2       | 3         | 15           |
| TOTAL        | 9       | 30        | 124          |

### Category Wise Number of Consumers of HESCO

| Month            | 2016-17   | 2017-18   | 2018-19   | 2019-20   | 2020-21   | 2021-22   |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Domestic         | 861282    | 877363    | 907482    | 933484    | 958445    | 978685    |
| Commercial       | 156200    | 159627    | 163791    | 166213    | 169007    | 171843    |
| Small Industry   | 12023     | 11643     | 11749     | 11364     | 11502     | 11630     |
| M&L Industry     | 3256      | 3248      | 3472      | 3462      | 3665      | 3830      |
| Agriculture      | 17286     | 13730     | 14434     | 15522     | 15660     | 15729     |
| Bulk Supply      | 335       | 337       | 342       | 344       | 345       | 346       |
| Public Light     | 540       | 540       | 540       | 572       | 572       | 573       |
| General Services | 0         | 14193     | 13821     | 13693     | 13768     | 13828     |
| Others           | 34        | 33        | 29        | 26        | 26        | 30        |
| Total            | 1,050,956 | 1,080,714 | 1,115,660 | 1,144,680 | 1,172,990 | 1,196,494 |

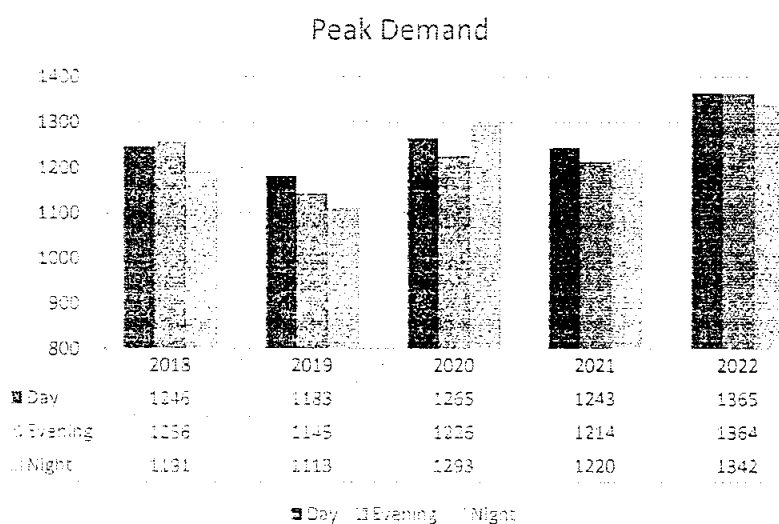


### Projections of Consumer Growth by Category

| Year    | Domestic | Commercial | Small Industry | M&L Industry | Agriculture | Bulk | Public Lights |
|---------|----------|------------|----------------|--------------|-------------|------|---------------|
| 2022-23 | 1004109  | 175156     | 4833           | 10865        | 15834       | 348  | 577           |
| 2023-24 | 1030194  | 178533     | 4866           | 11072        | 15939       | 351  | 580           |
| 2024-25 | 1056956  | 181976     | 4900           | 11284        | 16045       | 353  | 584           |
| 2025-26 | 1084414  | 185484     | 4935           | 11499        | 16151       | 355  | 588           |
| 2026-27 | 1112585  | 189060     | 4969           | 11719        | 16259       | 357  | 592           |

### Historical Peak Demand (MW)

| Year | Recorded Peak | Computed Peak |
|------|---------------|---------------|
| 2018 | 1103          | 1256          |
| 2019 | 1095          | 1183          |
| 2020 | 1050          | 1293          |
| 2021 | 1117          | 1243          |
| 2022 | 1105          | 1365          |



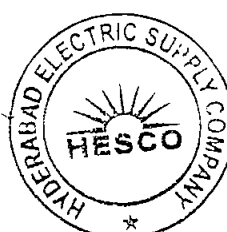


### Forecasted Peak Demand (MW)

| Year    | Recorded Peak | Computed Peak |
|---------|---------------|---------------|
| 2022-23 | 1148          | 1225          |
| 2023-24 | 1190          | 1267          |
| 2024-25 | 1233          | 1334          |
| 2025-26 | 1277          | 1401          |
| 2026-27 | 1322          | 1493          |

### Historical Sale of HESCO (GWh)

| Year           | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|----------------|---------|---------|---------|---------|---------|---------|
| Domestic       | 2,152   | 2,346   | 2,160   | 2,397   | 2,411   | 2,301   |
| Commercial     | 308     | 315     | 295     | 262     | 265     | 264     |
| Small Industry | 44      | 25      | 12      | 7       | 7       | 6       |
| M & L Industry | 678     | 734     | 742     | 710     | 817     | 909     |
| Agriculture    | 400     | 373     | 264     | 214     | 201     | 208     |
| Bulk Supply    | 94      | 105     | 113     | 107     | 106     | 113     |
| Public Light   | 35      | 38      | 28      | 3       | 5       | 8       |
| Others         | 0       | 91      | 304     | 189     | 202     | 226     |
| Total          | 3,712   | 4,027   | 3,916   | 3,890   | 4,014   | 4,034   |



### 12 Months Projections on Expected Sale of Units (GWh)

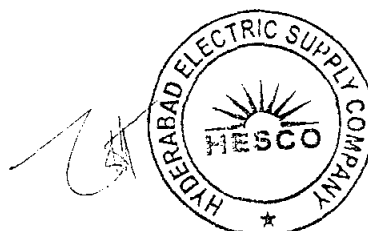
| Year         | 2021-22     | 2022-23     | 2023-24     | 2024-25     | 2025-26     | 2026-27     | 2027-28     | 2028-29     | 2029-30     | 2030-31      | 2031-32      |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| July         | 657         | 687         | 711         | 750         | 791         | 844         | 897         | 967         | 1037        | 1120         | 1203         |
| August       | 641         | 641         | 663         | 700         | 738         | 788         | 837         | 902         | 968         | 1045         | 1123         |
| September    | 570         | 600         | 621         | 656         | 691         | 737         | 784         | 845         | 906         | 979          | 1051         |
| October      | 532         | 552         | 571         | 603         | 635         | 678         | 721         | 777         | 833         | 900          | 966          |
| November     | 393         | 408         | 422         | 445         | 469         | 501         | 532         | 574         | 615         | 665          | 714          |
| December     | 336         | 350         | 362         | 382         | 402         | 429         | 457         | 492         | 528         | 570          | 612          |
| January      | 319         | 330         | 342         | 361         | 380         | 406         | 432         | 465         | 499         | 539          | 579          |
| February     | 292         | 303         | 313         | 331         | 348         | 372         | 395         | 426         | 457         | 493          | 530          |
| March        | 373         | 387         | 401         | 423         | 446         | 476         | 506         | 545         | 585         | 632          | 678          |
| April        | 520         | 543         | 562         | 594         | 626         | 668         | 710         | 765         | 820         | 886          | 952          |
| May          | 618         | 642         | 664         | 701         | 739         | 788         | 838         | 903         | 969         | 1046         | 1124         |
| June         | 674         | 699         | 723         | 764         | 805         | 859         | 913         | 984         | 1055        | 1140         | 1224         |
| <b>Total</b> | <b>5926</b> | <b>6142</b> | <b>6353</b> | <b>6708</b> | <b>7070</b> | <b>7545</b> | <b>8023</b> | <b>8646</b> | <b>9271</b> | <b>10016</b> | <b>10755</b> |

### Historical Category-wise Consumer Sanctioned Load (kW)

| Month            | 2016             | 2017             | 2018             | 2019             | 2020             | 2021             | 2022             |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Domestic         | 1,112,471        | 1,169,601        | 1,159,792        | 1,209,974        | 1,256,987        | 1,300,535        | 1,341,283        |
| Commercial       | 281,216          | 298,801          | 302,403          | 318,951          | 329,991          | 344,427          | 357,311          |
| Small Industry   | 100,738          | 104,887          | 101,457          | 103,029          | 99,627           | 102,619          | 104,749          |
| M&L Industry     | 715,127          | 748,341          | 761,231          | 799,008          | 845,488          | 879,752          | 941,372          |
| Agriculture      | 233,021          | 236,851          | 182,255          | 194,711          | 210,203          | 214,018          | 216,286          |
| Bulk Supply      | 47,759           | 47,290           | 57,495           | 61,367           | 77,492           | 78,442           | 80,722           |
| Public Light     | 23,932           | 24,017           | 24,017           | 24,077           | 24,053           | 24,053           | 24,055           |
| General Services | -                | -                | 145,890          | 148,530          | 163,915          | 169,621          | 175,055          |
| Others           | 929              | 926              | 896              | 688              | 649              | 649              | 763              |
| <b>Total</b>     | <b>2,515,193</b> | <b>2,630,713</b> | <b>2,735,436</b> | <b>2,860,334</b> | <b>3,008,403</b> | <b>3,114,116</b> | <b>3,241,596</b> |

### HESCO Distribution and Transmission Losses Year-Wise

| Year    | Distribution Loss at 11kV | Transmission Loss at 132KV | 11KV Diff | 132KV Diff |
|---------|---------------------------|----------------------------|-----------|------------|
| 2020-21 | 25.43%                    | 2.85%                      |           |            |
| 2021-22 | 24.32%                    | 2.82%                      | 1.11%     | 0.03%      |
| 2022-23 | 23.18%                    | 2.79%                      | 1.14%     | 0.03%      |
| 2023-24 | 22.02%                    | 2.76%                      | 1.16%     | 0.03%      |
| 2024-25 | 20.83%                    | 2.73%                      | 1.19%     | 0.03%      |
| 2025-26 | 20.05%                    | 2.71%                      | 0.78%     | 0.02%      |
| 2026-27 | 19.36%                    | 2.70%                      | 0.69%     | 0.01%      |
| 2027-28 | 18.77%                    | 2.69%                      | 0.59%     | 0.01%      |
| 2028-29 | 18.19%                    | 2.67%                      | 0.58%     | 0.02%      |
| 2029-30 | 17.61%                    | 2.65%                      | 0.58%     | 0.02%      |
| 2030-31 | 17.03%                    | 2.63%                      | 0.58%     | 0.02%      |



**HYDERABAD ELECTRIC SUPPLY COMPANY**

**CERTIFICATE OF INCORPORATION**



GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. L 03496 of 1997-98

I hereby certify that "HYDREND ELECTRIC SUPPLY COMPANY LTD."

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is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

the company is limited by Shares.

Given under my hand at Lahore.

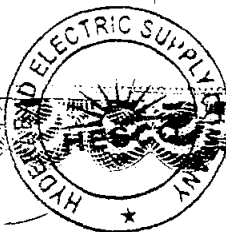
this 23rd day of April  
one thousand nine hundred and ninety eight.

Fee Rs. =5,000,200/-



( AKBAR  
JOINT

SPAH )  
REGISTRAR  
OF COMPANIES



# GOVERNMENT OF PAKISTAN



## CERTIFICATE FOR COMMENCEMENT OF BUSINESS

[Under section 146 (2) of the Companies Ordinance, 1984 (XLVII of 1984)]

I hereby certify that the WINDWARD ELECTRIC SUPPLY COMPANY LTD.  
which was incorporated under the  
Companies Ordinance, 1984 (XLVII of 1984), on the 23rd  
day of April 19 98 and which has filed a duly verified  
declaration in the prescribed form that the conditions of clauses (a) to (e) of sub-section  
(1) of Section 146 of the said Ordinance have been complied with, is entitled to  
commence business.

Given under my hand at Lahore  
this 26th day of May  
one thousand nine hundred and Ninety eight.

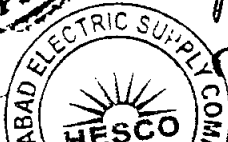
Fee Rs. 200/-



C.R.O.-4

( AKBAR SHAH )  
Joint Registrar of Companies

No. JRL 8243  
Dated 26-5-98



**HYDERABAD ELECTRIC SUPPLY COMPANY**

**MEMORANDUM AND ARTICLE OF  
ASSOCIATION**

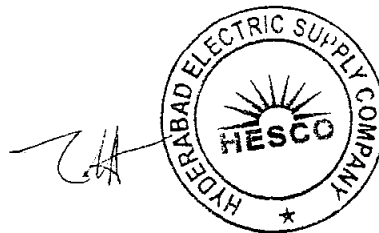


# HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED

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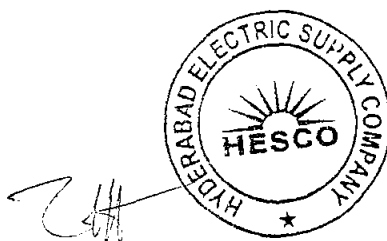


# HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED

## INDEX

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**THE COMPANIES ORDINANCE, 1984**

**PUBLIC COMPANY LIMITED BY SHARES**

**MEMORANDUM OF ASSOCIATION**

**OF**

**HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED**

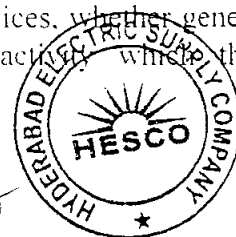
- I. The name of the company is "Hyderabad Electric Supply Company Limited".
- II. The registered office of the company will be situated in Lahore, Province of Punjab, Pakistan.
- III. The objects for which the Company is established are to undertake any or all of the following businesses:
  1. To acquire or take over those properties, rights and liabilities of the Pakistan Water and Power Development Authority comprising that administrative division formally known as the Hyderabad Area Electricity Board (AEB) pursuant to the Pakistan Water and Power Development Authority Act of 1958 (as amended) and to carry on, expand and extend the businesses and activities of such Board or any part thereof including, without limitation, the business of a public electricity distributor and supplier.
  2. To acquire or take over the properties, rights and liabilities of the grid stations of the Pakistan Water and Power Development Authority and the transmission lines in relation thereto which at the date of adoption of this Memorandum and Articles of Association are directly and exclusively supplying electricity to the areas formerly supplied by the Hyderabad AEB and are located within the said AEB.
  3. To carry on all or any of the businesses of purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation and efficient use of electricity and all other forms of energy, and all other powers necessary or incidental to the business of electricity distribution and supply.
  4. Electrification. - To do anything which a public electricity supplier is empowered or required to do under or by virtue of or under a license or other authorization granted according to law and its implementing rules and regulations or any statutory instrument made thereunder or any statutory modification or re-enactment thereof and to plan, survey, design, supply equipment, and carry out the electrification of cities, towns, villages, gas and oil refineries, workshops, buildings, highways, bridges, ports, air terminals, and other premises within its area of supply.
  5. Dealer in Electrical Equipments. - To carry on all or any of the businesses of wholesalers, retailers, traders, importers, exporters, suppliers, distributors, designers, developers, manufacturers, installers, fitters, testers, repairers, maintainers, contractors, constructors, operators, users, inspectors, reconditioners, servicers, improvers, alterers, protectors, removers, hirers, replacers, importers and exporters of electrical appliances, systems, products and services used for energy conservation.

7.11

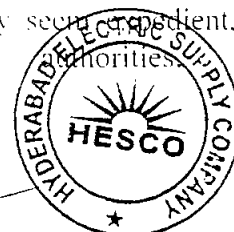


in respect of, and otherwise turn to account and deal with, the property, rights and information so acquired.

11. Metering. - For the purposes of electricity supply, distribution and communication, to install in, on, above or under any premises or place and to operate, use, inspect, maintain, repair, replace and remove cables, lines, ducts, transformers, switchgear (remotely controlled and otherwise, and including time switches), fuses, circuit breakers, electricity service equipment, meters and other devices for measuring or controlling the quantity or quality of electricity supplied, prepayment and debt payment devices, items provided to afford access to, support, encase, insulate, and protect from damage or tampering, the above-mentioned gadgets, or to protect people and property from injury or damage, or to comply with any legal obligation and for other purposes associated with the supply of electricity and to install all such things and apparatus and items for the purposes of supplying, measuring and controlling light, heat, steam, hot water, air-conditioning and refrigeration, and for associated purposes, including payment for these facilities.
12. Demand Forecasting. - To provide or procure the provision of such facilities and services as may be necessary or desirable to forecast electricity/energy demand and to satisfy such demand.
13. Transportation. - To acquire, (whether by purchase, lease, concession, grant, hire or otherwise), charter, lease, take or let on hire, operate, use, employ or turn to account, build, equip, service, repair, maintain, and supply motor vehicles, railway locomotives, wagons, trucks, vessels, and craft of any description, engineering plants and machinery, and parts and accessories of all kinds, and to carry on the businesses of storage contractors, freight contractors, carriers by land, water and air of freight and passengers, forwarding agents, shipping agents and agents of any other kind, in so far as such activities are incidental to or necessary for the transformation, supply and distribution of electricity.
14. Audio-Visual System. - To carry on as principal, agent, contractor or sub-contractor all or any of the businesses of running, operating, managing, supplying and dealing in systems for the conveyance by any means of sounds, visual images, signals, and services, facilities and equipment ancillary to or for use in connection with such systems.
15. Management Information System. - To carry on all or any of the businesses of running, operating, managing, supplying and dealing in data processing and information retrieval systems, computers, computer programmes and software, computer bureau and data bases, meter reading and credit checking and to provide services, facilities and equipment ancillary to or for use in connection with the same.
16. Research and Development. - To carry on business as inventors, researchers and developers, to conduct, promote and commission research and development in connection with the businesses and activities of the Company and its subsidiaries, to establish and maintain research stations, laboratories, workshops, testing and proving grounds and sites, facilities and establishments and installations, and to exploit and turn to account the results of any research and development carried out by or for it.
17. Labour Contracting. - To carry on all or any of the businesses of consultants, advisers and suppliers of management, personnel and training services, whether generally or in respect of one or more of the types of business or activity which the Company has



25. Partnership. - To enter into partnership, joint venture or cooperation arrangements with any person or company or other legal entity, local or foreign, carrying on or engaged in any business or transaction which the Company is authorized to carry on or engage in, or otherwise seek assistance from or assist any such person, company or legal entity.
26. Related Businesses. - To acquire by any means the whole or any part of the assets, and to undertake the whole or any part of the liabilities, of any person, natural or juridical, carrying on or proposing to carry on any business which the Company is authorized to carry on or which can be carried on in connection therewith, to acquire an interest in, amalgamate or enter into partnership or into any arrangement for sharing profits, cooperation, or mutual assistance, with any such person, to promote, form and sponsor any company or companies in furtherance of the objects herein stated, and to give or accept, for any of the acts or things aforesaid or property acquired, such consideration as the Company thinks fit, including without limitation, any shares, debentures, or other securities or rights.
27. Equity Investment. - To invest the surplus moneys of the Company not immediately required in any manner to subscribe for, purchase or otherwise acquire, and to hold, and deal with, any shares, debentures, bonds, notes, and other securities, obligations and investments of any nature whatsoever, including any options or rights in respect of them, and otherwise to invest and deal with the money and assets of the Company, but not to act as an investment company.
28. Lending. - To advance money or give credit to such persons or companies and on such terms as may seem expedient and, in particular, to customers and others having dealings with the Company, to guarantee the performance of any contract or obligation and the payment of money by the Company, and to accept securities of any person or any property or interest therein of whatever nature in payment or partial payment for any services rendered or for any sale or supply made to, or debt owing from, any such person, but not to act as a finance or banking company.
29. Trusts. - To vest any real or personal property, rights or interests acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the Company, with or without any declared trust in favour of the Company, and to undertake and execute any trust the undertaking whereof may seem desirable, either gratuitously or otherwise.
30. Portfolio Investments. - Subject to such terms and conditions as may be thought advantageous, to trade its shares and to undertake markup and currency swaps, options (including traded options), swap option contracts, forward exchange contracts, futures contracts or other financial instruments allowed by law, including hedging agreements of any kind, all or any of which may be on a fixed and/or floating rate basis and/or in respect of local or foreign currency or commodities of any kind, but not to engage in the business of a stockbroker.
31. Government Permissions. - To apply for and obtain necessary consents, permissions and licenses from any Government, Provincial, Local, Foreign, Multilateral or other authorities or entities for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for effecting any modification of the constitution of the Company or for any other purpose which may seem expedient, and to enter into arrangements with any Government or authorities, local, foreign, federal,



37. Dissolution and Winding Up. - To cease carrying on or wind up any business or activity of the Company and to cancel any registration of and to wind up or procure the dissolution of the Company in any state or territory.
38. Equity Conversion. - To issue, allot and grant options over securities of the Company towards the satisfaction of any liability or obligation undertaken or agreed to be undertaken by or for the benefit of the Company, or in consideration of any obligation or for any other similar purpose.
39. International Operations. - To procure the Company to be registered or recognized in any part of the world and to do all or any of the above things in any part of the world, either as principal, agent, trustee, contractor or otherwise, alone or in collaboration with another, and either by or through agents, trustees, sub-contractors, subsidiaries or otherwise.
40. Disposal of Assets and Declaration of Dividends. - To dispose by any means of the whole or any part of the assets of the Company or of any interest therein and to distribute in specie or otherwise by way of dividends or bonus or reduction of capital all or any of the property or assets of the Company among its members, and particularly, but without prejudice to the generality of the foregoing, securities of any other company formed to take over the whole or any part of the assets or liabilities of the Company or any proceeds of sale or other disposal of any property or assets of the Company.
41. Insurance. - To insure the property, assets, and employees of the Company in any manner deemed fit by the Company, and to create any reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, insuring, improving, extending or maintaining any of the properties of the Company or for any other purpose conducive to the interests of the Company, but not to act as an insurance company.
42. Regulations. - To make rules or regulations not inconsistent with this Memorandum and to provide for all matters for which provision is necessary or expedient for the purpose of giving effect to the provisions of this Memorandum and the efficient conduct of the affairs of the Company.
43. General Power. - To carry on any other businesses or activities which the Directors consider capable of being carried on directly or indirectly for the benefit of the Company and to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

Declaration. It is hereby declared that

- (a) the word "company" in this Memorandum of Association, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether corporate or unincorporated, and whether domiciled in Pakistan or elsewhere;
- (b) the objects specified in each of the paragraphs of this clause shall be regarded as independent objects and, accordingly, shall in no way be limited or restricted (except where otherwise expressed in such paragraphs) by reference to or inference from the terms of any other paragraph or the name of the Company, but may be carried out in as full and ample a manner and construed in as wide a



We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

| Name and surname<br>(Present and former) in full<br>(in Block Letters) | Father's/ Husband's<br>Name in Full | Nationality | Occupation    | Residential<br>Address in Full                                                       | Number of<br>Shares taken<br>by Each<br>Subscriber | Signature |
|------------------------------------------------------------------------|-------------------------------------|-------------|---------------|--------------------------------------------------------------------------------------|----------------------------------------------------|-----------|
| 1. Ch. Muhammad Akram                                                  | Choudry Ali Bux                     | Pakistani   | WAPDA Service | A-2, Senior Officer's Hostel,<br>Wapda Water Wing Colony,<br>Hussainabad, Hyderabad. | 1                                                  |           |
| 2. Mr. Mansoor Ali Sheikh                                              | Muhammad Ali Sheikh                 | Pakistani   | WAPDA Service | 2-C, Audit Officers Colony,<br>Gulberg-III, Lahore.                                  | 1                                                  |           |
| 3. Mr. Pir Mian Jan Said                                               | Pir Marifat Shah                    | Pakistani   | WAPDA Service | B-1, NTPS WAPDA Colony,<br>Tando Muhammad Khan Road,<br>Hyderabad.                   | 1                                                  |           |
| 4. Mr. Ansar Haider                                                    | Nehal-ud-Din Hydera<br>Khan         | Pakistani   | WAPDA Service | A-1, Wapda Power Wing<br>Colony, Hussainabad,<br>Hyderabad.                          | 1                                                  |           |
| 5. Mr. Muhammad Sharif Ansari                                          | Muneer Khan                         | Pakistani   | WAPDA Service | H. No. 50, Block A, Tando Mir<br>G. Hussain, Unit No. 09,<br>Latifabad, Hyderabad.   | 1                                                  |           |
| 6. Mr. Tariq Shahab                                                    | Shaukat Ali Shahab Talib            | Pakistani   | WAPDA Service | 21-Greenwood Homes, Block-c,<br>New Muslim Town, Lahore.                             | 1                                                  |           |
| 7. Mr. Akram Arain                                                     | Fazal Muhammad                      | Pakistani   | WAPDA Service | 132kV Grid Station, Ghazi<br>Road, LCCHS, Lahore.                                    | 1                                                  |           |

Total number of shares taken \_\_\_\_\_ 7. (Seven) \_\_\_\_\_

Dated the \_\_\_\_\_ day of \_\_\_\_\_

Witnesses to above signatures

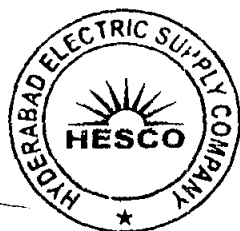
(Full Name, Father's/Husband's Name)

(in Block Letters) \_\_\_\_\_

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

Full Address \_\_\_\_\_



THE COMPANIES ORDINANCE, 1984  
PUBLIC COMPANY LIMITED BY SHARES  
ARTICLES OF ASSOCIATION  
OF

HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED

**I. PRELIMINARY**

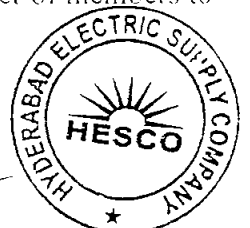
1. TABLE "A" Not to Apply

The regulations in Table "A" in the First Schedule to the Companies Ordinance, 1984 shall not apply to the Company except as reproduced herein.

2. Definitions

Unless the context otherwise requires, capitalized terms used in these Articles shall have the meanings set out below:-

- (a) **"Articles"** mean these Articles as originally framed or as from time to time altered in accordance with law.
- (b) **"Board"** means the group of Directors in a meeting duly called and constituted or, as the case may be, the Directors assembled at a board.
- (c) **"Company"** means the Hyderabad Electric Supply Company Limited.
- (d) **"Directors"** means the Directors for the time being of the Company as named in Article 49 and, subsequently, such members duly elected and registered pursuant to Sections 178 and 205, respectively .
- (e) **"Month"** means calendar month according to the Gregorian calendar.
- (f) **"Office"** means the registered office for the time being of the Company.
- (g) **"Ordinance"** means the Companies Ordinance, 1984, or any modification or re-enactment thereof for the time being in force.
- (h) **"Ordinary Resolution"** means a resolution passed at a general meeting of the Company when the votes cast (whether *viva voce*, by show of hands or by poll) in favour of a resolution by members who, being entitled to vote in person or by proxy, do so vote, exceed the number of votes, if any, cast against the resolution by members so entitled and voting.
- (i) **"Register"** means, unless the context otherwise requires, the register of members to be kept pursuant to Section 147 of the Ordinance.
- (j) **"Seal"** means the common or official seal of the Company.



### III. SHARES

#### A. General

#### 5. Shares Under Directors' Control

Subject to Section 183 and these Articles, the shares of the Company shall be under the control of the Directors who may allot or otherwise dispose of the same to such persons, on such terms and conditions as the Directors think prudent.

#### 6. Amount Payable on Application

No shares shall be offered to the public for subscription except upon the term that the amount payable on application shall not be less than the full amount of the nominal amount of the share.

#### 7. Allotment of Shares

No share shall be issued at a discount except in accordance with the provisions of the Ordinance. The Directors shall, as regards any allotment of shares, duly comply with such of the provisions of Sections 68 to 73, as may be applicable to the Company. The minimum subscription upon which the Company may proceed to allot the shares shall be Rs 10,000 (Rupees Ten Thousand).

#### 8. Share Certificates

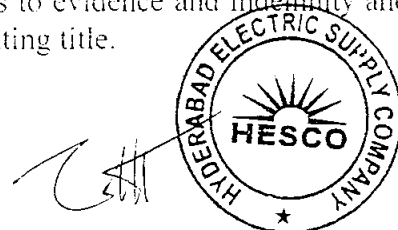
Every person whose name is entered as a member in the Register shall, free of charge, be entitled to receive within ninety (90) days after allotment or within forty-five (45) days of the application for registration of transfer, a certificate under Seal specifying the share or shares held by him and the amount paid-up thereon, including in particular and without limitation, such legends as the Company shall be obliged to affix to certain classes of share certificates as provided by law or as the Company shall have agreed to affix pursuant to any contractual arrangement in this respect; Provided, that, in respect of share or shares held jointly by several persons, the Company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all.

#### 9. Certificate under Seal

The certificate of title to shares may be issued under the authority of a Director or of a committee of Directors duly authorized thereto by the Board in such manner and form as the Directors may from time to time prescribe. The Seal shall be duly affixed to every share certificate issued by the Company.

#### 10. Issuance of Replacement Certificate

If a share certificate is defaced, lost or destroyed, it may be renewed on payment by the requesting shareholder or his representative of such fee and stamp taxes, if any, and compliance with such terms prescribed by the Directors as to evidence and indemnity and payment of expenses incurred by the Company in investigating title.





## HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED

I/We, \_\_\_\_\_, of \_\_\_\_\_, in consideration of the sum of Rupees \_\_\_\_\_ paid to me by \_\_\_\_\_, of \_\_\_\_\_, (hereinafter called the "Transferee/s", for brevity), do hereby transfer to the Transferee/s the Ordinary/Preferred Share(s) numbered \_\_\_\_\_ to \_\_\_\_\_, inclusive, standing in my/our name in the books of the Hyderabad Electric Supply Company Limited, to hold unto the said Transferee, his/her/their executors, administrators and assigns, subject to the several conditions on which I/We held the same at the time of the execution hereof, and I/We, the Transferee/s, do hereby agree to take the said share (s) subject to the conditions aforesaid.

Witness our hands this \_\_\_\_\_ day of \_\_\_\_\_

Transferor

Transferee

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

Signed by the above-named Transferor/s and Transferee/s in the presence of:

Witnesses

Full Name, Father's/  
Husband's Name

(1) \_\_\_\_\_  
Signature

Nationality \_\_\_\_\_

Full Address:

Occupation \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Full Address of  
Transferee: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
Signature

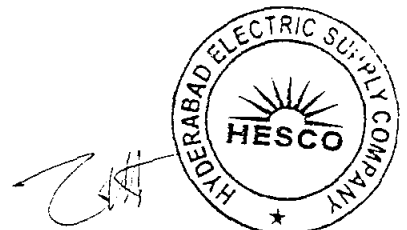
Full Address:

Occupation \_\_\_\_\_

\_\_\_\_\_  
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### 17. Non- Refusal of Transfer of Shares

The Directors shall not transfer any fully paid shares unless the transfer deed is defective or invalid. The Director may decline to recognize any instrument of transfer, unless-



**D. ALTERATION OF CAPITAL**

**22. Power to Increase Capital**

The Company may, from time to time, by ordinary resolution, increase the share capital by such sum to be divided into shares of such amount as the resolution shall prescribe.

**23. Further Issue of Capital**

All further issue of shares capital shall be subject to the applicable provisions of Section 86. Thereafter, the Directors may dispose of the same in such manner as they think most beneficial to the Company.

**24. Provisions Applicable to New Shares**

The new shares capital shall be subject to the same provisions with reference to transfer and transmission as the original share capital.

**25. Consolidation and Subdivision**

The Company may, by ordinary resolution:-

- (a) consolidate and divide its share capital into shares of larger amount than its existing shares;
- (b) subdivide its existing shares or any of them into shares of smaller amount than that fixed by the Company's Memorandum of Association, subject to the provisos to Section 92, sub-section (1), clause (d); or
- (c) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

**26. Reduction of Share Capital**

The Company may, by Special Resolution, reduce its share capital in any manner, with and subject to any incident authorized and consent required by law.

**IV. MEETINGS AND PROCEEDINGS**

**A. GENERAL MEETINGS**

**27. Statutory Meeting**

The statutory general meeting of the Company shall be held within the period required by Section 157.

**28. Annual General Meeting**

The annual general meeting shall be held in accordance with the provisions of Section 158, within eighteen (18) Months from the date of incorporation of the Company and, thereafter, once at least in every year within a period of six Months following the close of its financial year and not later than fifteen Months after the holding of its last preceding annual general meeting, as may be determined by the Directors.

**29. Other Meetings**

All general meetings of the Company other than the statutory meeting or an annual general meeting shall be called extraordinary general meetings.



35. Chairman of Meeting

The Chairman of the Board of Directors, if any, shall preside as chairman at every general meeting of the Company, but if there is no such Chairman, or if at any meeting he is not present within fifteen minutes after the time appointed for the meeting, or is unwilling to act as chairman, any one of the Directors present may be elected to be the chairman, and if none of the Directors is present, or willing to act as chairman, the members present shall choose one of their number to be the chairman.

36. Adjournment

The Chairman may, with the consent of any meeting at which a quorum is present (and shall if so directed by the majority of members present), adjourn the meeting from time to time but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned for ten days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

37. Voting

A resolution put to the vote in any general meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. Unless a poll is so demanded, a declaration by the Chairman that a resolution has, on a show of hands, been carried, or carried unanimously, or by a particular majority, or lost, and an entry to that effect in the minutes of the proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favor of, or against, that resolution.

38. Demand for a Poll

A poll may be demanded only in accordance with the provisions of Section 167.

39. Manner of Taking a Poll

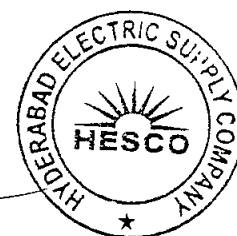
If a poll is duly demanded, it shall be taken in accordance with the manner laid down in Section 168 and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.

40. Time of Taking a Poll

A poll demanded on the election of Chairman or on a question of adjournment shall be taken at once.

41. Casting Vote

In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place, or at which the poll is demanded, shall have and exercise a second or casting vote.



48. Revocation of Authority

A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the share in respect of which the proxy is given; Provided, that, no intimation in writing of such death, insanity, revocation or transfer as aforesaid shall have been received by the Company at its Office before the commencement of the meeting or adjourned meeting at which the proxy is used.

**V. MANAGEMENT AND ADMINISTRATION**

A. Board of Directors

49. Number of Directors

The number of Directors shall not be less than seven. The first Directors, to hold office until the first annual general meeting, shall be:-

1. Ch. Muhammad Akram
2. Mr. Mansoor Ali Sheikh
3. Mr. Pir Mian Jan Said
4. Mr. Ansar Haider
5. Mr. Muhammad Sharif Ansari
6. Mr. Tariq Shahab
7. Mr. Akram Arain

50. Qualification of Directors

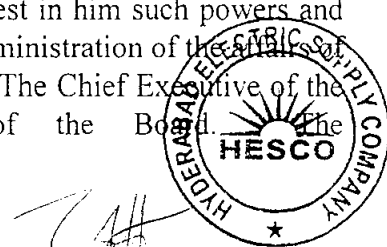
Save as provided in Section 187, no person shall be appointed as a Director unless he is a member of the Company.

51. Chairman of the Board

The Directors may elect one of their number as the Chairman of the Board and vest in him such powers and functions as they may deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control.

52. Chief Executive

The Directors may elect one of their number to be the Chief Executive of the Company in accordance with the provisions of Sections 198 and 199 and vest in him such powers and functions as they deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control. The Chief Executive of the Company shall be the *ex-officio* Vice-Chairman of the Board.



an encumbrance on its undertaking or any part thereof and to issue debentures and other securities whether outright or as security for any obligation, liability or debt of the Company or of any third party. In exercising the aforesaid powers of the Company the Directors may, from time to time and on such terms and conditions as they think fit, raise money from banks and financial institutions and from other persons under any permitted system of financing, whether providing for payment of interest or some other form of return, and in particular the Directors may raise money on the basis of mark-up price, musharika, modaraba or any other permitted mode of financing, and without prejudice to the generally of the foregoing the Directors may exercise all or any of the powers of the Company under Section 196(2) of the Ordinance. In particular, the Directors may issue any security as defined in Section 2(1)(34) of the Ordinance or may issue any instrument or certificate representing redeemable capital as defined in 2(1)(30A) of the Ordinance or participatory redeemable capital as defined in Section 2(1)(25) of the Ordinance.

57. Duties of Directors

The Directors shall duly comply with the provisions of the Ordinance.

58. Minute Books

The Directors shall cause minutes to be made in books provided for the purpose of:-

- (a) all appointments of officers made by the Directors;
- (b) the names of the Directors present at each meeting of the Directors and of any committee of the Directors; and
- (c) all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors; and every Director present at any meeting of Directors or committee of Directors shall sign his name in a book to be kept for that purpose.

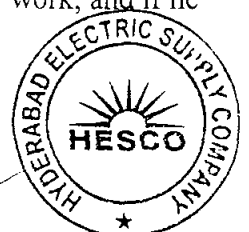
C. DISQUALIFICATION OF DIRECTORS

59. Disqualification of Directors

No person shall become a Director of the Company if he suffers from any of the disabilities or disqualifications mentioned in Section 187 of the Ordinance and, if already a Director, shall cease to hold such office from the date he so becomes disqualified or disabled or:-

- (a) if removed by general or special order of the holding company;
- (b) if removed by a resolution of members as hereinafter provided; or
- (c) if by notice in writing given to the Company he resigns his office;

Provided, however, that no Director shall vacate his office by reason only of his being a member of any company which has entered into contracts with, or done any work for, the Company but such Director shall not vote in respect of any such contract or work, and if he does so vote, his vote shall not be counted.



64. Proceedings of Committee Meetings

A committee may meet and adjourn as it thinks fit. Questions arising at any meeting shall be determined by a majority of votes of the members present. In case of an equality of votes, the chairman shall have and exercise a second or casting vote.

65. Validity of Directors' Acts

All acts done in any meeting of the Directors or of a committee of Directors shall, notwithstanding that it be afterwards discovered that there was some defect in the appointment of such Directors or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a Director unless the said act or acts is *ultra vires* in itself.

66. Resolution in Writing

A resolution in writing circulated to all the Directors and signed by a majority of the total number of Directors or affirmed by them through fax, telex or telegram shall be as valid and effectual as if it had been passed at a meeting of the Directors duly convened and held.

E. ELECTION AND REMOVAL OF DIRECTORS

67. Rotation of Directors

At the first annual general meeting of the Company, all the Directors shall retire from office, and Directors shall be elected in their place in accordance with Section 178 for a term of three years.

68. Eligibility for Re-election

A retiring Director shall be eligible for re-election.

69. Election in Accordance with the Ordinance

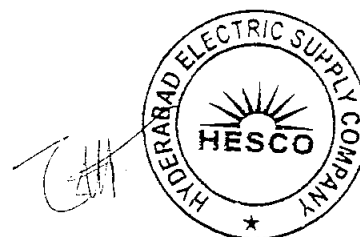
The Directors shall comply with the provisions of Sections 174 to 178 and Sections 180 and 184 relating to the election of Directors and matters ancillary thereto.

70. Filling of Casual Vacancy

Any casual vacancy occurring in the Board of Directors may be filled by the Directors, but the person so chosen shall be subject to retirement at the same time as if he had become a Director on the day on which the Director in whose place he is chosen was last elected as Director.

71. Removal of Director

The Company may remove a Director but only in accordance with the provisions of the Ordinance.



79. Profit Carried Forward

The Directors may carry forward any profits which they may think prudent not to distribute, without setting them aside as a reserve.

80. Payment of Dividends Specie

With the sanction of a resolution in a general meeting, any dividend may be paid wholly or in part by the distribution of specific assets and in particular of paid-up shares or debentures of any other company or in any one or more of such ways. The Directors may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any members upon the footing of the value so fixed, in order to adjust the rights of all members, and may vest any such specific assets in trust for the members entitled to the dividend as may seem expedient to the Directors.

81. Dividends to Joint Holders

If several persons are registered as joint holders of any share, any one of them may give effectual receipt for any dividend payable on the share.

82. Notice of dividend

Notice of any dividend that may have been declared shall be given in the manner hereinafter mentioned to the persons entitled thereto. The Company may give such notice by publication in a newspaper of general circulation in the Province where the Office is situated.

83. Period for Payment of Dividends

Dividends shall be paid within the period specified in Section 251.

## VIII. ACCOUNTS

84. Books of Account

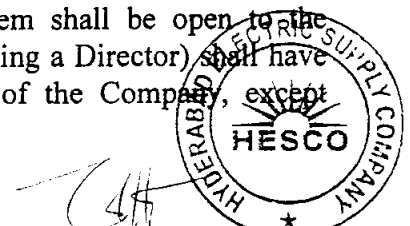
The Directors shall cause to be kept proper books of account as required under Section 230.

85. Place Where Accounts Kept

The books of account shall be kept at the Office or at such other place as the Directors shall think fit and shall be open to inspection by the Directors during business hours.

86. Inspection by Members

The Directors, or their representatives, shall from time to time determine whether and to what extent and at what time and place/s and under what conditions or regulations the accounts and books or papers of the Company or any of them shall be open to the inspection of members not being Directors. No member (not being a Director) shall have any right of inspecting of any account and book or papers of the Company, except



## **X. CONFIDENTIALITY**

### **94. Confidentiality Undertaking**

Every director, manager, adviser, auditor, trustee, member of a committee, officer, agent, accountant, or other employees of the Company shall, if so required by the Directors, before entering upon his duties, sign a confidentiality undertaking in relation to all transactions of the Company with its customers and the state of accounts with individuals and in matters relating thereto, and shall undertake not to reveal any of the matters which may come to his knowledge in the discharge of his duties, except when required to do so by the Directors or by any general meeting or by any a court of law of competent jurisdiction and except so far as may be necessary in order to comply with any of the provisions in these presents.

### **95. Members' Access to Company Premises**

No member or other person (not being a Director) shall be entitled to enter upon the property of the Company or examine the Company's premises or properties without the permission of a Director, subject to Article 94, to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery of trade, or secret process or of any matter whatsoever which may relate to the conduct of the business of the Company and which in the opinion of the Directors will be inexpedient, in the interest of the Company and its members, to communicate.

## **XI. RECONSTRUCTION**

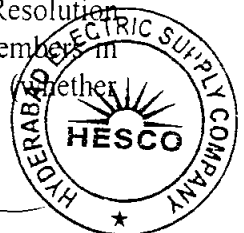
### **96. Reconstruction**

On any sale of the undertakings of the Company, the Directors or the liquidators on a winding up may, if authorized by a Special Resolution, accept fully paid shares, debentures or securities of any other company, either then existing or to be formed for the purchase in whole or in part of the property of the Company. The Directors (if the profits of the Company permit), or the liquidators (in a winding up), may distribute such shares or securities, or any other properties of the Company amongst the members without realization, or vest the same in trustees for them. A Special Resolution may provide for the distribution or appropriation of the cash, shares or other securities, benefits or property, and for the valuation of any such securities or property at such price and in such manner as the meeting may approve. All shareholders shall be bound by any valuation or distribution so authorized, and waive all rights in relation thereto save only such statutory rights (if any) as are, in case the Company is proposed to be or is in the course of being wound up, incapable of being varied or excluded by these Articles.

## **XII. WINDING UP**

### **97. Division and distribution of Assets Upon Dissolution**

If the Company is wound up, the liquidator may, with the sanction of a Special Resolution of the Company and any other sanction required by law, divide amongst the members in specie or kind the whole or any part of the assets of the Company (whether





We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of these Articles of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

| Name and surname<br>(Present and former) in full<br>(in Block Letters) | Father's/ Husband's<br>Name in Full | Nationality | Occupation    | Residential<br>Address in Full                                                       | Number of<br>Shares taken<br>by Each<br>Subscriber | Signature |
|------------------------------------------------------------------------|-------------------------------------|-------------|---------------|--------------------------------------------------------------------------------------|----------------------------------------------------|-----------|
| 1. Ch. Muhammad Akram                                                  | Choudry Ali Bux                     | Pakistani   | WAPDA Service | A-2, Senior Officer's Hostel,<br>Wapda Water Wing Colony,<br>Hussainabad, Hyderabad. | 1                                                  |           |
| 2. Mr. Mansoor Ali Sheikh                                              | Muhammad Ali Sheikh                 | Pakistani   | WAPDA Service | 2-C, Audit Officers Colony,<br>Gulberg-III, Lahore.                                  | 1                                                  |           |
| 3. Mr. Pir Mian Jan Said                                               | Pir Marifat Shah                    | Pakistani   | WAPDA Service | B-1, NTPS WAPDA Colony,<br>Tando Muhammad Khan Road,<br>Hyderabad.                   | 1                                                  |           |
| 4. Mr. Ansar Haider                                                    | Nehal-ud-Din Hydera<br>Khan         | Pakistani   | WAPDA Service | A-1, Wapda Power Wing<br>Colony, Hussainabad,<br>Hyderabad.                          | 1                                                  |           |
| 5. Mr. Muhammad Sharif Ansari                                          | Muneer Khan                         | Pakistani   | WAPDA Service | H. No. 50, Block A, Tando Mir<br>G. Hussain. Unit No. 09,<br>Latifabad, Hyderabad.   | 1                                                  |           |
| 6. Mr. Tariq Shahab                                                    | Shaukat Ali Shahab Talib            | Pakistani   | WAPDA Service | 21-Greenwood Homes, Block-c,<br>New Muslim Town, Lahore.                             | 1                                                  |           |
| 7. Mr. Akram Arain                                                     | Fazal Muhammad                      | Pakistani   | WAPDA Service | 132kV Grid Station, Ghazi<br>Road, LCCHS, Lahore.                                    | 1                                                  |           |

Total number of shares taken 7 (Seven)

Dated the \_\_\_\_\_ day of \_\_\_\_\_

Witnesses to above signatures

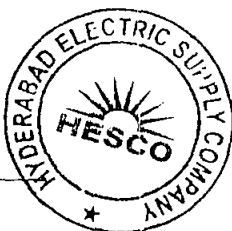
(Full Name, Father's/Husband's Name)

(in Block Letters) \_\_\_\_\_

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

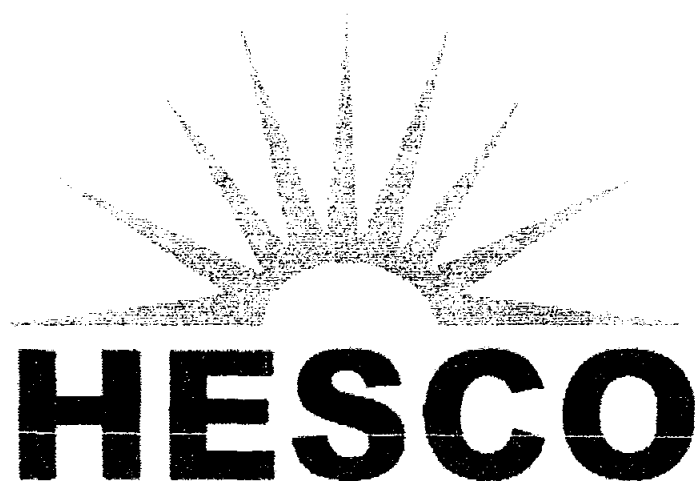
Full Address \_\_\_\_\_



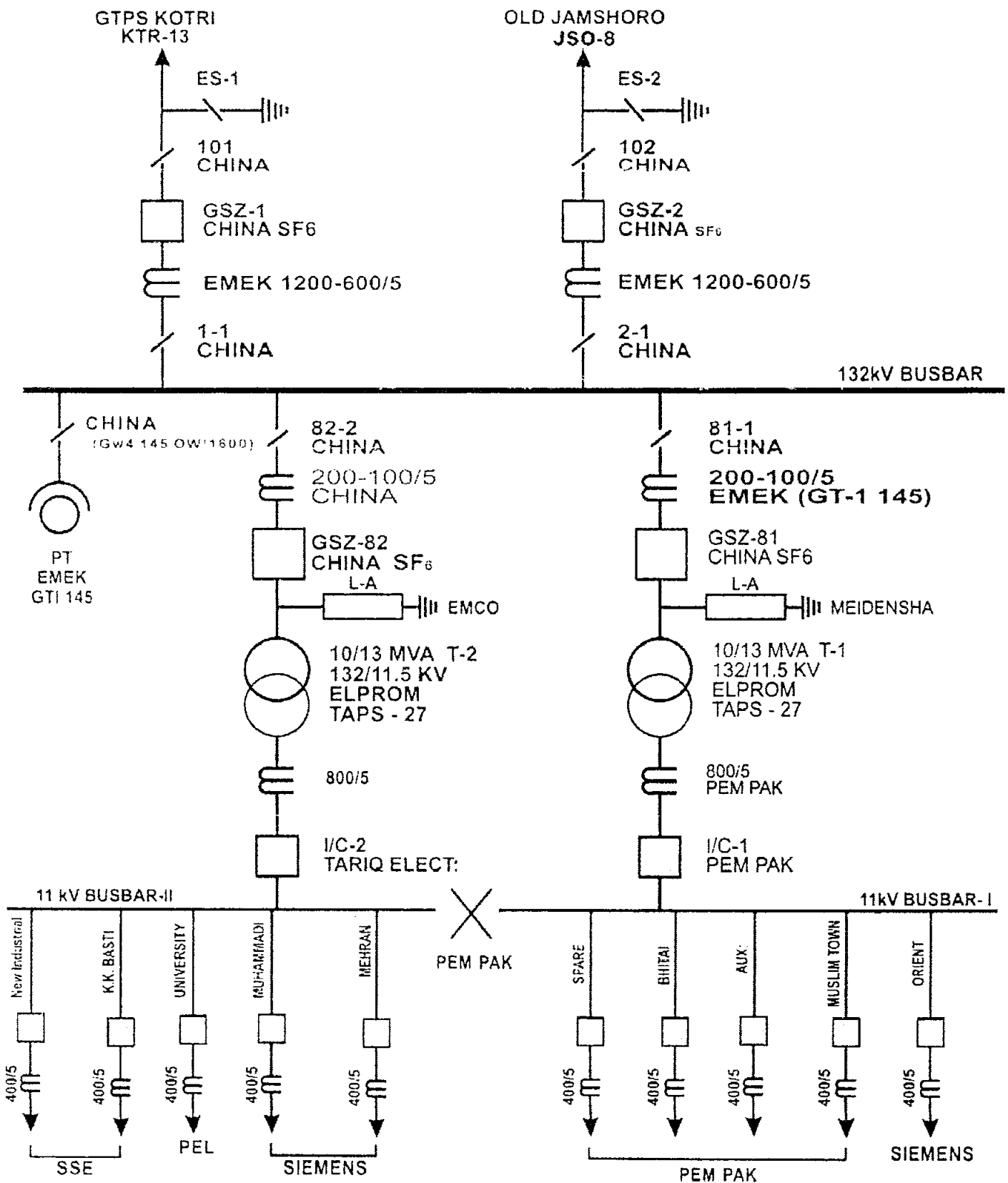
*Annexure - F*  
(1°)

**HYDERABAD ELECTRIC SUPPLY COMPANY**

**HESCO 11KV FEEDER MAP**



# 132KV GULSHAN-E-SHAHBAZ



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

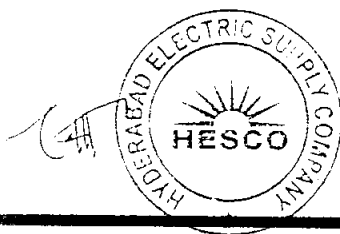
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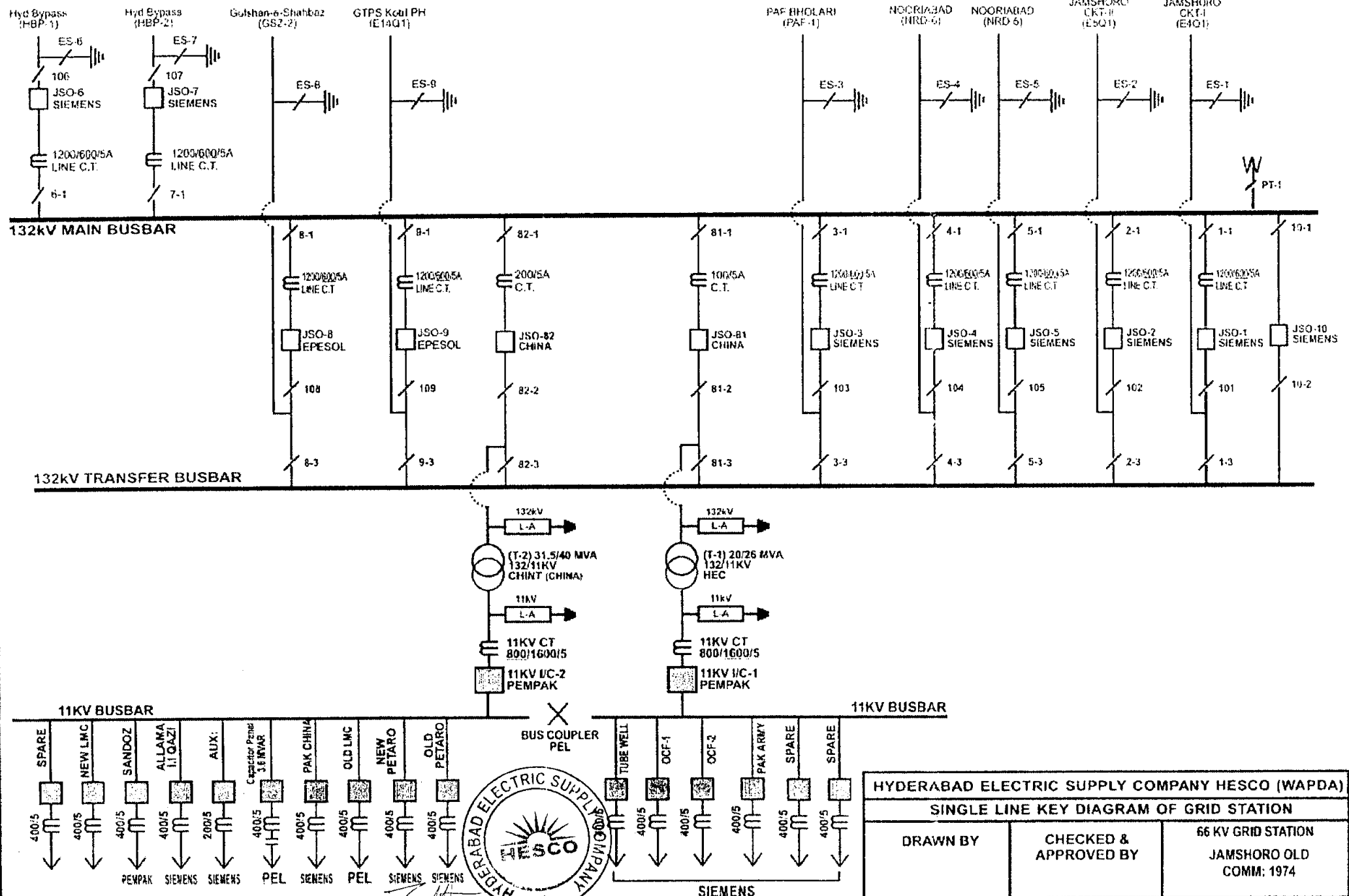
CHECKED & APPROVED BY

132 KV GRID STATION  
GULSHAN-E-SHAHBAZ

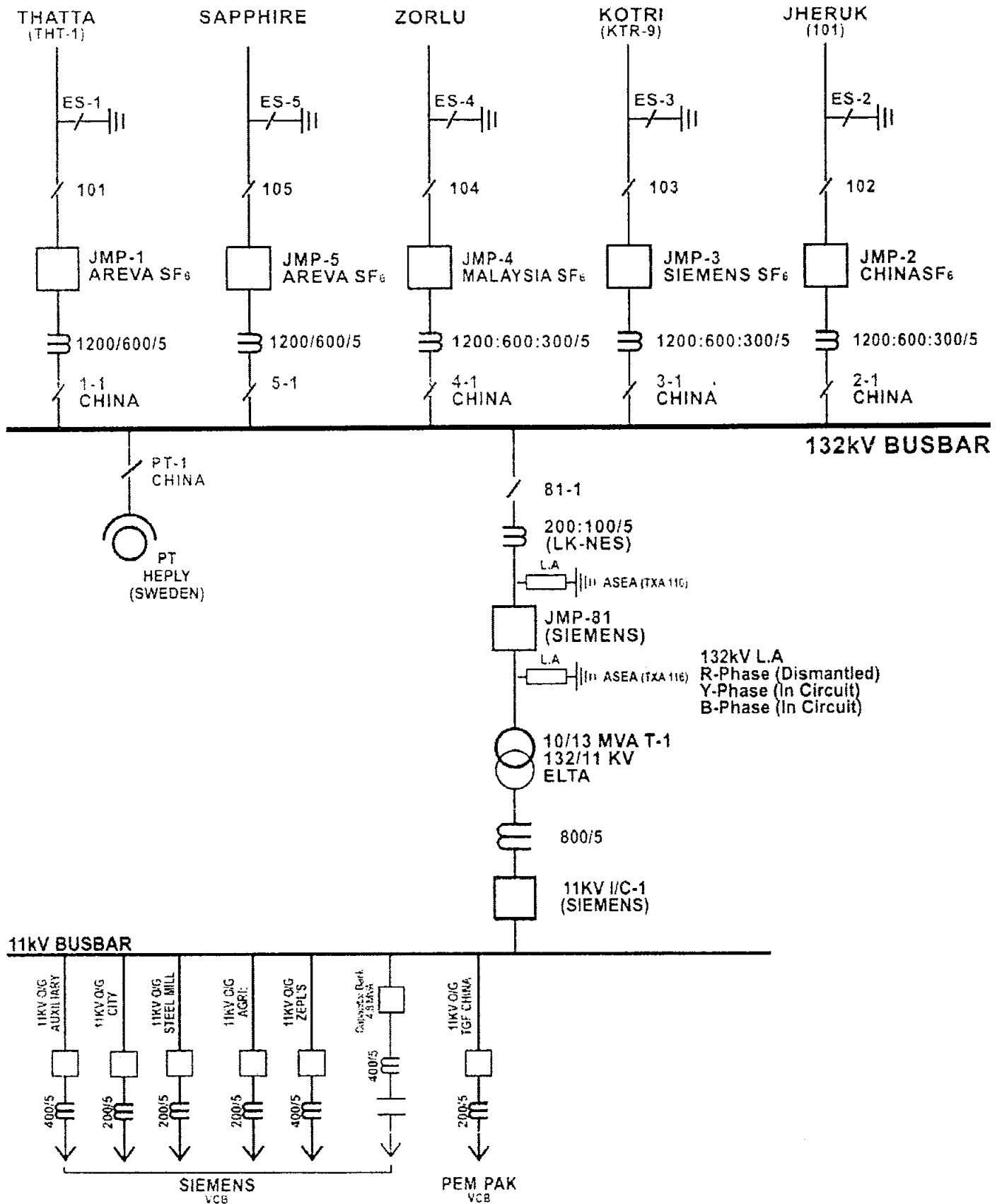
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# 132kV JAMSHORO OLD



# 132kV JHAMPIR



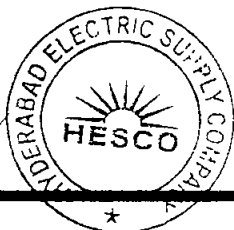
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

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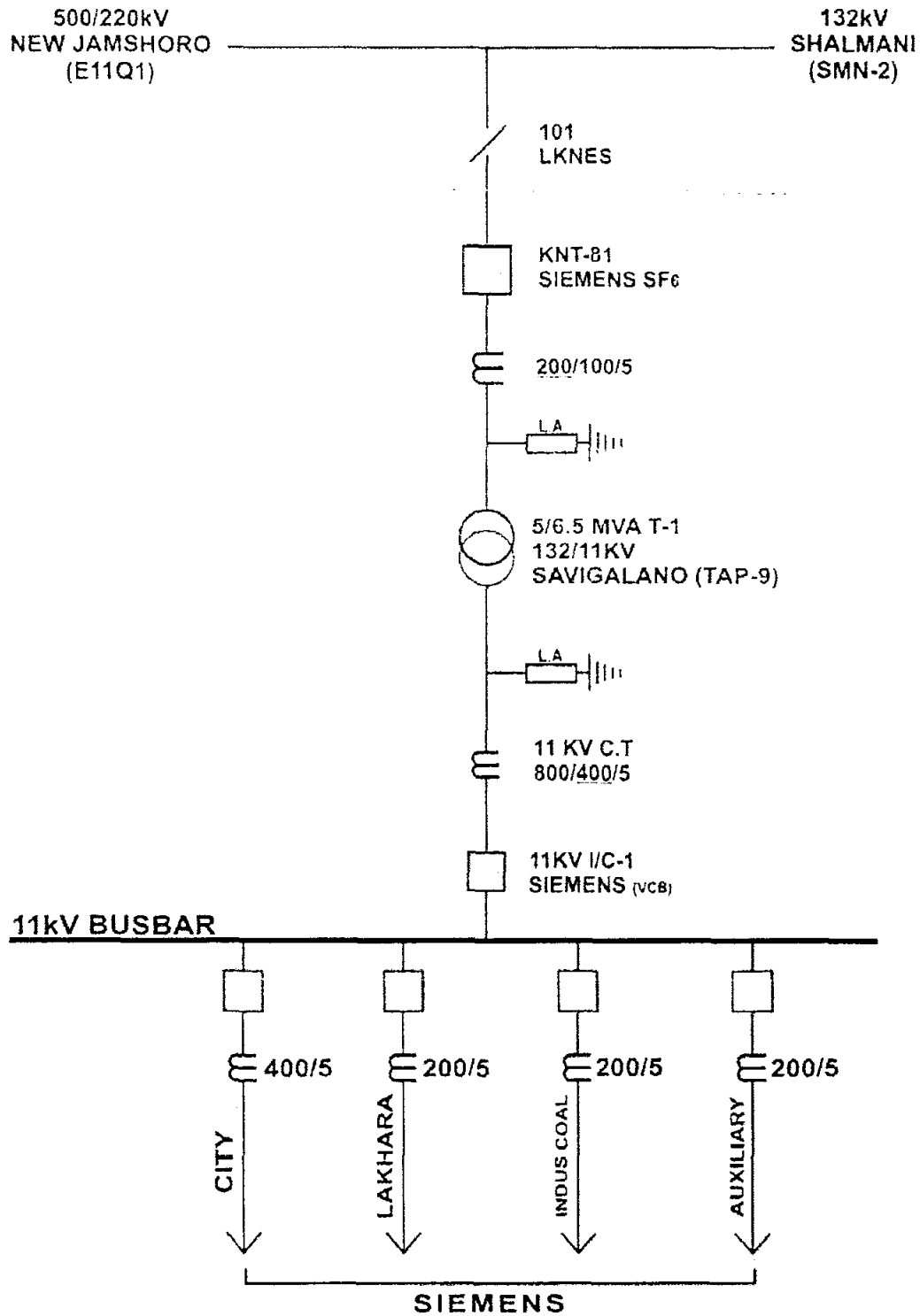
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132 KV GRID STATION  
JHAMPIR  
COMM: 1986



# 132kV KHANOTE



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

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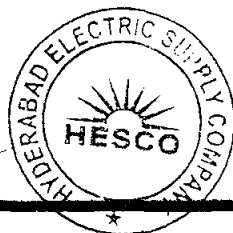
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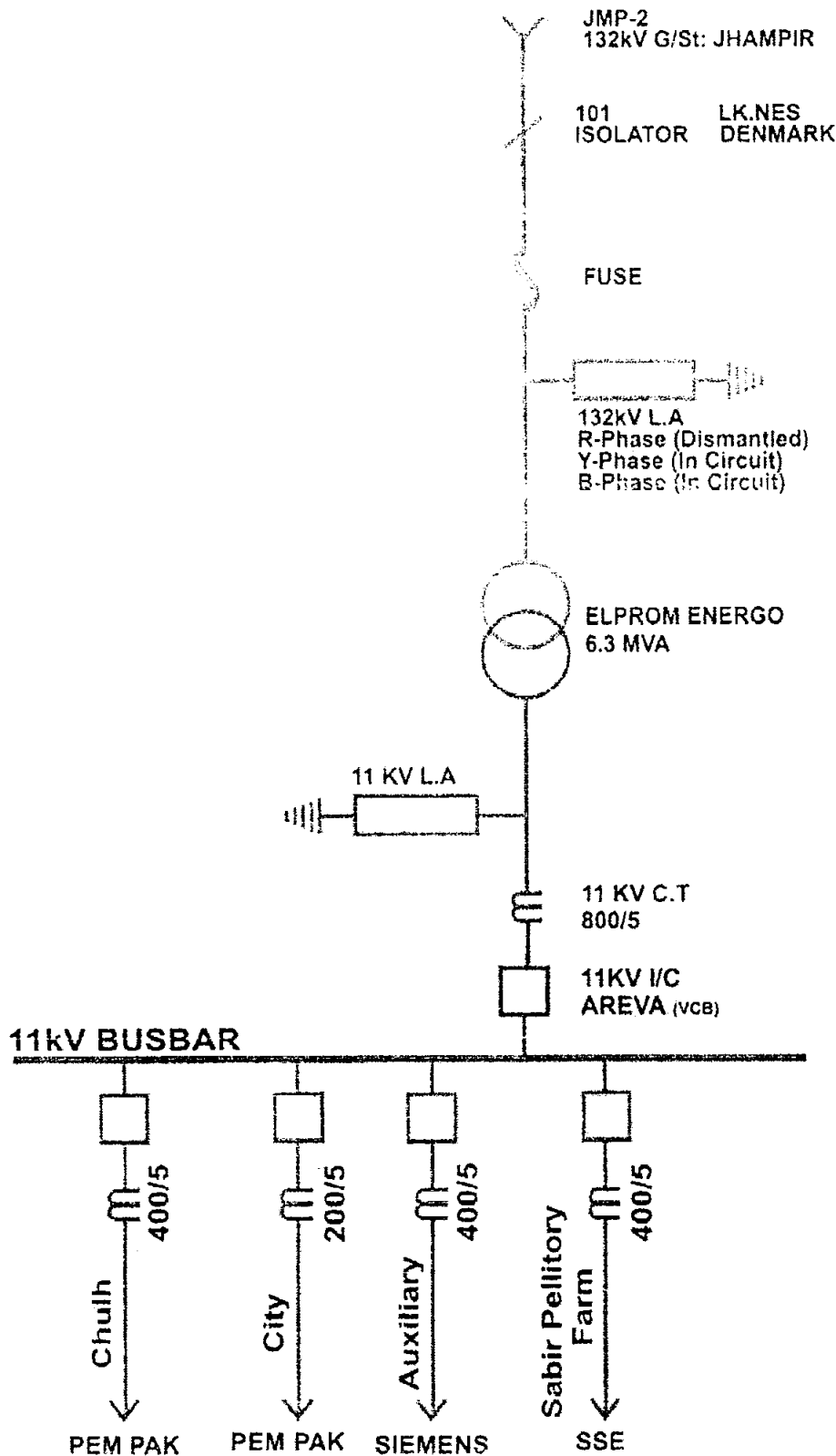
132 KV GRID STATION

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# 132kV JHIRRUK



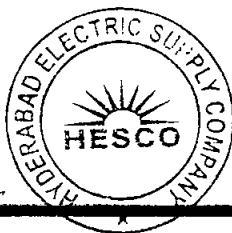
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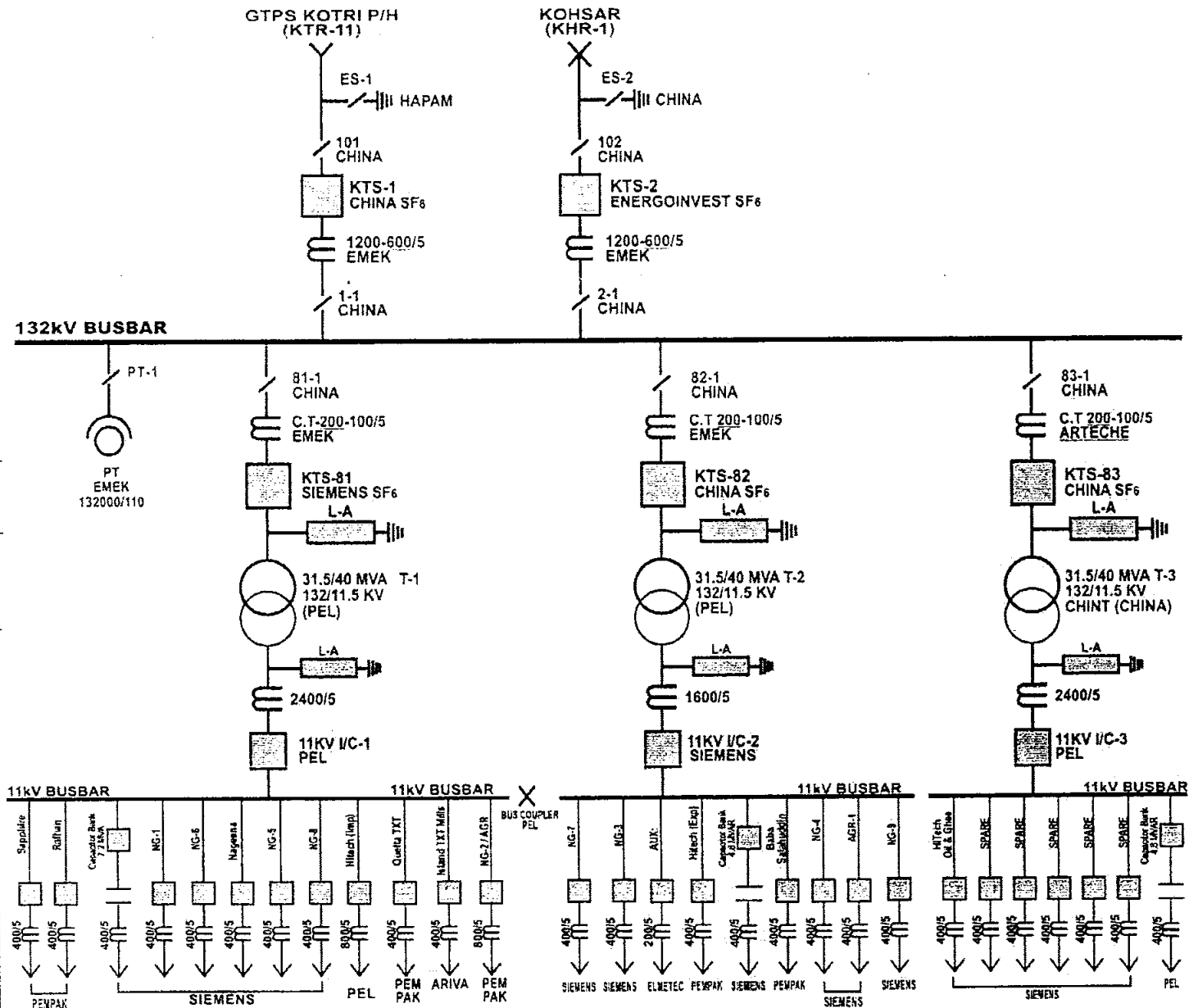
DRAWN BY  
Aqeel Malik  
SSO-II Incharge

CHECKED &  
APPROVED BY

132 KV GRID STATION  
JHIRRUK  
COMM: 1974



# 132kV KOTRI SITE



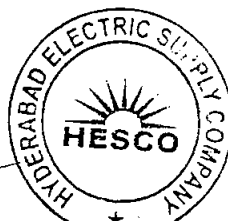
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

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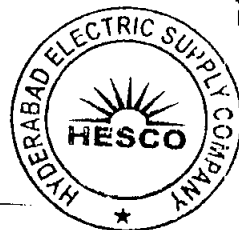
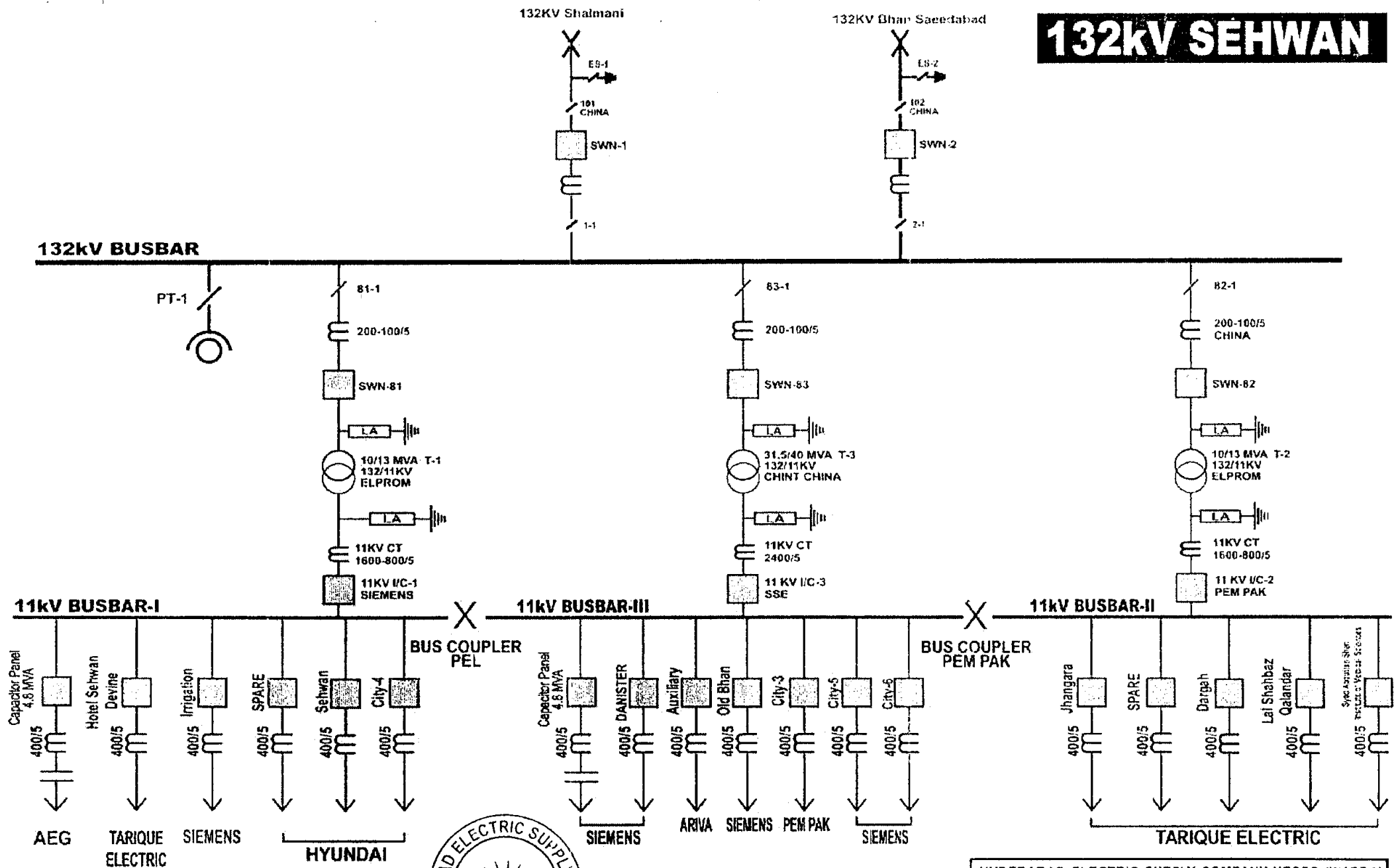
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132 KV GRID STATION  
KOTRI SITE  
COMM: 1988



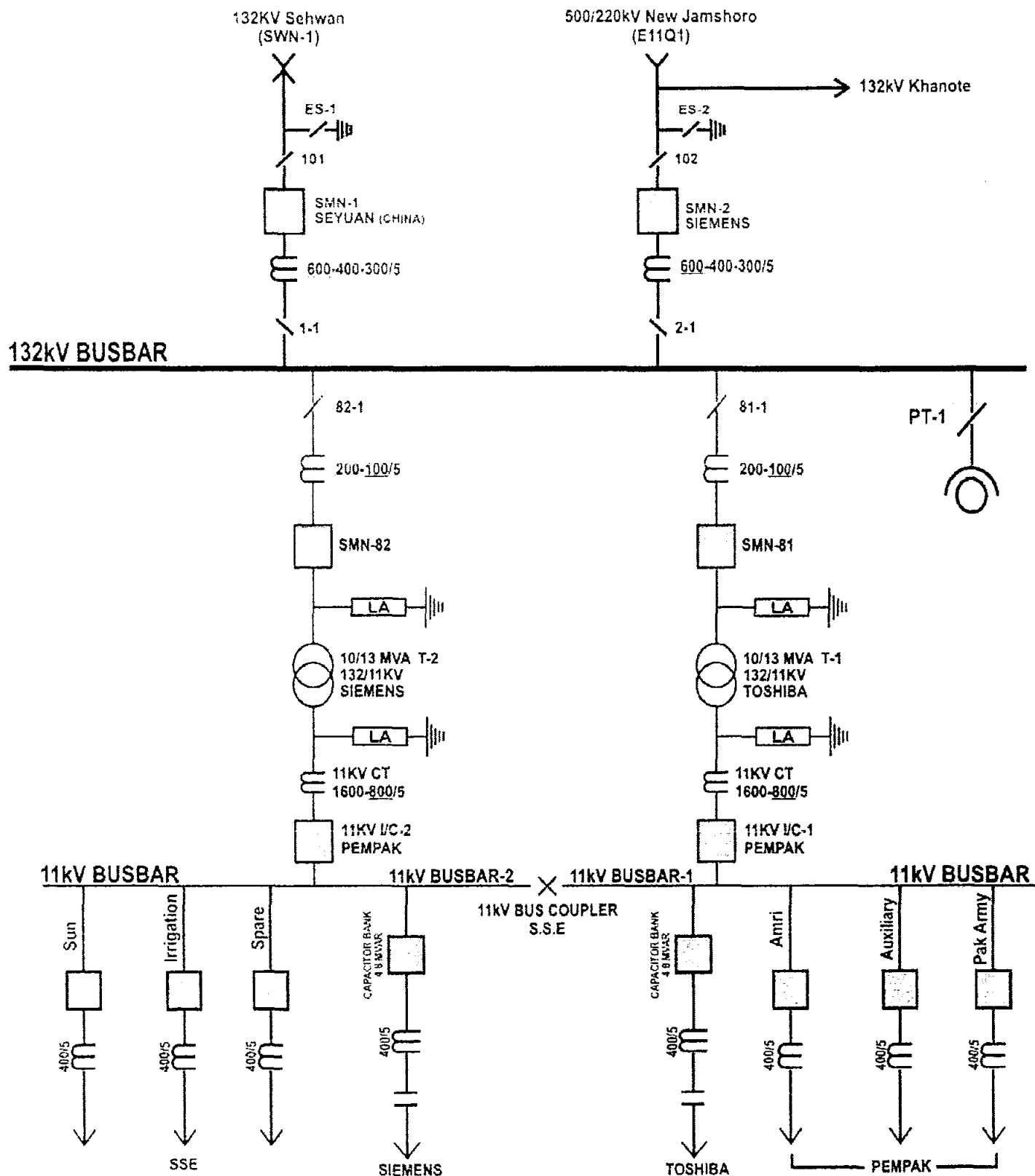


# 132kV SEHWAN



| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA) |                       |                                        |
|-------------------------------------------------|-----------------------|----------------------------------------|
| SINGLE LINE KEY DIAGRAM OF GRID STATION         |                       |                                        |
| DRAWN BY                                        | CHECKED & APPROVED BY | 132 KV GRID STATION<br>Sehwan<br>COMM: |

## 132kV SHALMANI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

### SINGLE LINE KEY DIAGRAM OF GRID STATION

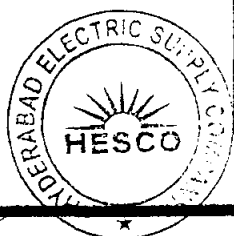
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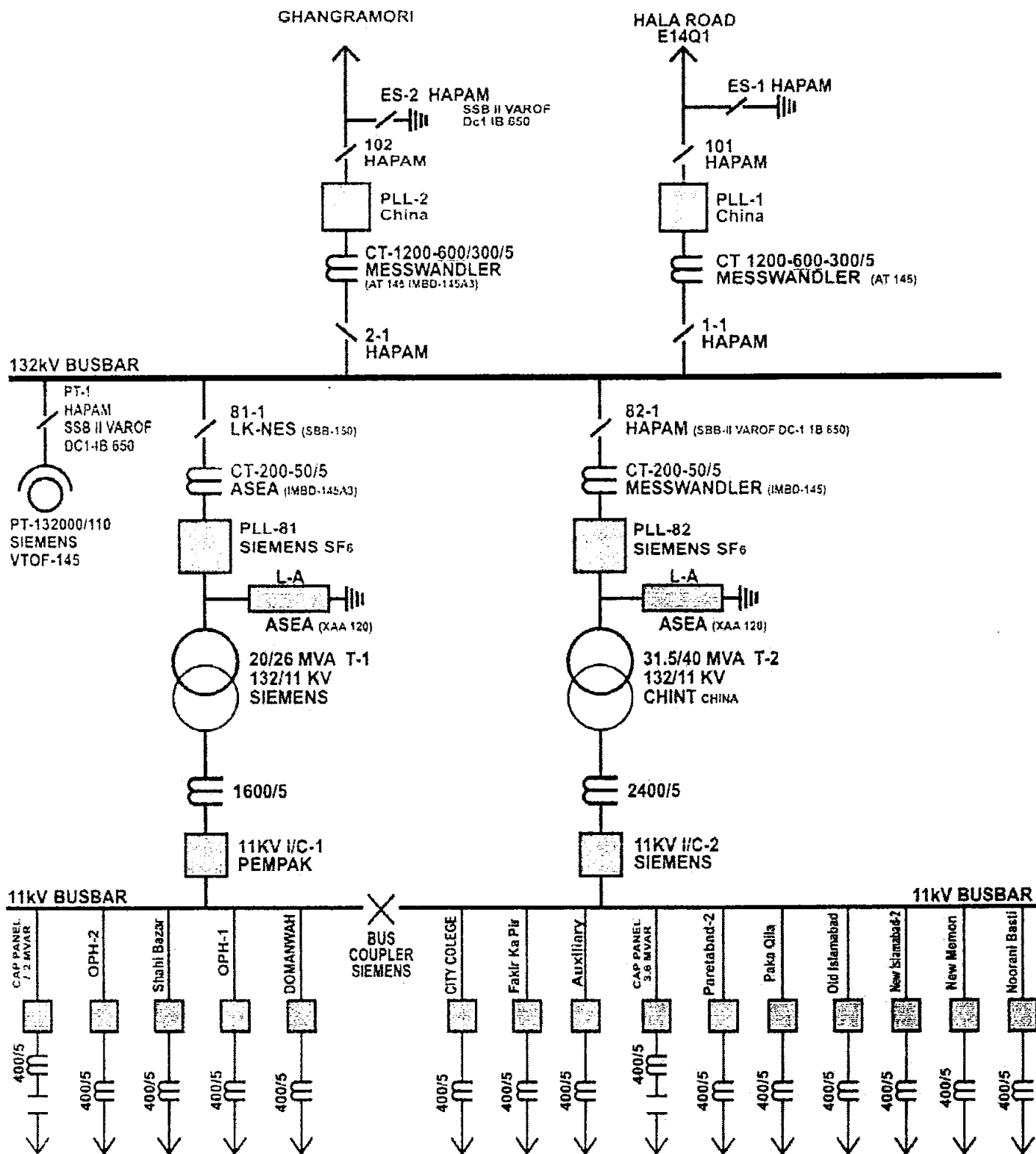
132 KV GRID STATION

## Shalmani

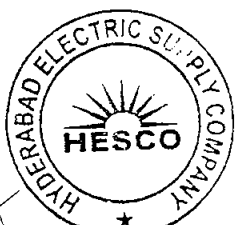
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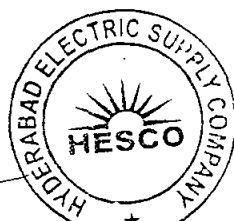
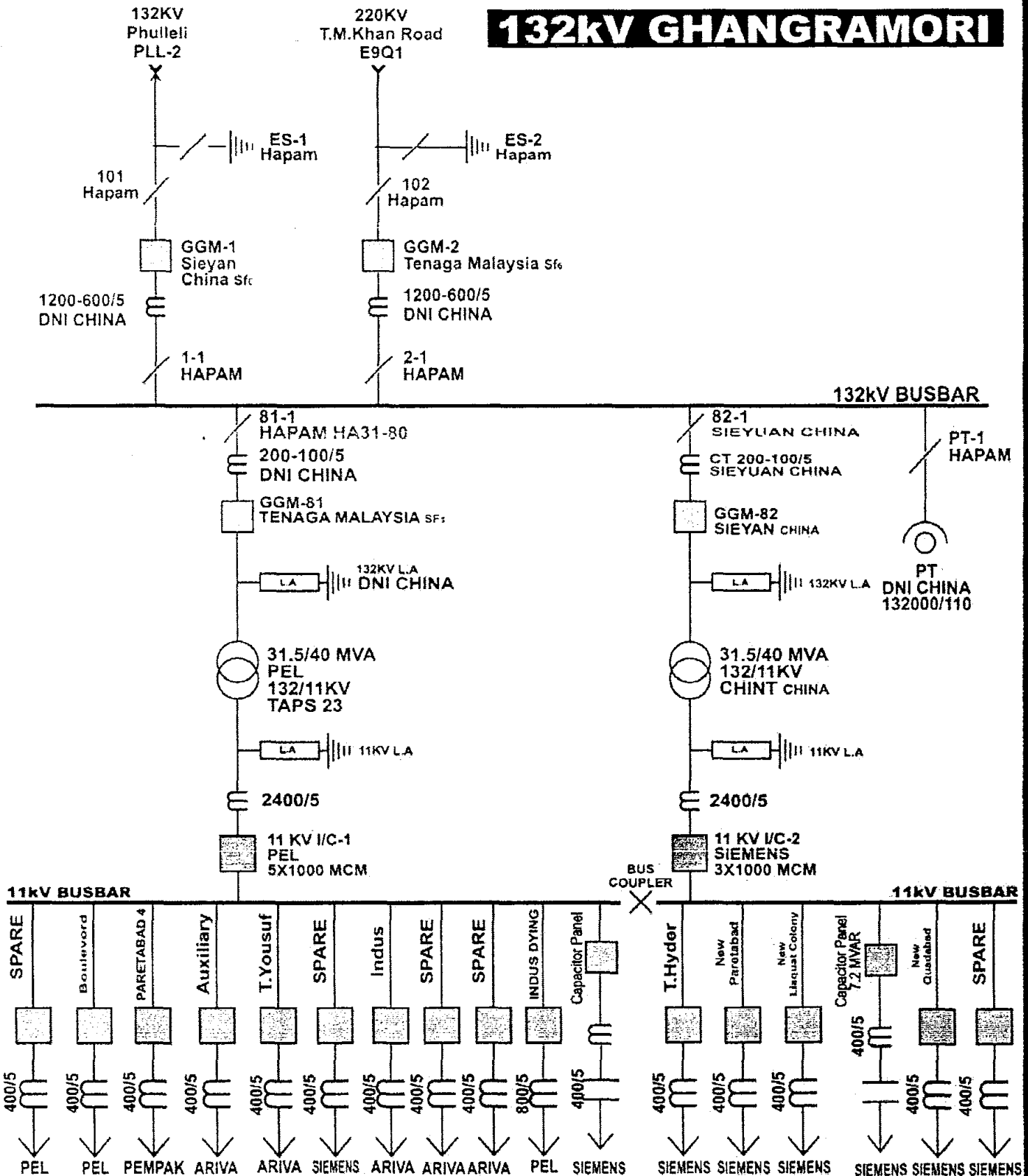
# 132KV PHULELI



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| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA) |                          |                                                   |
| SINGLE LINE KEY DIAGRAM OF GRID STATION         |                          |                                                   |
| DRAWN BY                                        | CHECKED &<br>APPROVED BY | 132 KV GRID STATION<br>PHULLELI<br><br>COMM: 1982 |



# 132kV GHANGRAMORI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

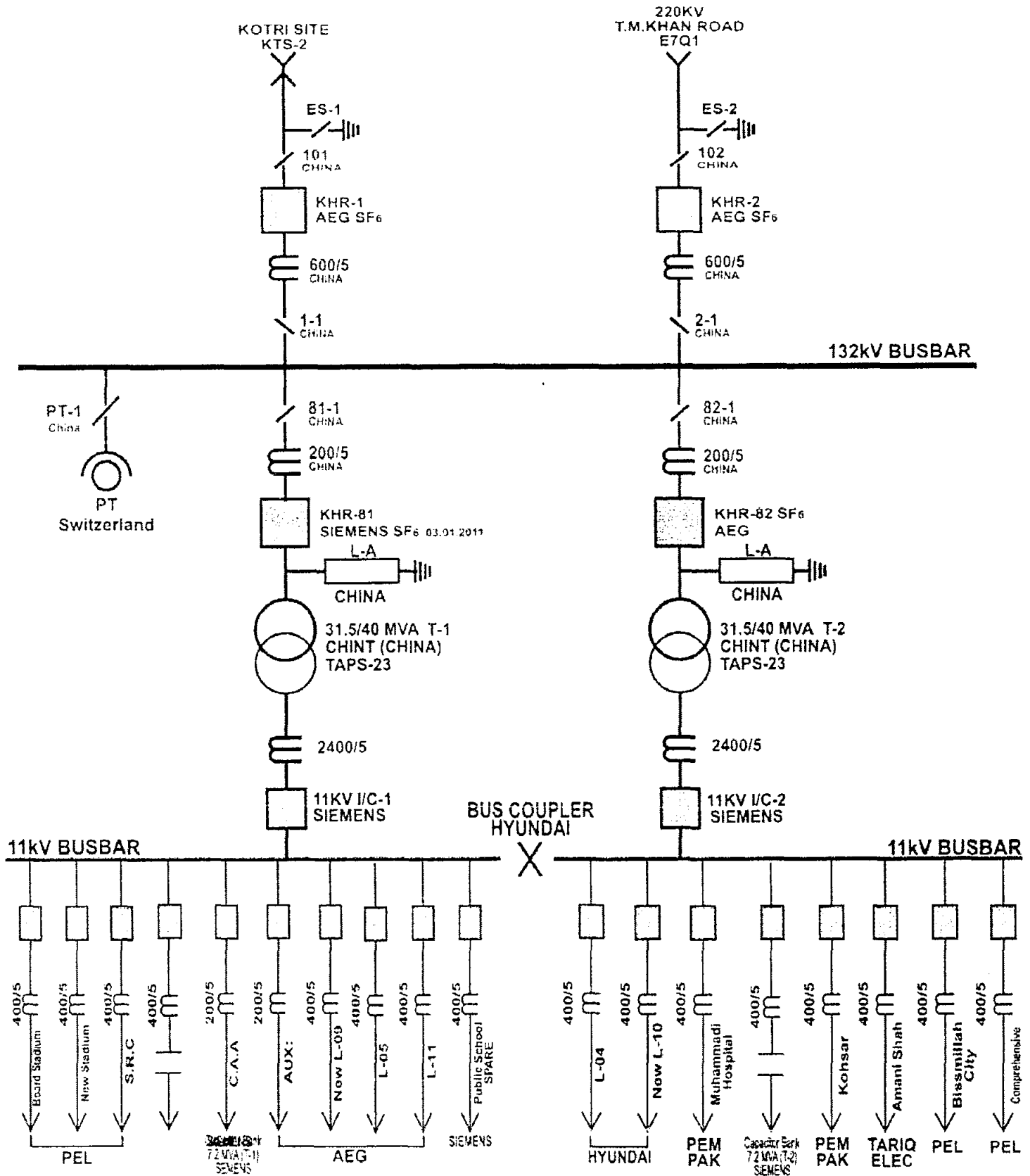
CHECKED &  
APPROVED BY

132 KV GRID STATION

Ghangramori

COMM: 20.03.2011

# 132kV KOHSAR



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

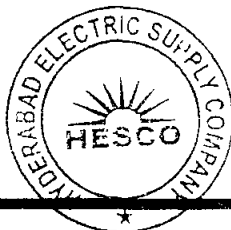
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

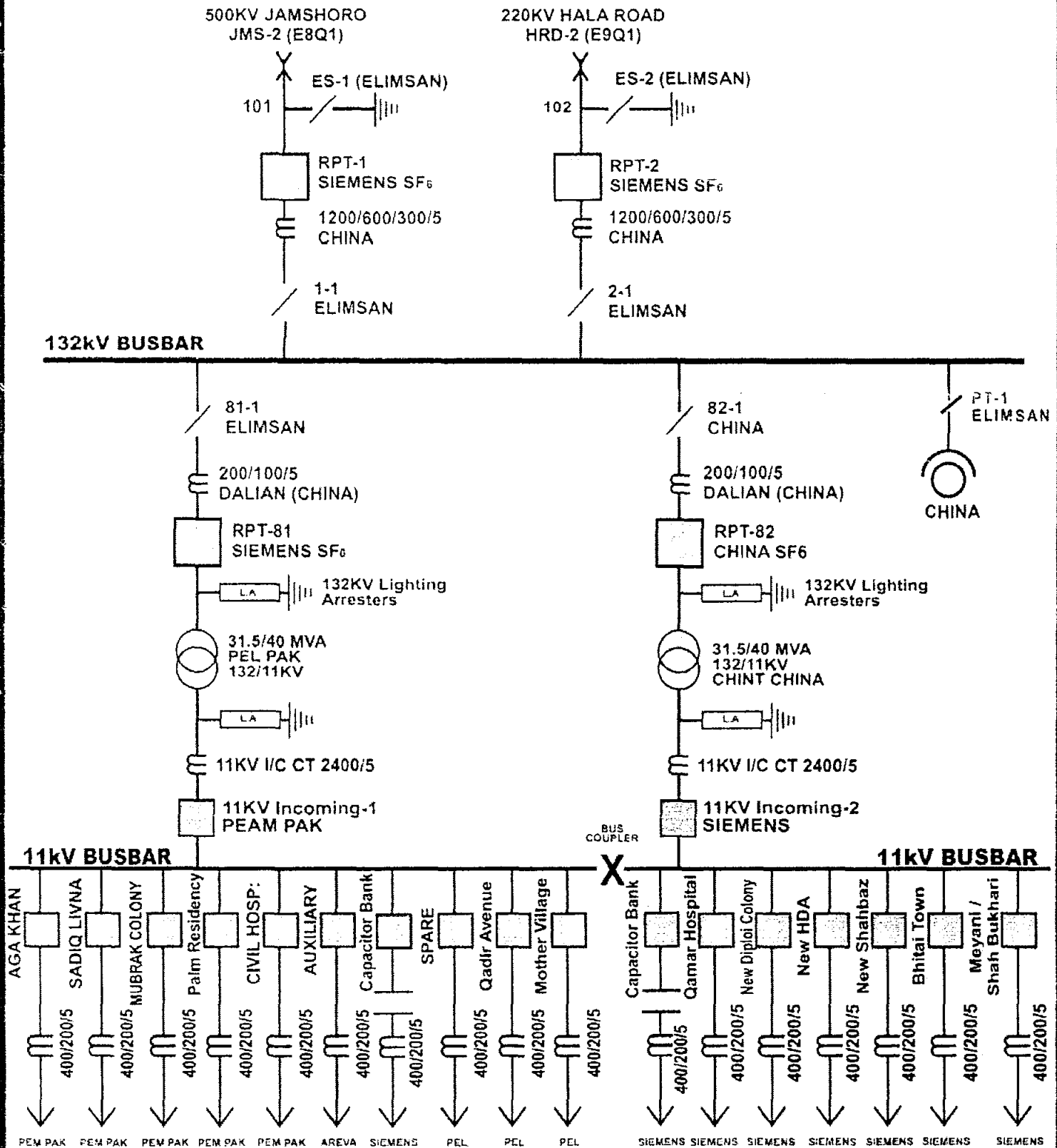
CHECKED &  
APPROVED BY

132KV GRID STATION

KOHSAR  
COMM: 15-03-1999



# 132kV RAJPUTANA / SHAH LATIF



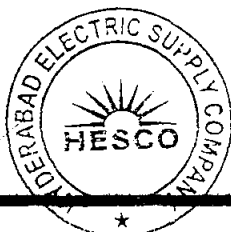
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

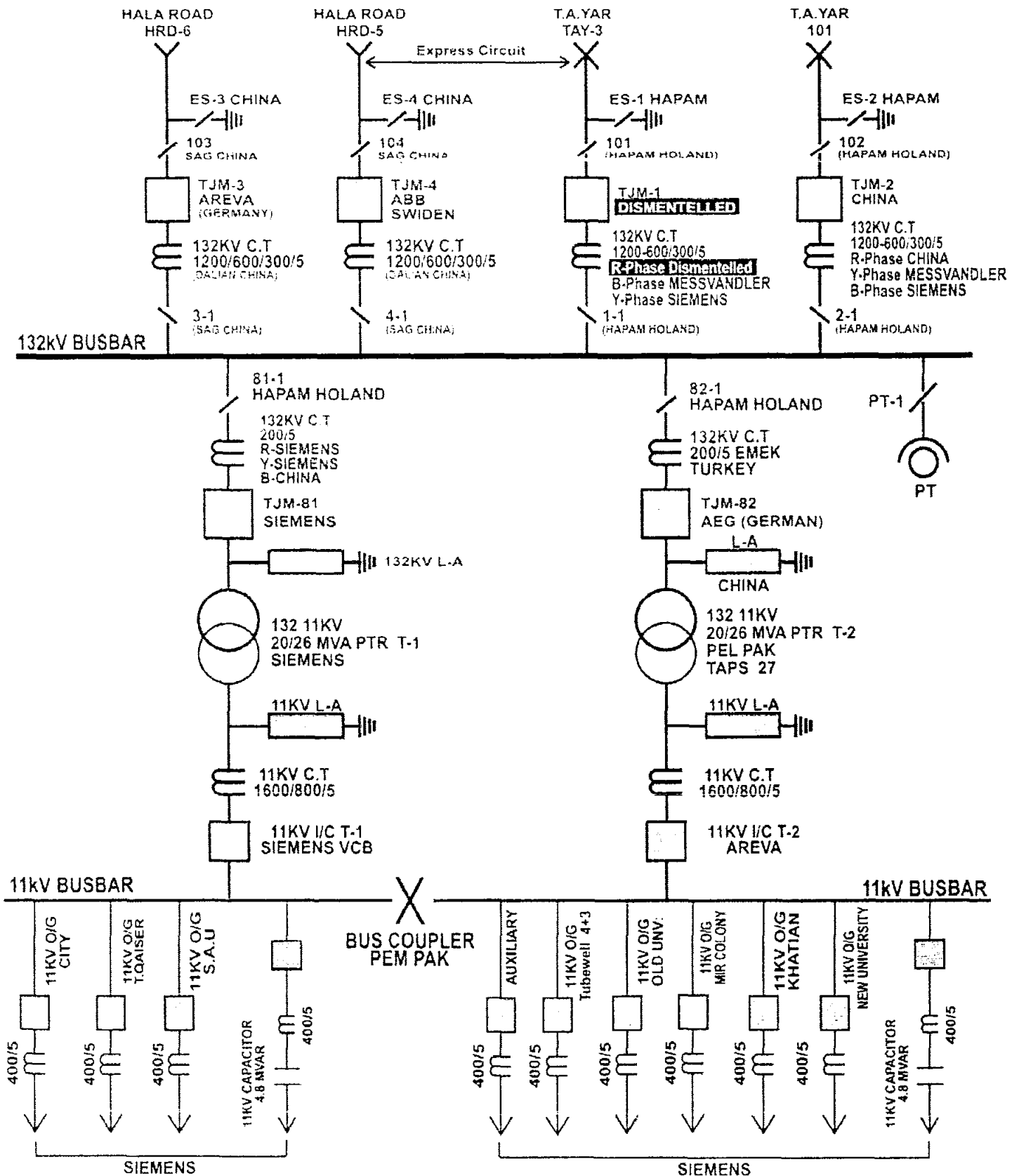
DRAWN BY

CHECKED &  
APPROVED BY

132 KV GRID STATION  
RAJPUTANA / SHAH LATIF  
COMM: 01.06.2012 (NO LOAD)  
03.06.2012 (ON LOAD)



# 132kV TANDO JAM



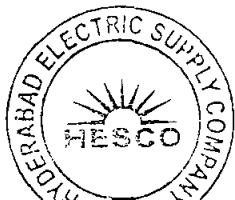
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

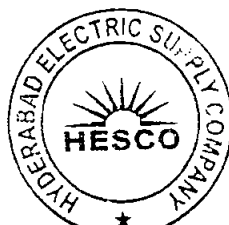
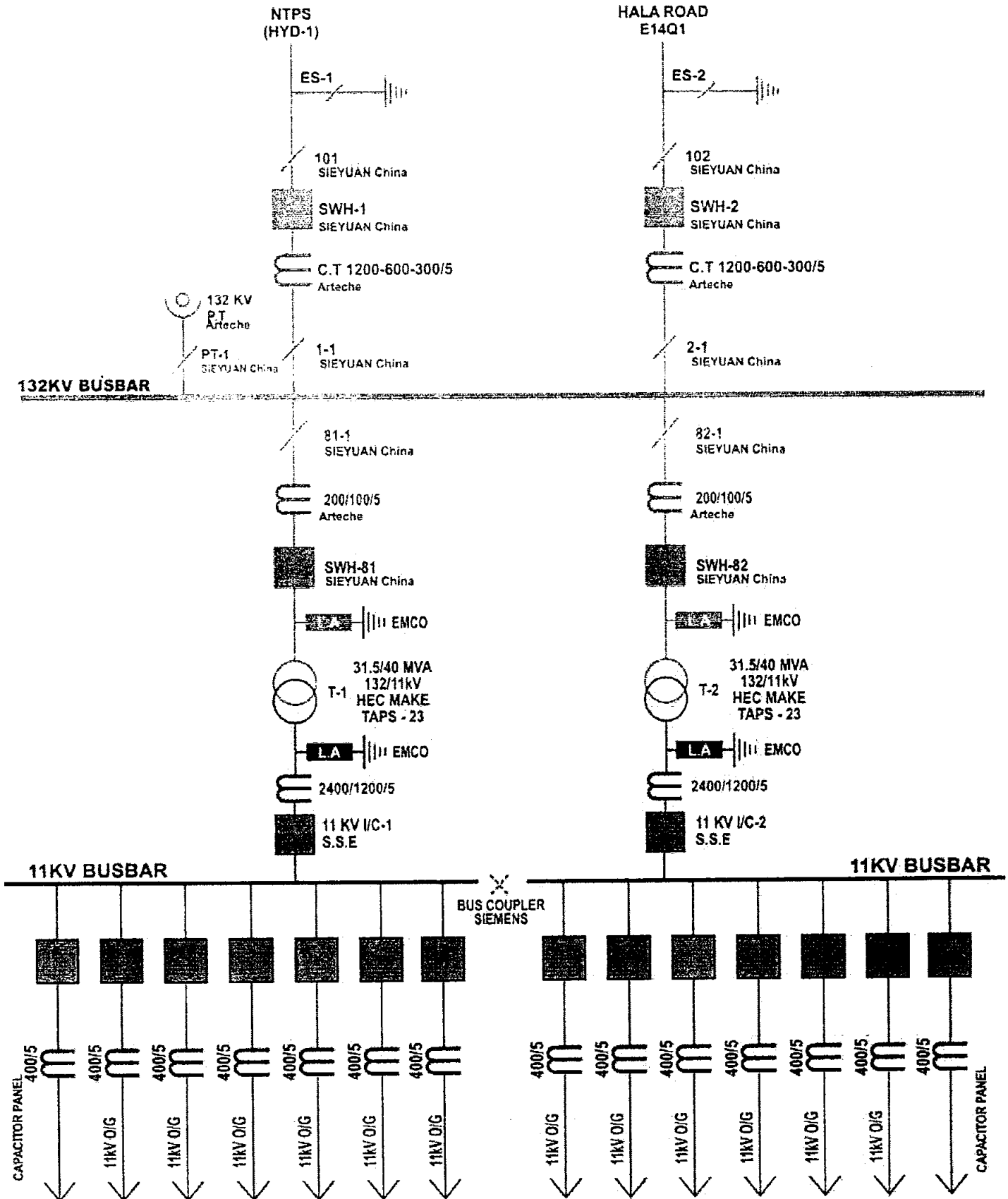
DRAWN BY

CHECKED &  
APPROVED BY

132KV GRID STATION  
TANDO JAM  
COMM: 30-06-2005

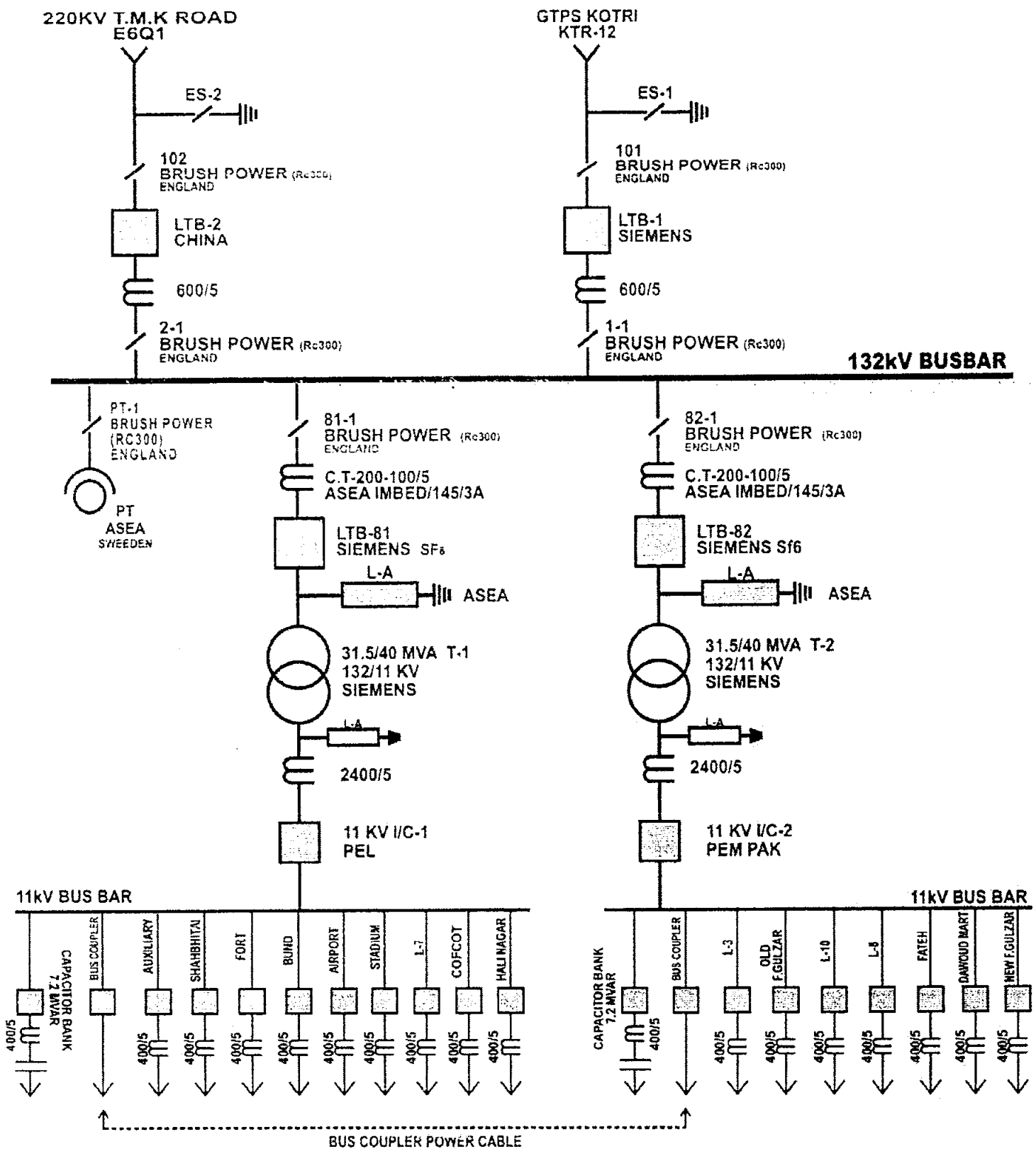


# 132KV SAKHI WAHAB HUSSAIN





# 132kV LATIFABAD



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

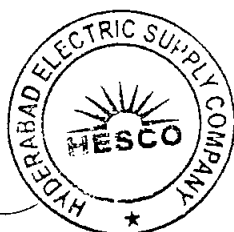
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

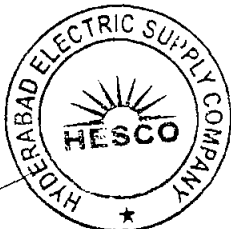
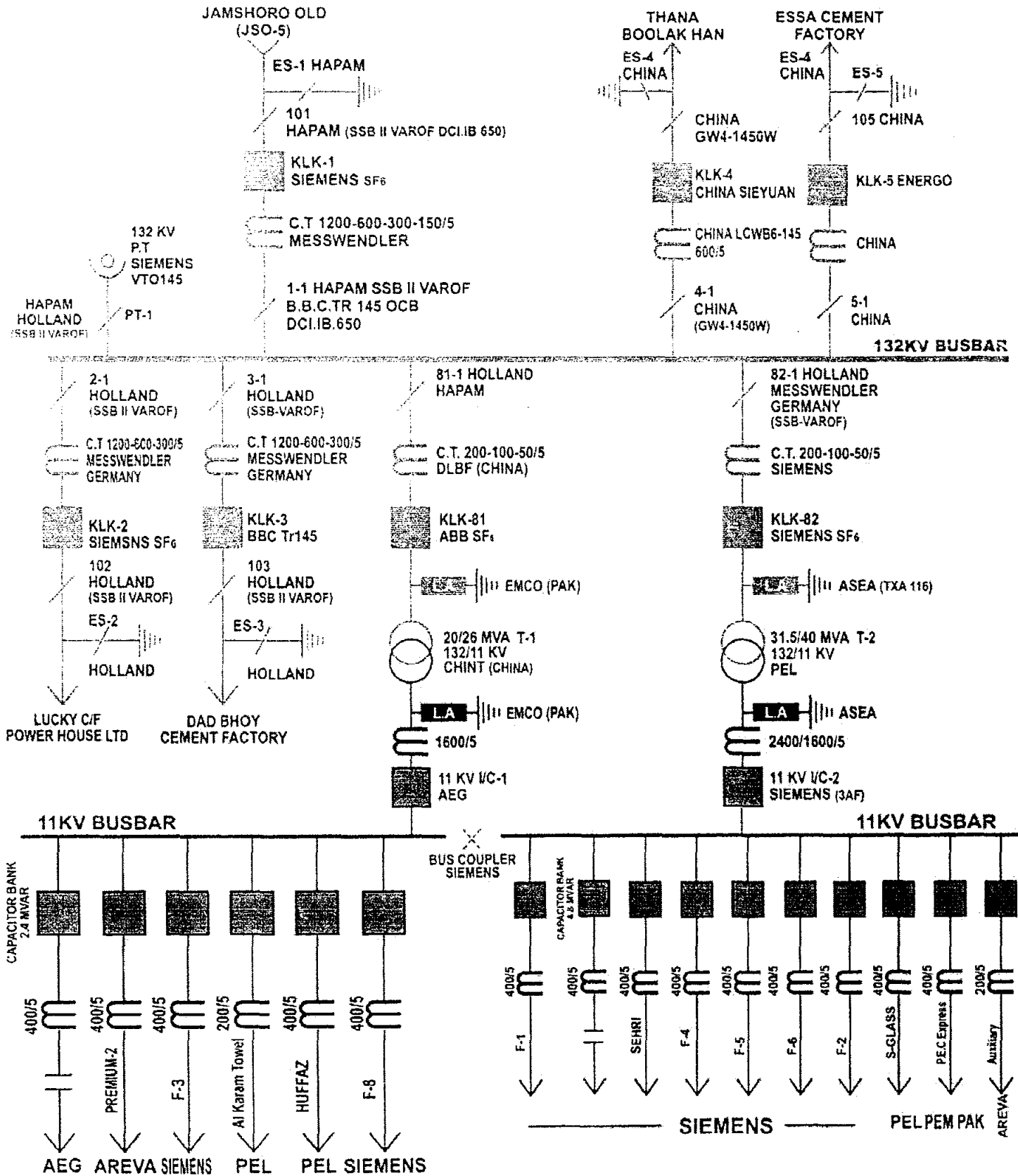
CHECKED &  
APPROVED BY

132 KV GRID STATION  
LATIFABAD

COMM: 19-5-1975



# 132 KV KALU KOHAR



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

CHECKED &  
APPROVED BY

132 KV GRID STATION  
KALU KOHAR  
COMM: 1986

COMM: 1986

# 132kV NOORIABAD

Jamshoro-1  
Master Green  
JSO-5

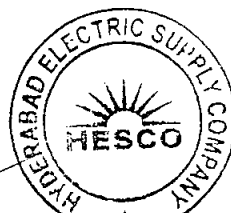
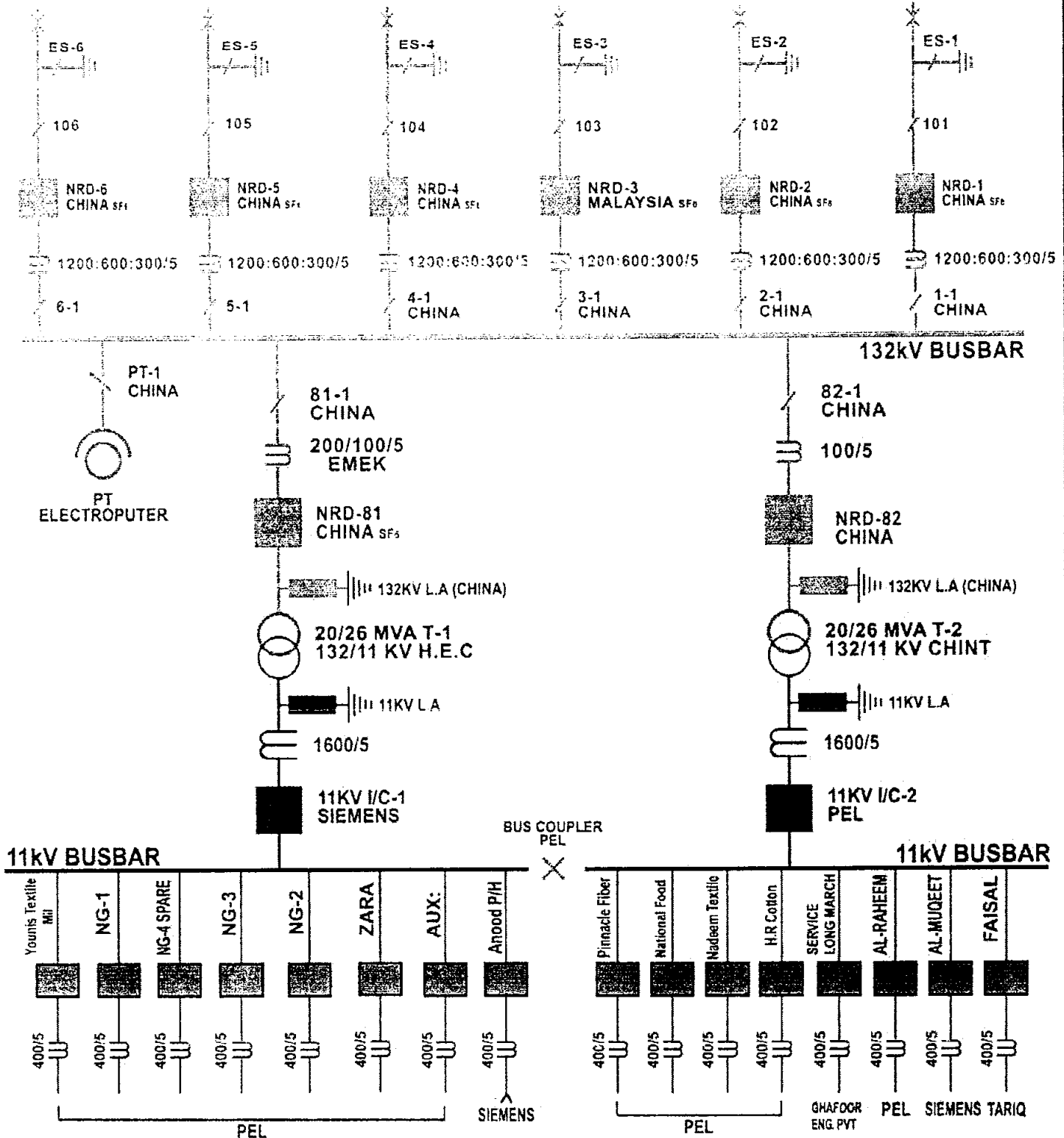
Jamshoro-2  
JSO-4

TGF CHINA  
WPP

FFCEL  
WPP  
JMP-4

KALU KOHAR  
KLK-1

P.A.F Bholari  
PAF-1



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

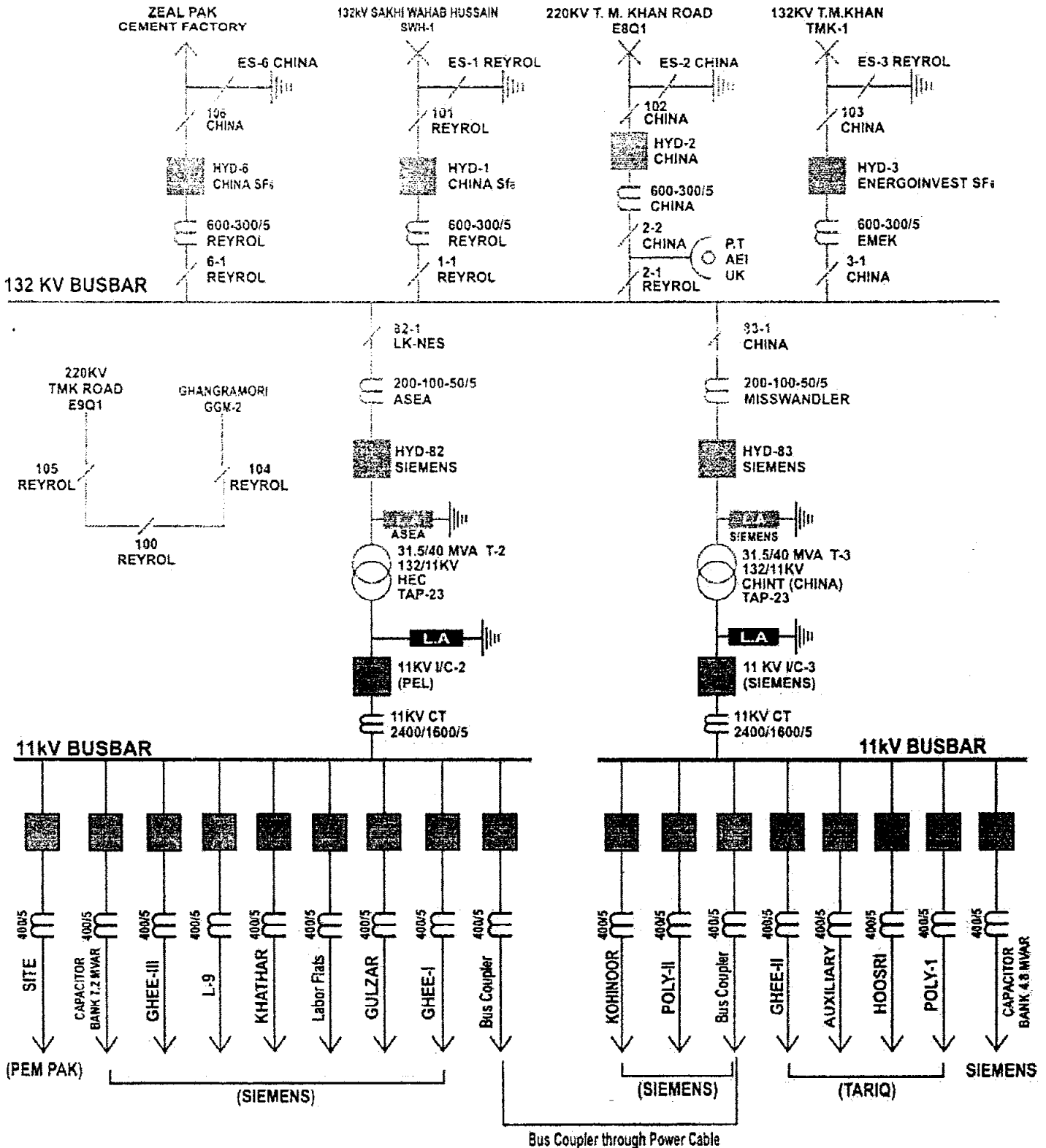
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

CHECKED &  
APPROVED BY

132 KV GRID STATION  
NOORIABAD  
COMM: 2001

# 132kV N.T.P.S



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

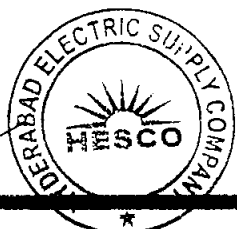
DRAWN BY

CHECKED &  
APPROVED BY

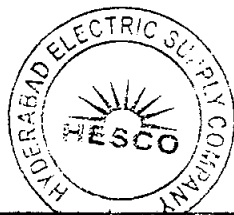
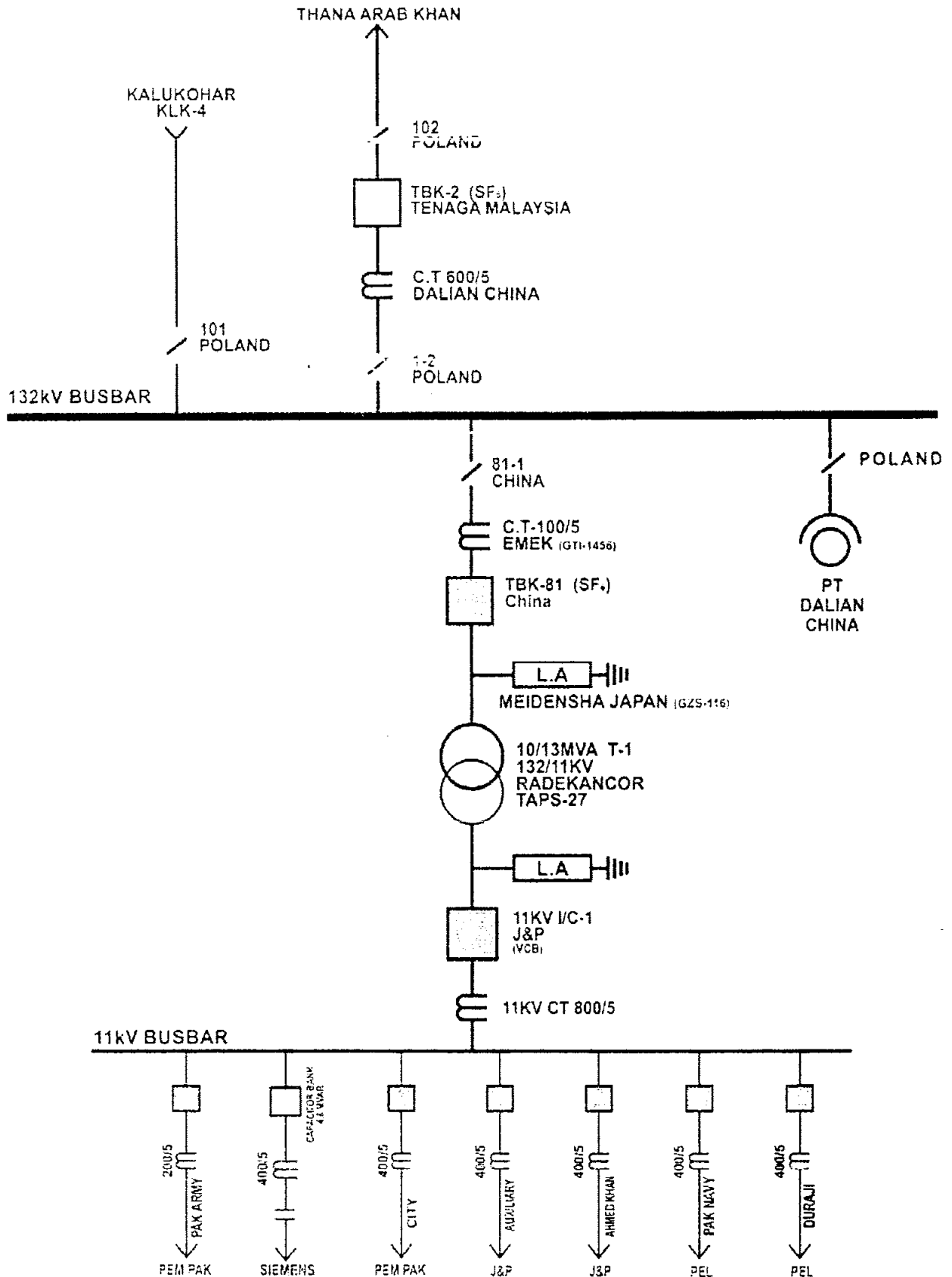
132 KV GRID STATION

N.T.P.S

COMM: 1986

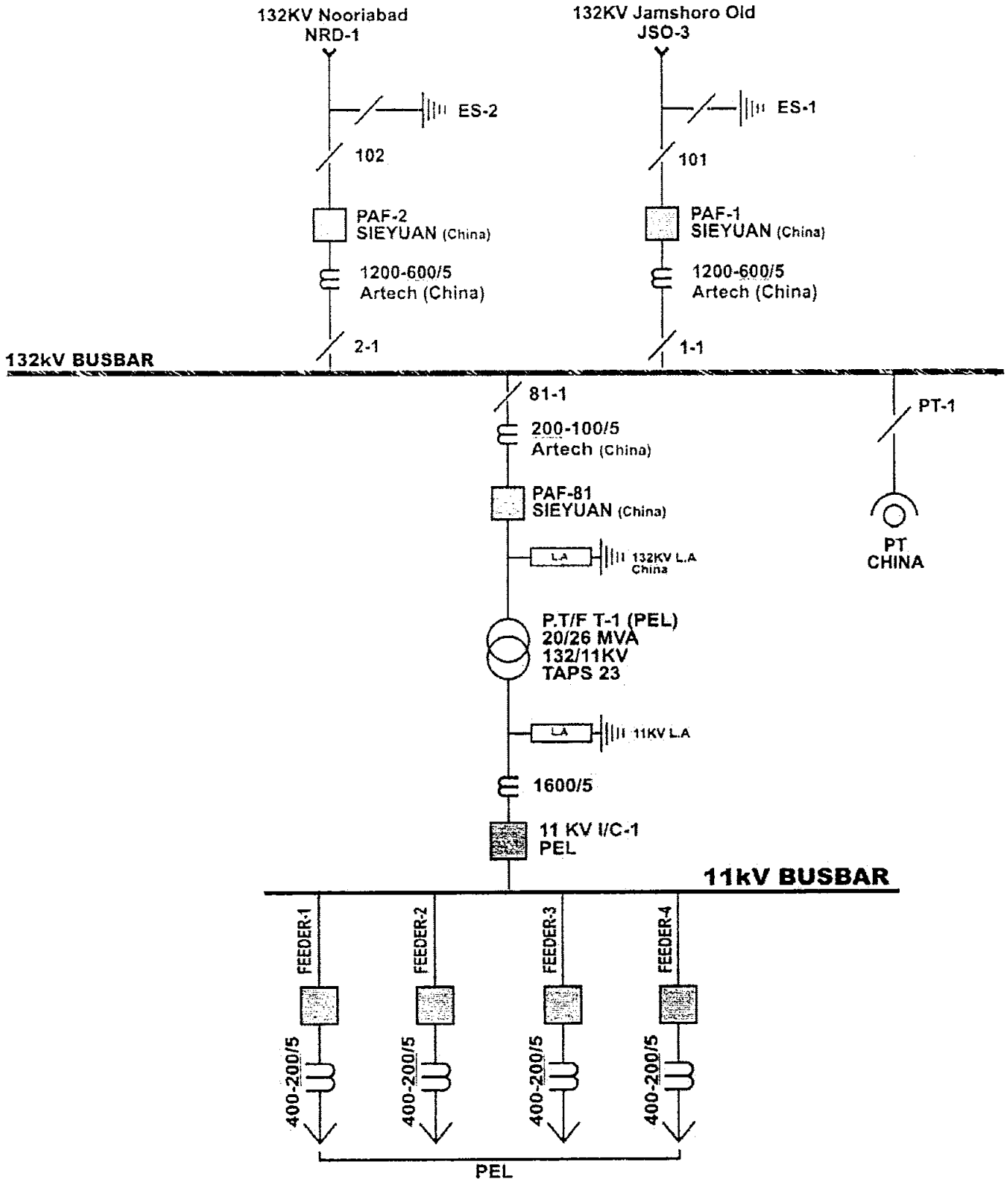


# 132kV T.B.KHAN



| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA) |                       |                                                          |
|-------------------------------------------------|-----------------------|----------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF GRID STATION         |                       |                                                          |
| DRAWN BY                                        | CHECKED & APPROVED BY | 132 KV GRID STATION<br>THANA BOULA<br>KHAN<br>COMM: 1995 |

# 132kV PAF BHOLARI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

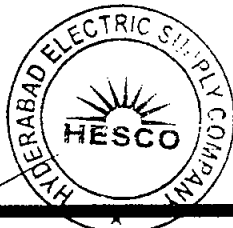
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

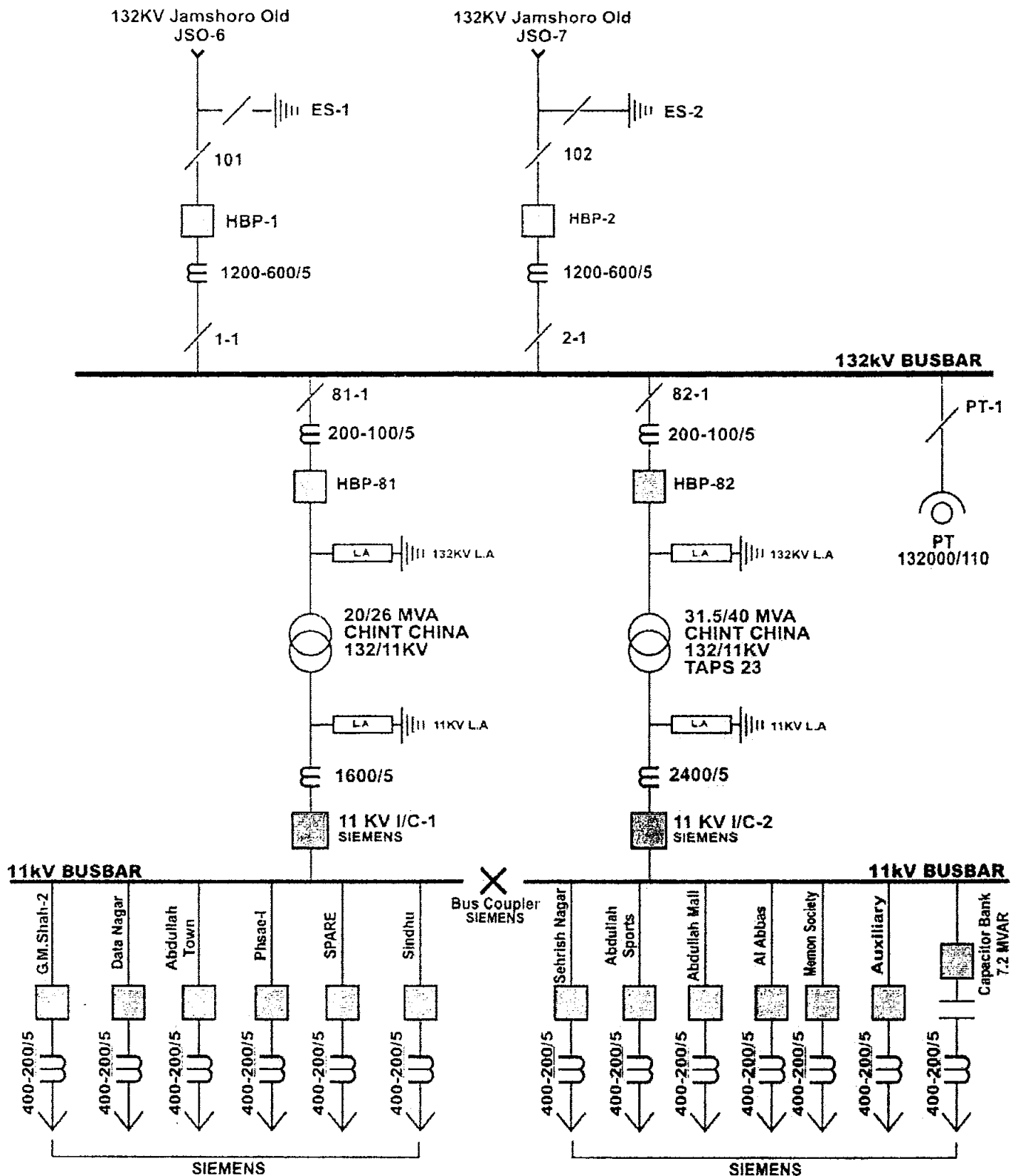
CHECKED &  
APPROVED BY

132 KV GRID STATION

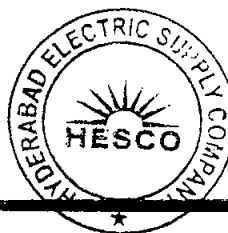
PAF BHOLARI  
COMM: 10.07.2017



## 132kV HYD BY PASS



|                                                 |                       |                                                        |
|-------------------------------------------------|-----------------------|--------------------------------------------------------|
| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA) |                       |                                                        |
| SINGLE LINE KEY DIAGRAM OF GRID STATION         |                       |                                                        |
| DRAWN BY                                        | CHECKED & APPROVED BY | 132 KV GRID STATION<br>HYD BY PASS<br>COMM: 19.02.2018 |



NEW JAMSHORO  
E7Q1 (JMS-1)

HALA ROAD  
E8Q1 (HRD-1)

ES-1 ISOLATOR CHINA HAPAM

ES-2 HAPAM

101  
CHINA

102  
CHINA

QSD-1  
TNAGA SF: (SFE-13)  
15 05 2010

QSD-2  
TANAGA SF<sub>6</sub>  
28.10.2010

C.T 1200-600/5 EMEK

1200-600/5 EMEK

1-1  
CHINA

2-1  
CHINA

**132KV BUS BAR**

**132KV BUS BAR**

PT-2  
PT  
83-1  
CHINA  
132KV C.T  
200/5 CHINA

82-1  
CHINA  
132KV C.T  
200/5 ENEC

81-1  
CHINA  
132KV C.T  
200/S EMEK

84-1 CHINA  
132KV C.T  
200/5 CHINA  
QSD-84  
SIEMENS DB 2011  
PT-1  
PT  
EWEK

ABB  
L-A  
CHINA  
20/26 MVA T-3  
132/11 KV  
IRAN

SIEMENS SF6 20/21 2012  
L-A  
MEIDENSHA  
20/26 MVA T-2  
132/11KV  
ELprom

SIEMENS SF<sub>6</sub> 1700 1200V

L-A

MEIDENSHA

31.5/40 MVA T-1  
132/11KV  
SIEMENS

SIEMENS 6300

L-A

CHINA

20/26 MVA T-4

132/11 KV

PEL



11KV C.T 1600/S  
SIEMENS

11KV C.T 2400/5  
FICO

11KV C.T 1600:5  
FICO


**11KV UC-3  
SIEMENS**

11 KV WC-2  
SIEMENS

11KV UC-1  
REL


**11KV VC-A  
SIEMENS**

11 KV BUSBAR

11 KV BUSBAR

11 KV BUSBAR

### 11 KV BUSBAR

BUS  
COUPLER  
SIEMENS  
- X T

- X -  
BUS  
COUPLER  
251

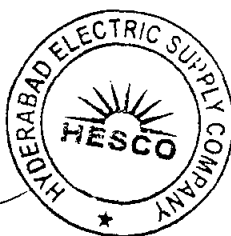
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

### SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

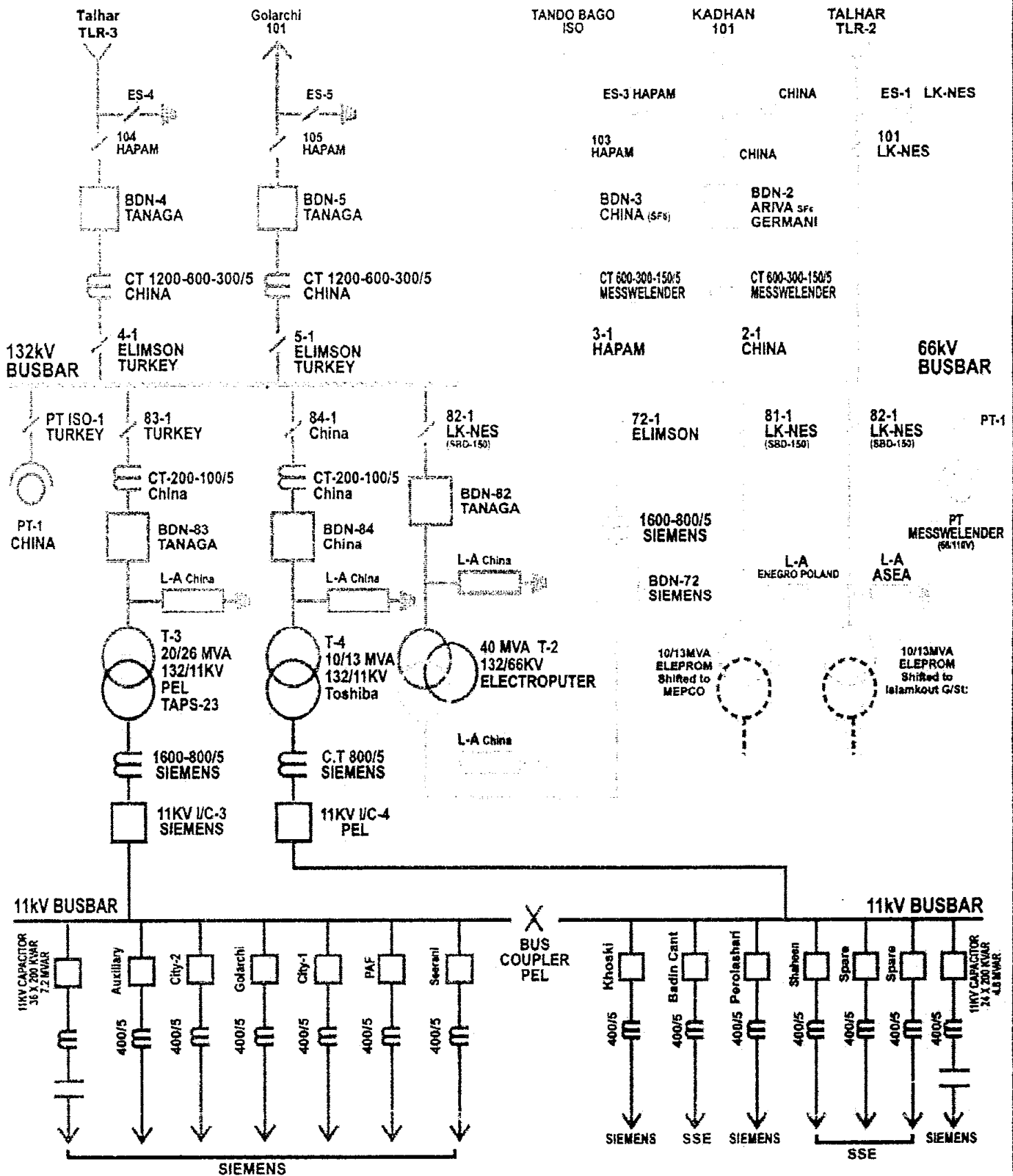
CHECKED &  
APPROVED BY

132 KV GRID STATION  
QASIMABAD  
COMM: 17-1-1992





# 132 & 66kV BADIN



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

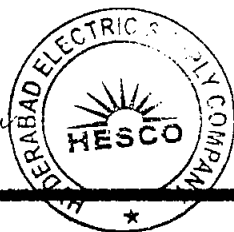
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

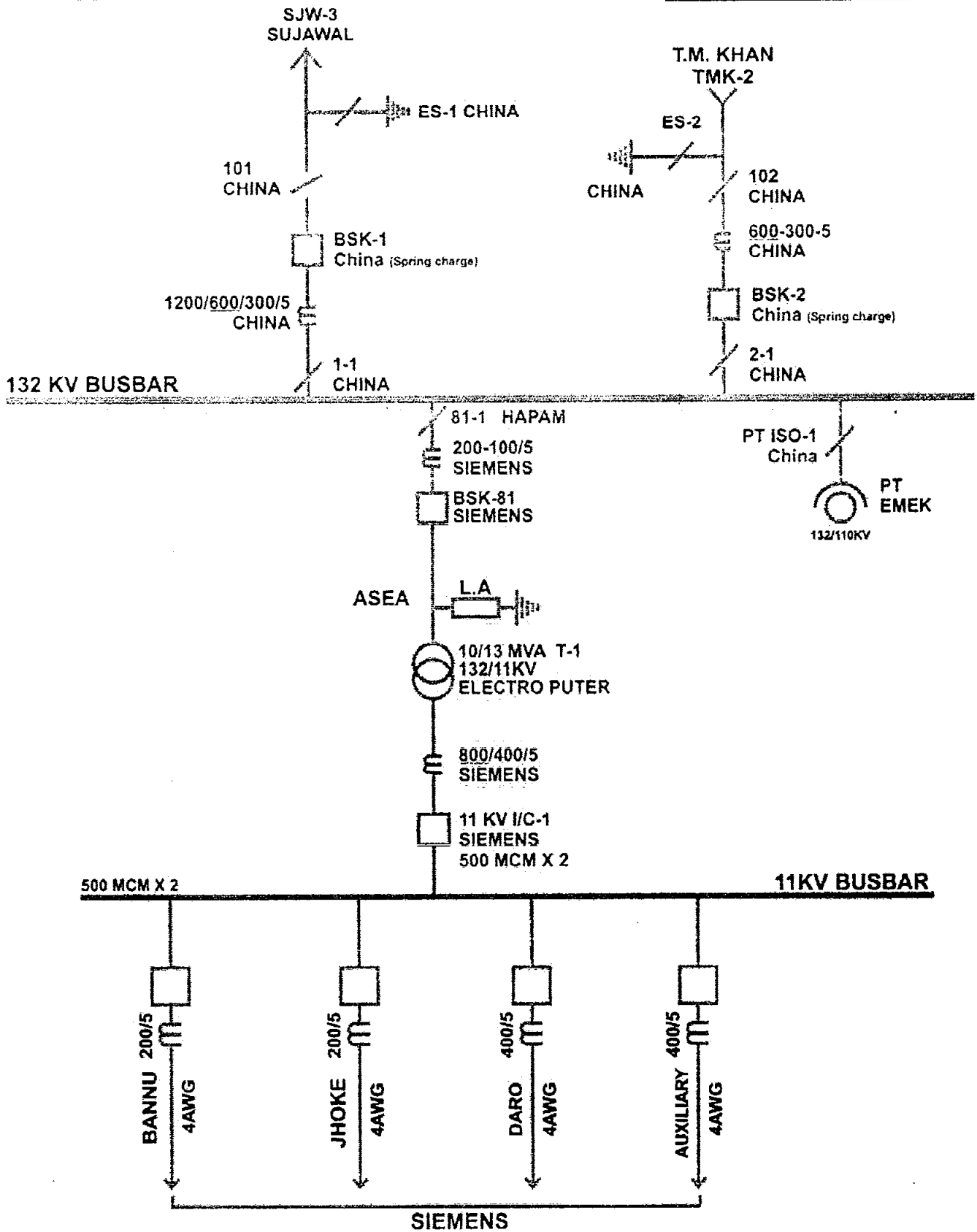
CHECKED &  
APPROVED BY

132 & 66 KV GRID STATION  
BADIN

COMM: (66KV) 11-02-1980  
COMM: (132KV) 31-01-2011

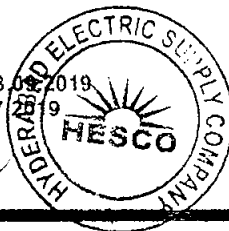


# 132kV B.S.KARIM



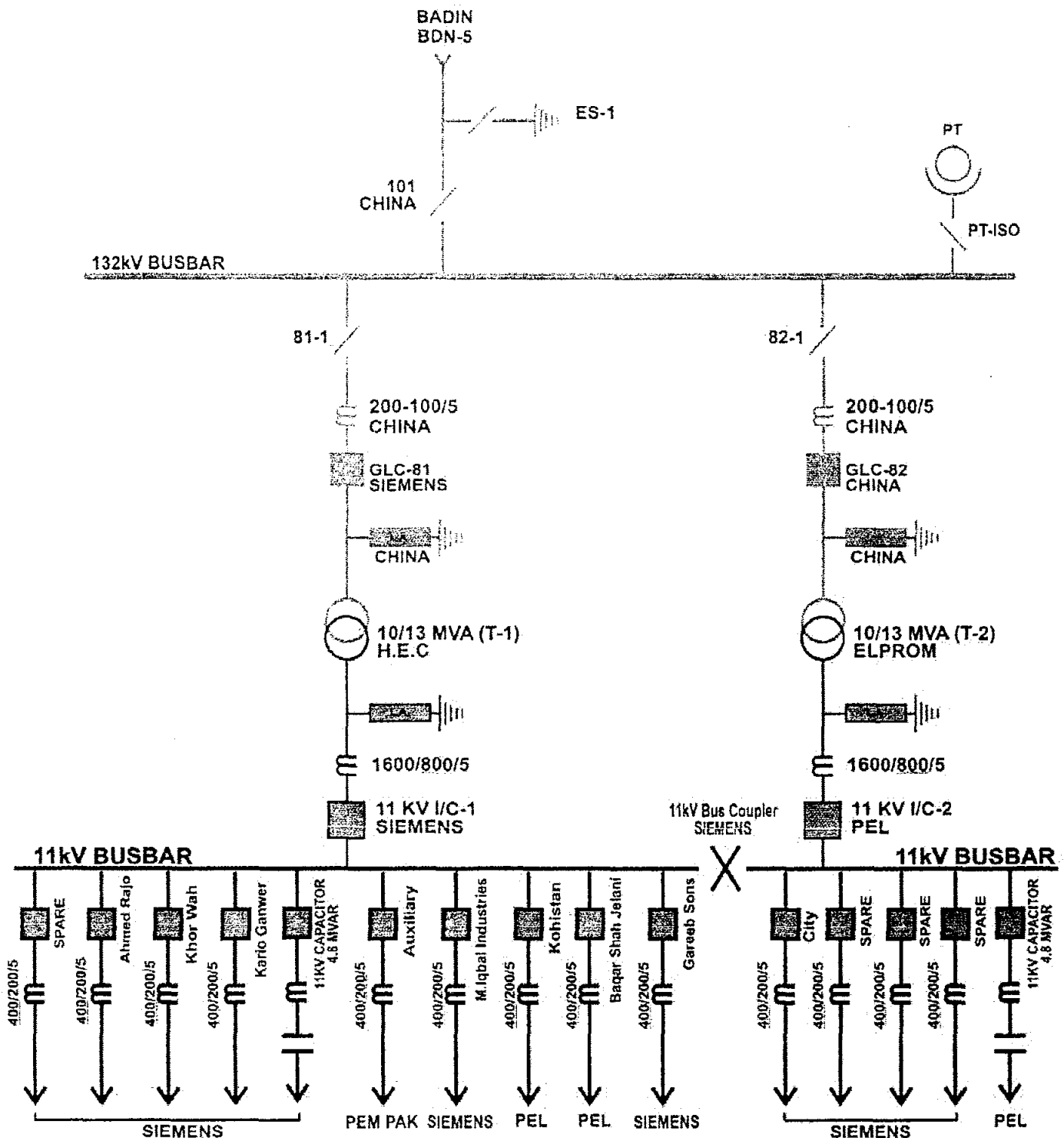
Battery Bank  
Rectifier

Volta Make 28.04.2019  
AYK 07.28.19



| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO WARDHA |                       |                                                                           |
|------------------------------------------------|-----------------------|---------------------------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF GRID STATION        |                       |                                                                           |
| DRAWN BY                                       | CHECKED & APPROVED BY | 132KV GRID STATION<br>B.S.KARIM<br>28.04.2019<br>29.08.1984<br>10.07.1986 |

# 132kV GOLARCHI



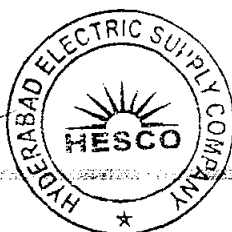
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

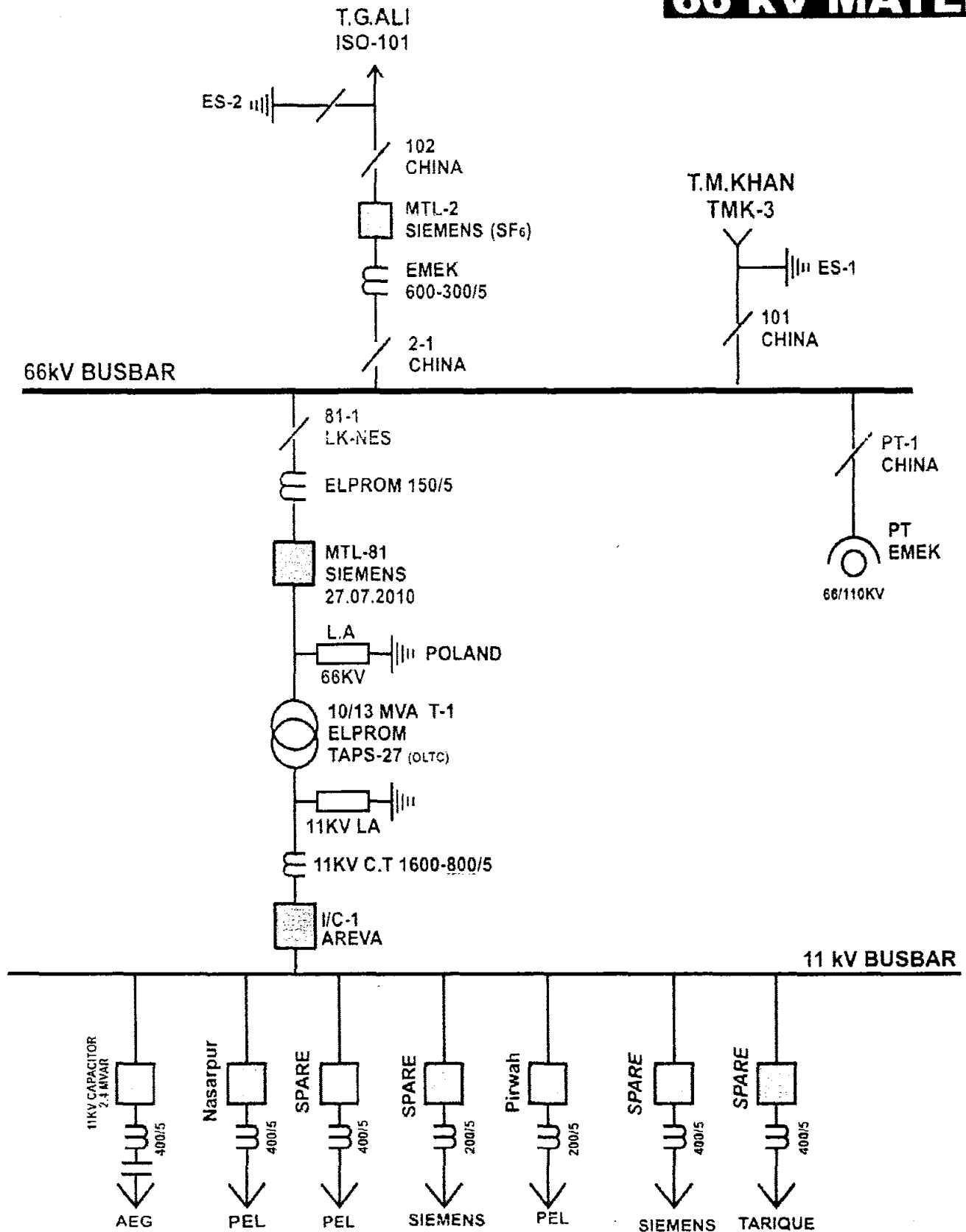
DRAWN BY

CHECKED &  
APPROVED BY

132kV Grid Station  
Golarchi  
Comm: 01-2011



# 66 kV MATLI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

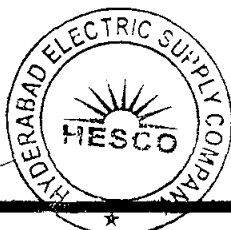
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

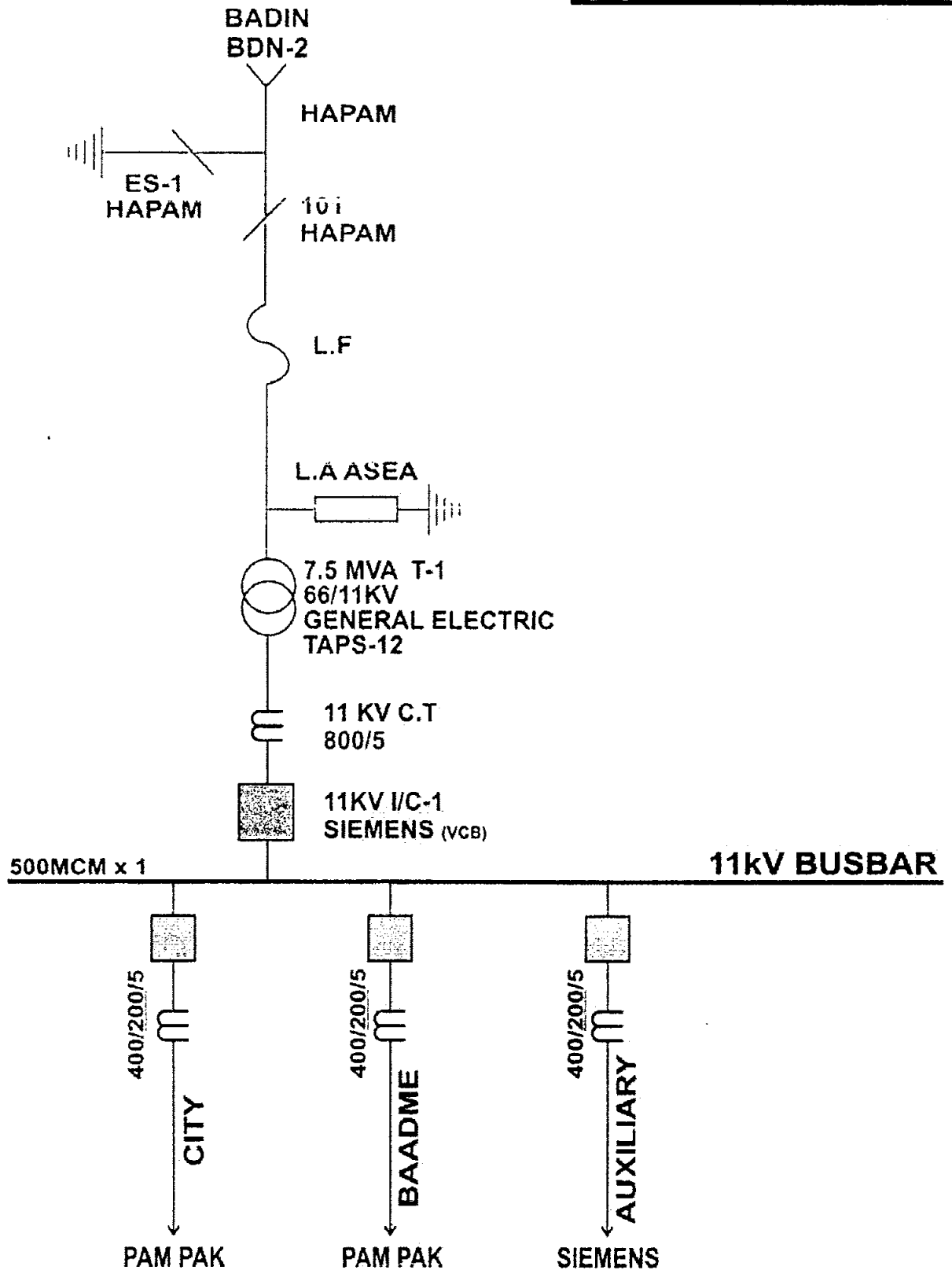
CHECKED &  
APPROVED BY

66 KV GRID STATION  
MATLI

COMM: 02-08-1982



# 66 KV KADHAN



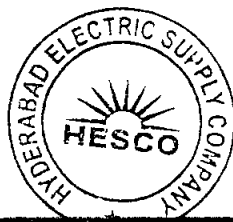
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

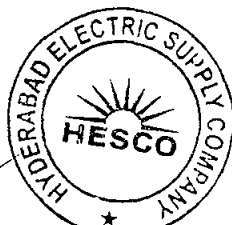
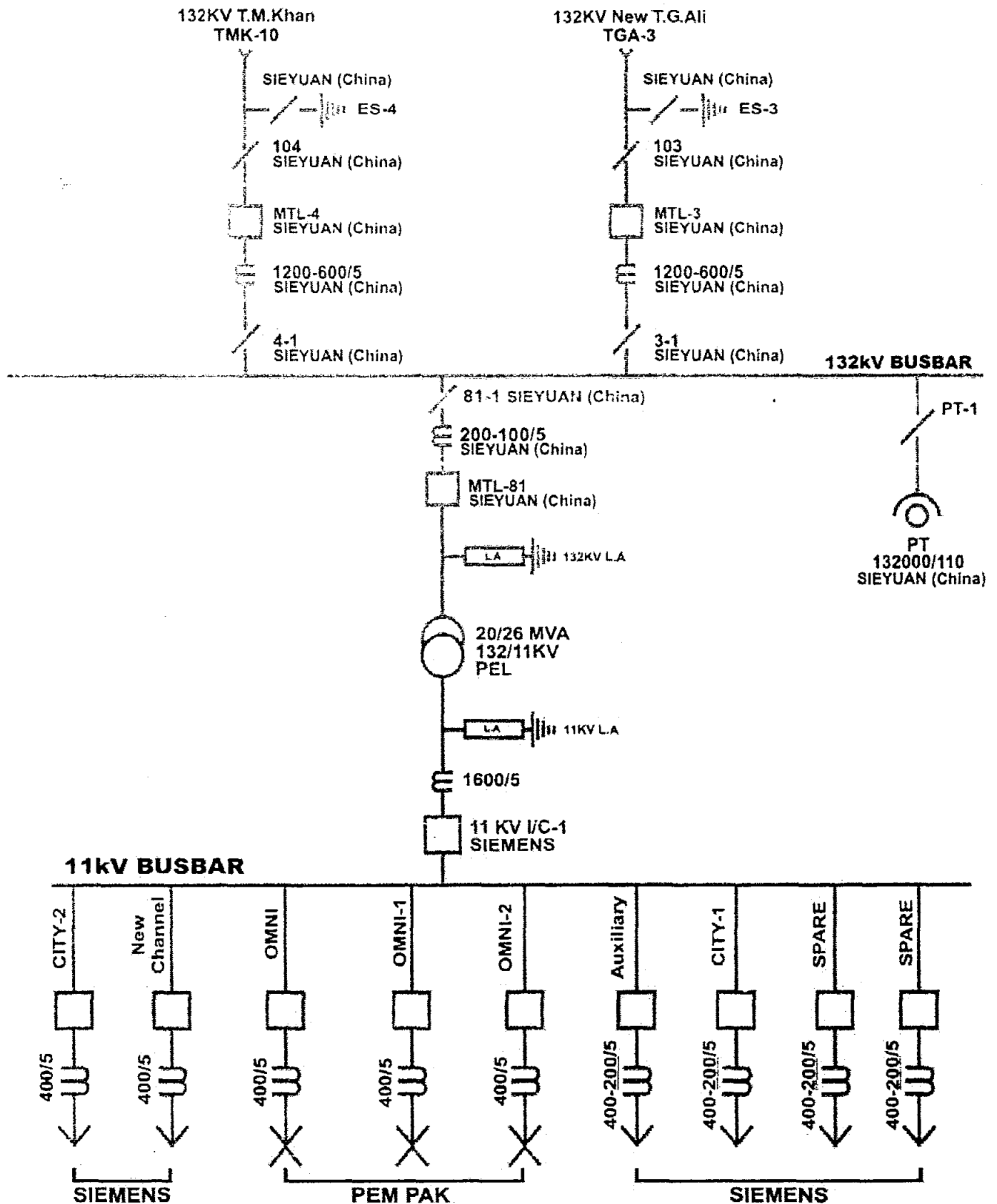
DRAWN BY

CHECKED &  
APPROVED BY

66 KV GRID STATION  
KADHAN  
COMM: 1994



# 132kV MATLI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

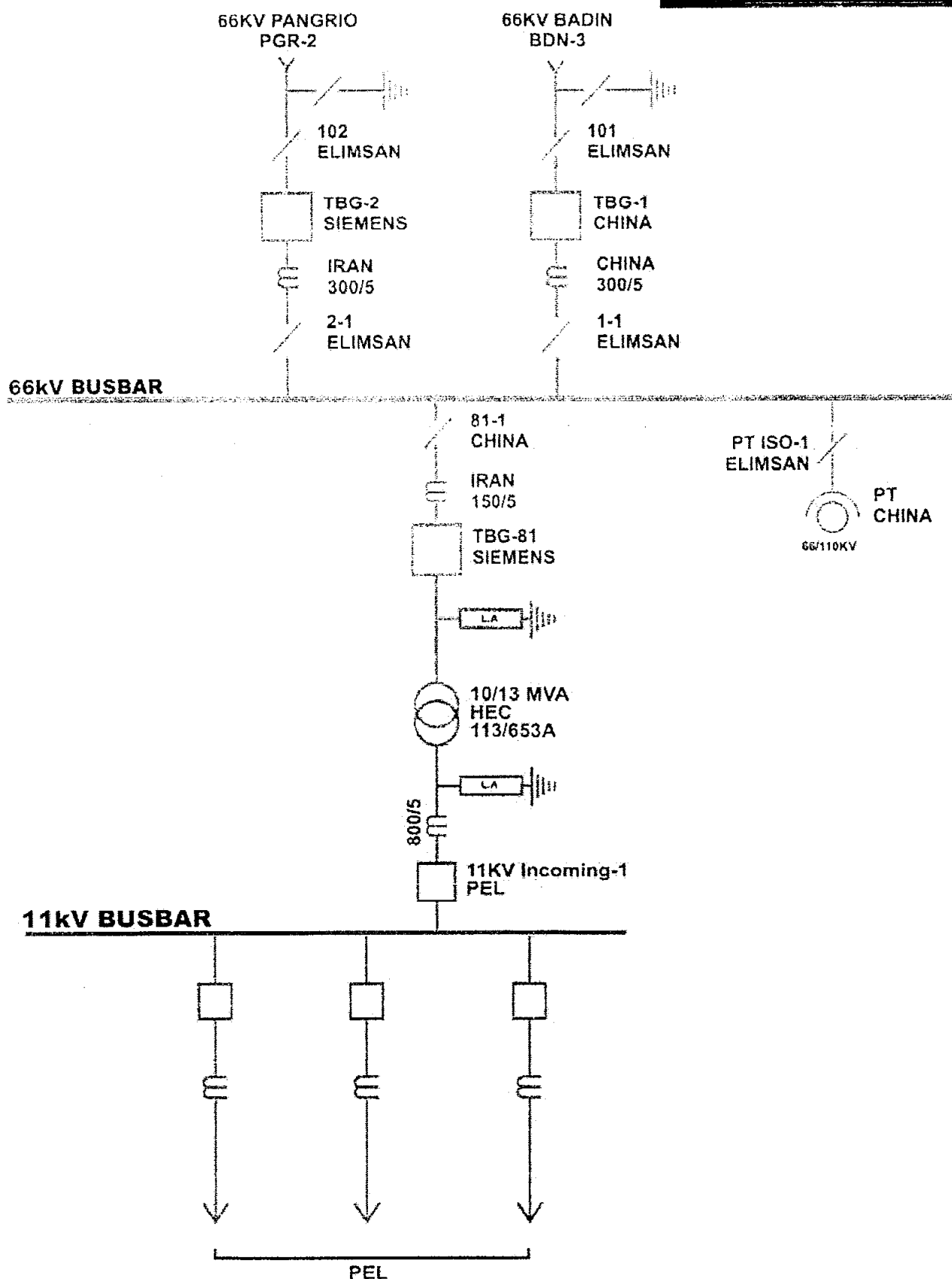
CHECKED &  
APPROVED BY

132 KV GRID STATION

MATLI

COMM: 09.08.2017

# 66kV TANDO BAGO



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

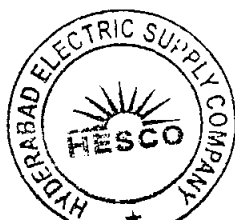
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

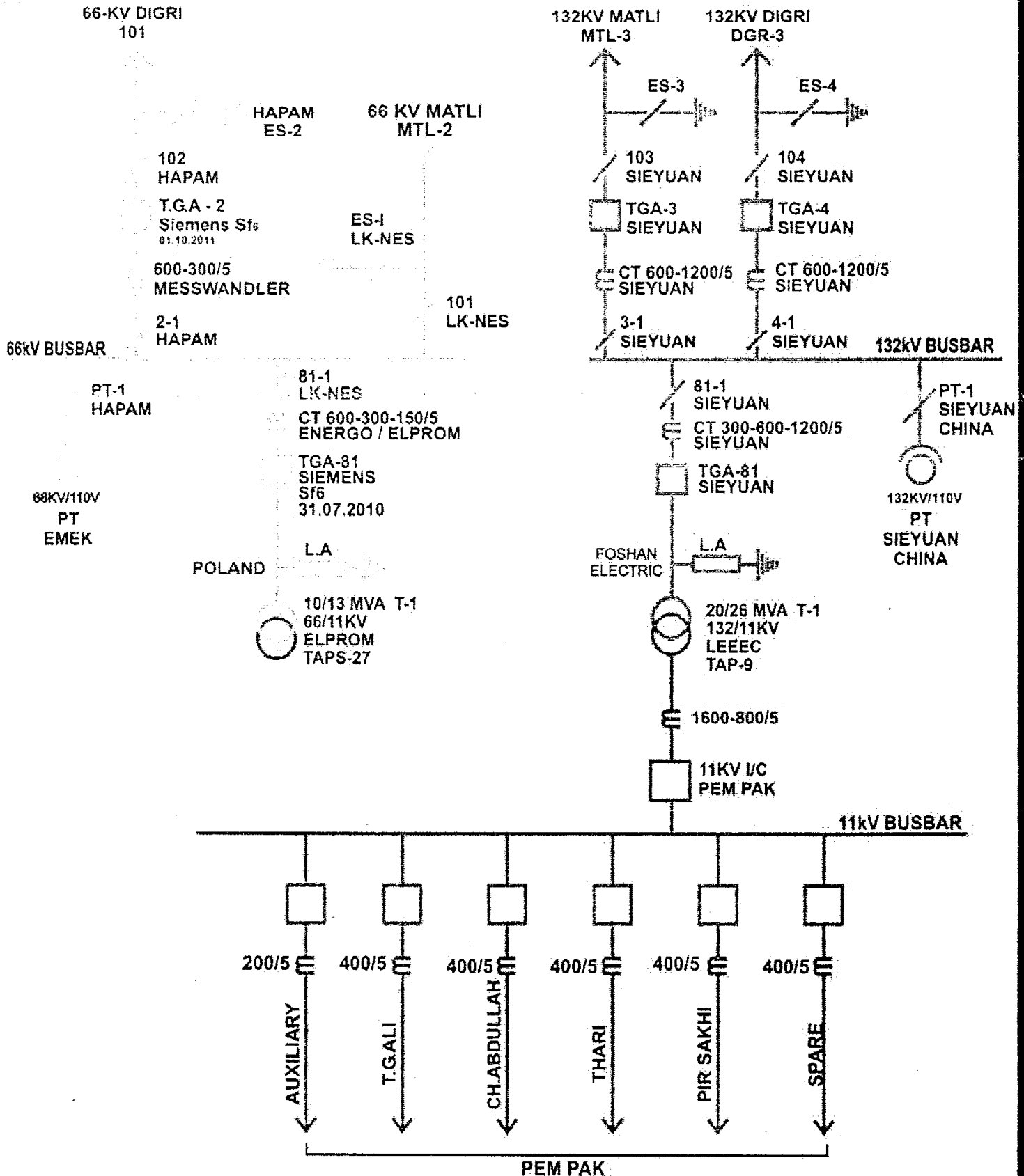
CHECKED &  
APPROVED BY

132 KV GRID STATION  
TANDO BAGO

COMM: .09.2012



# 132KV TANDO GHULAM ALI



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

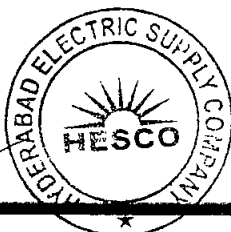
DRAWN BY

CHECKED &  
APPROVED BY

TANDO GHULAM ALI

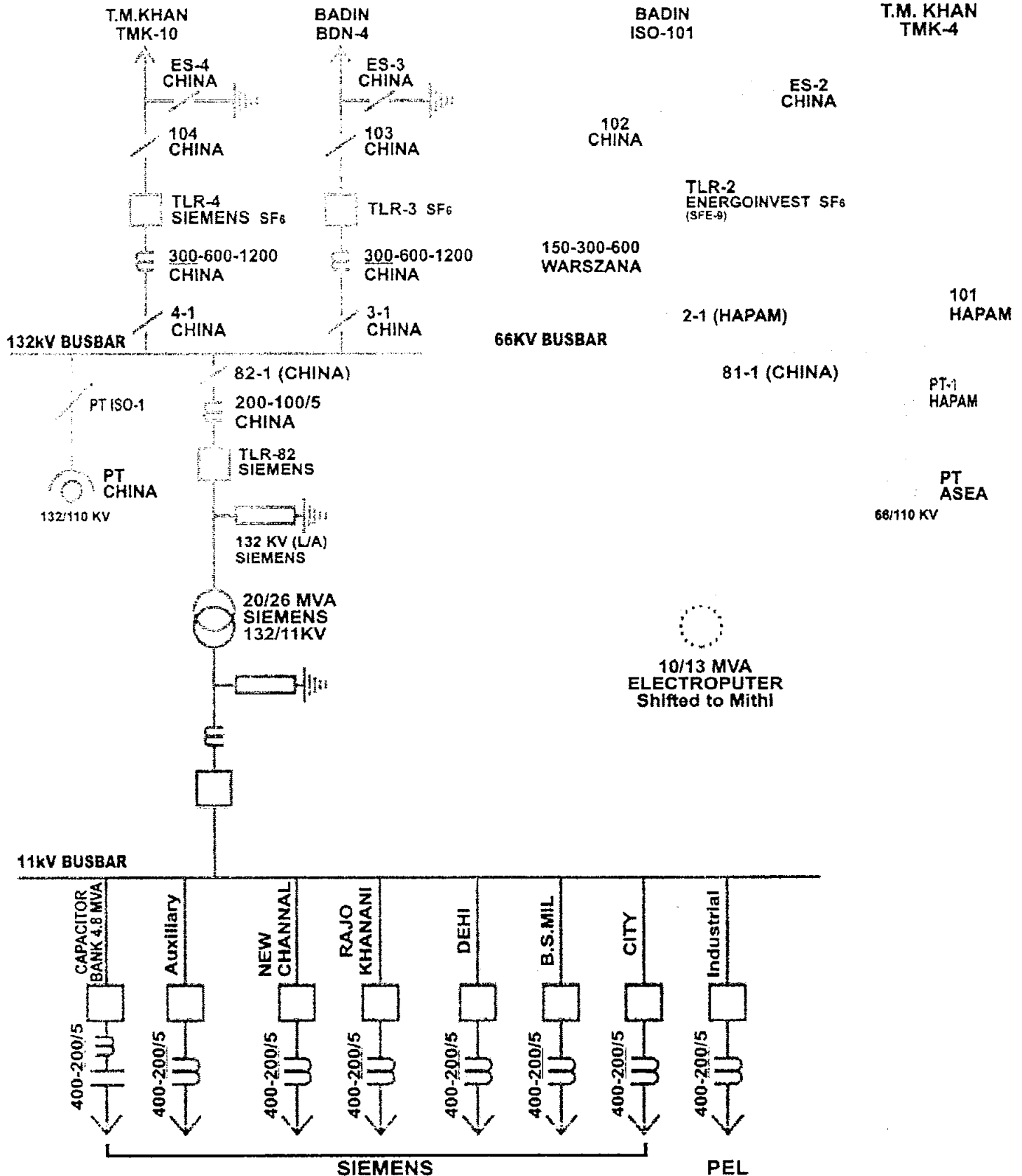
66KV Comm: 1980

132KV Comm: June 2017





# 132kV TALHAR



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

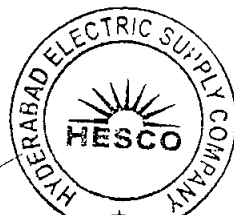
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

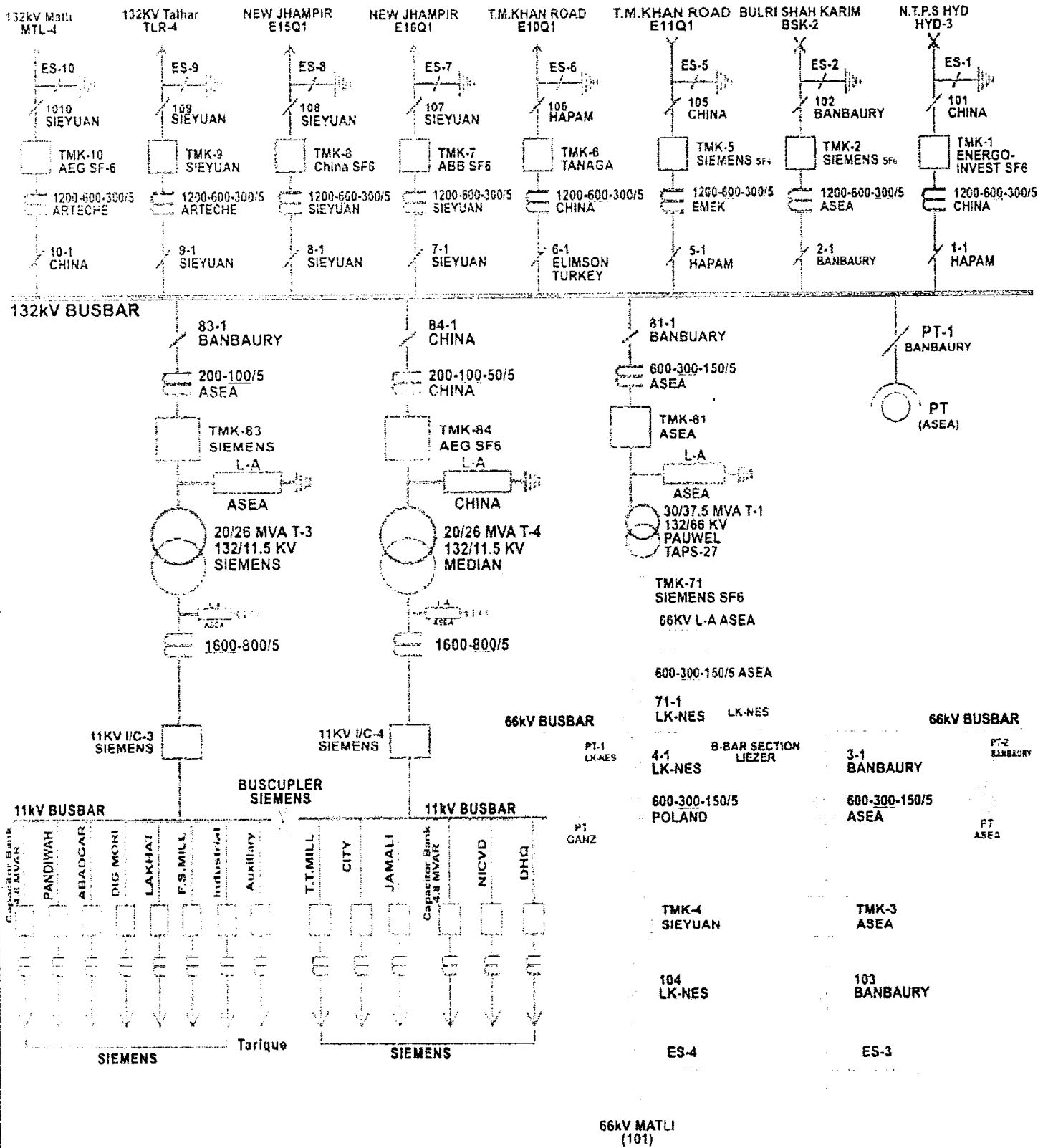
CHECKED &  
APPROVED BY

132kV GRID STATION  
TALHAR

66kV COMM:12.01.1995  
132kV COMM:24.07.2014



# 132kV T.M.KHAN



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

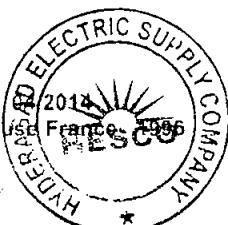
CHECKED & APPROVED BY

132KV GRID STATION  
T.M.KHAN

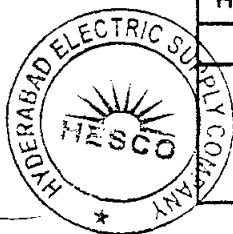
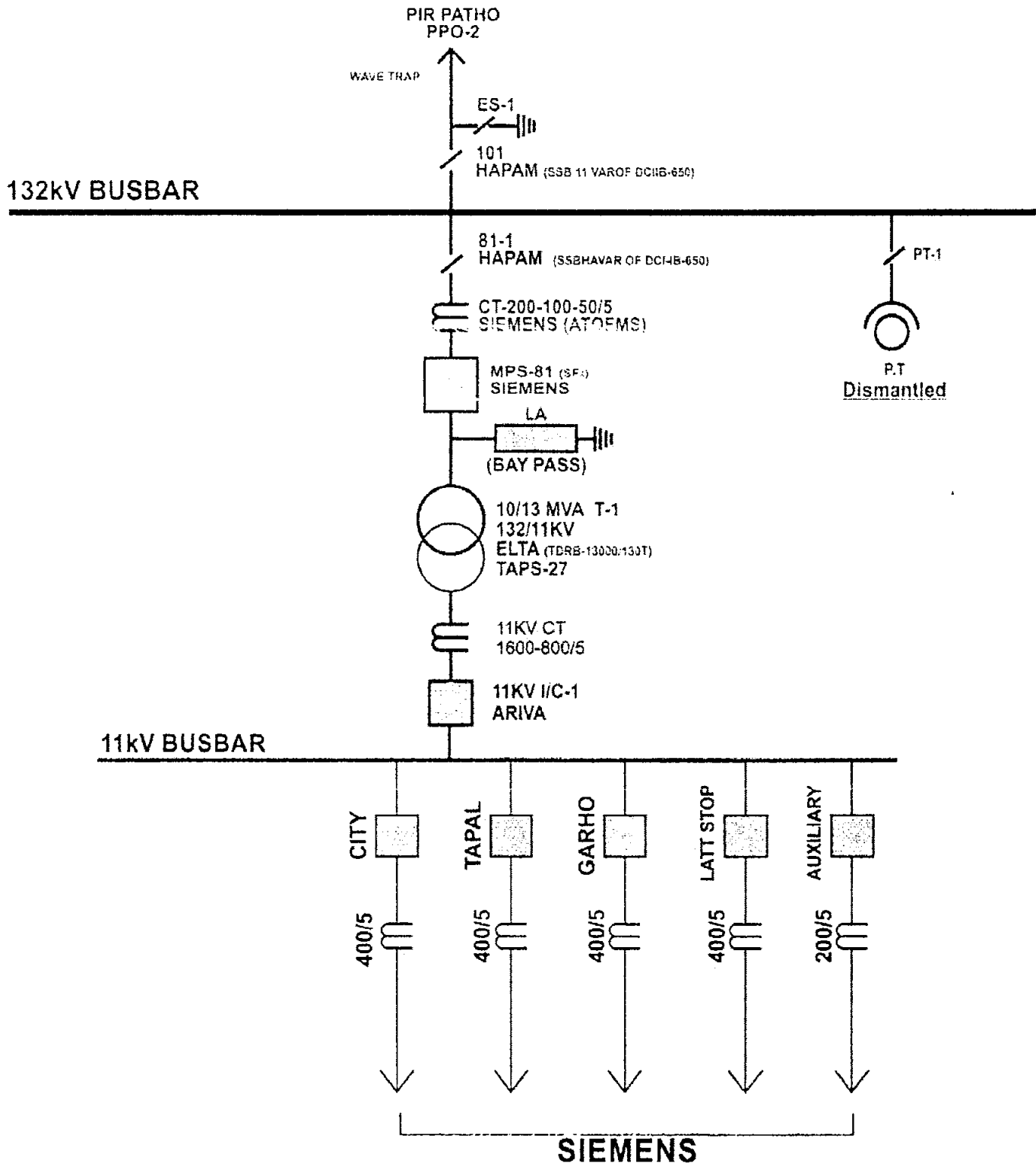
COMM: 30-04-1976

Battery Bank  
Rectifier

Exide Make  
Westing House

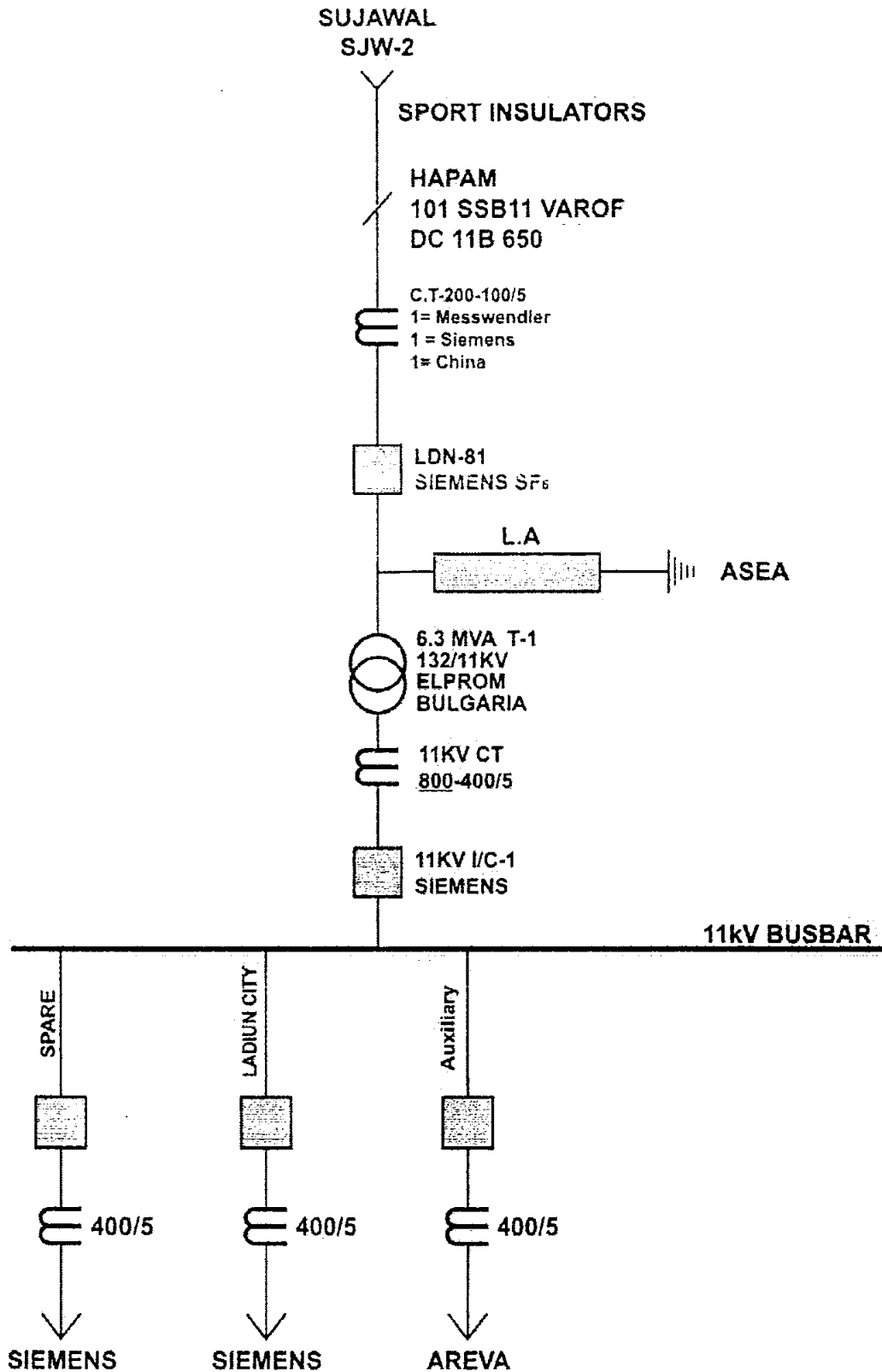


# 132kV MIRPURSAKRO



| HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA) |                       |                                  |
|-------------------------------------------------|-----------------------|----------------------------------|
| SINGLE LINE KEY DIAGRAM OF GRID STATION         |                       |                                  |
| DRAWN BY                                        | CHECKED & APPROVED BY | 132 KV GRID STATION<br>M.P.SAKRO |
|                                                 |                       | COMM: 1989                       |

# 132kV LADIUN



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

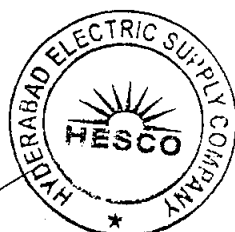
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

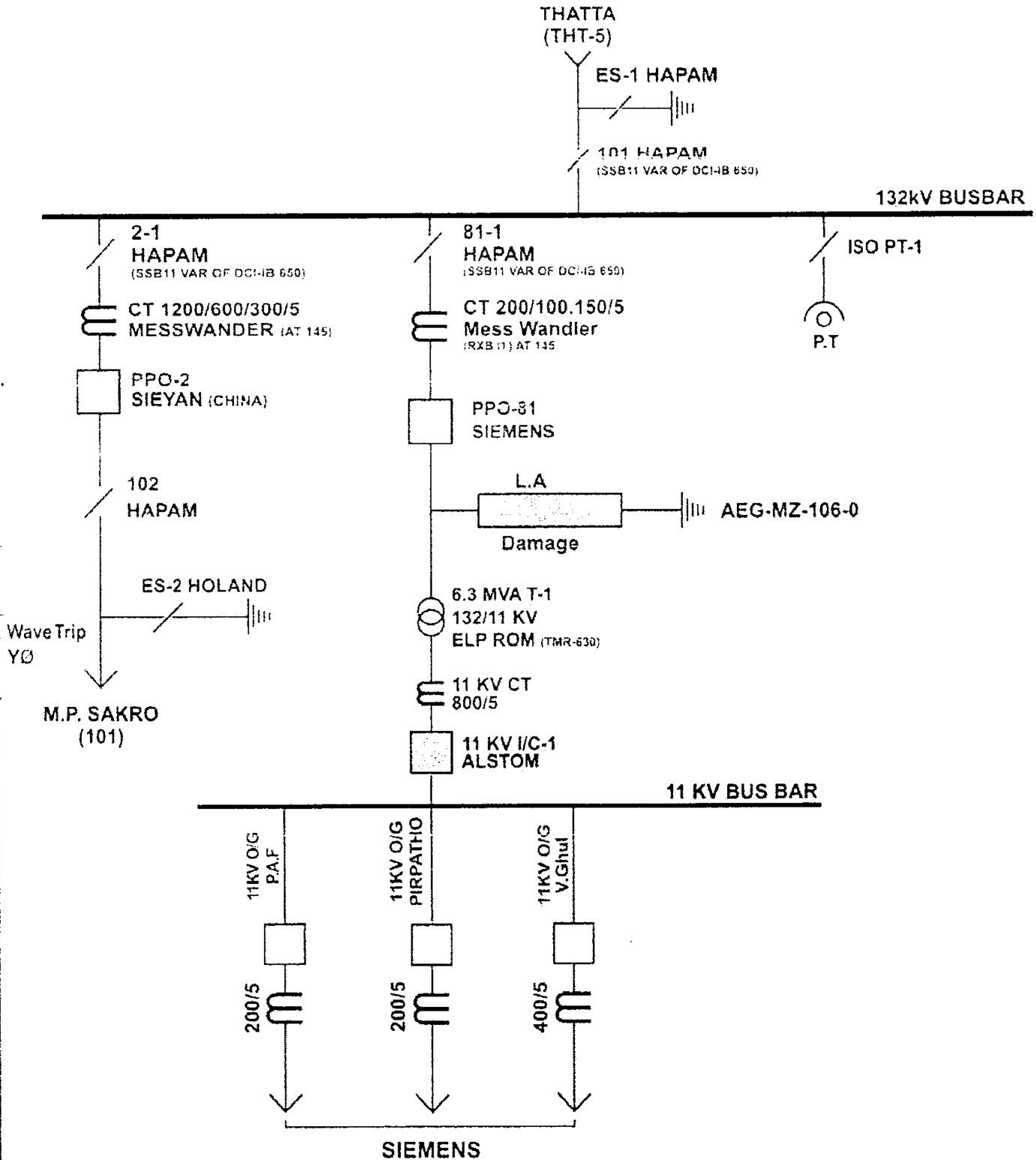
CHECKED &  
APPROVED BY

132 KV GRID STATION  
LADIUN

COMM: 1978



# 132kV PIR PATHO



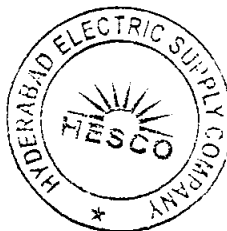
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

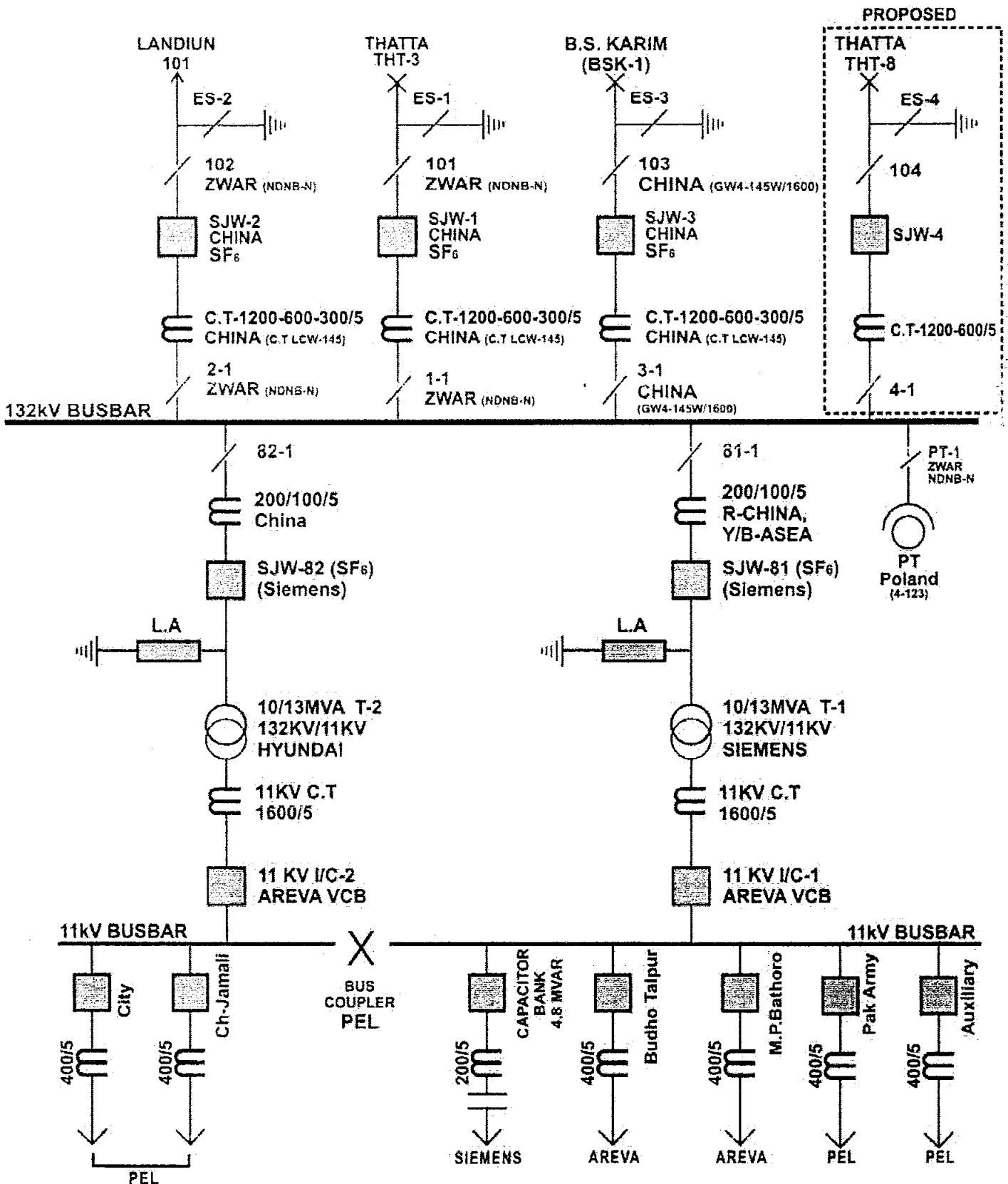
DRAWN BY

CHECKED &  
APPROVED BY

132 KV GRID STATION  
PIRPATHO  
COMM: 1978



# 132 KV SUJAWAL



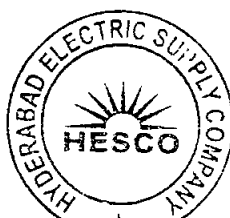
HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

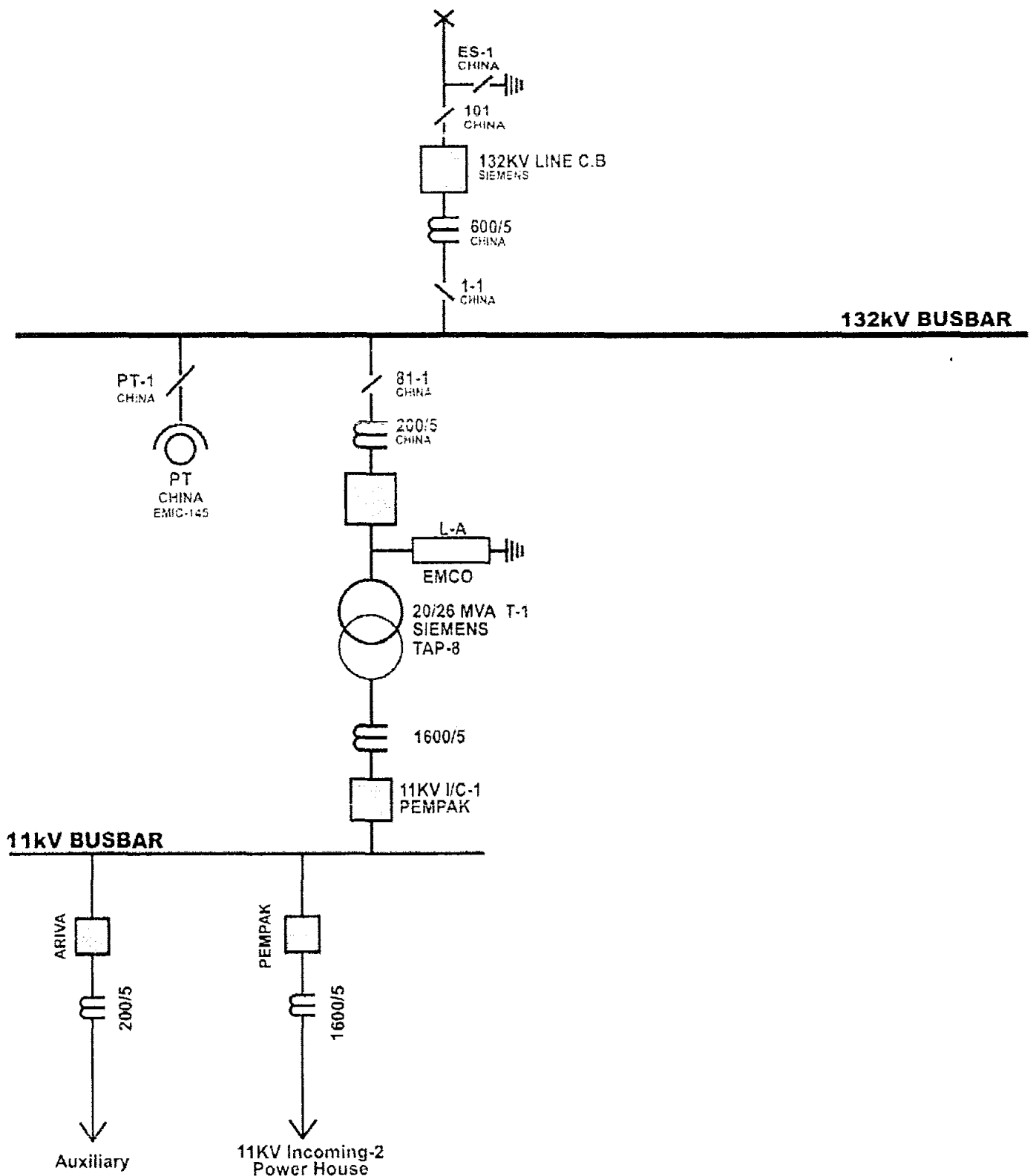
CHECKED &  
APPROVED BY

132 KV GRID STATION  
SUJAWAL  
COMM: 1978



# 132kV T.P.P.L

132KV G/ST. THATTA  
THT-4



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

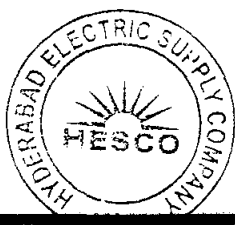
SINGLE LINE KEY DIAGRAM OF GRID STATION

DRAWN BY

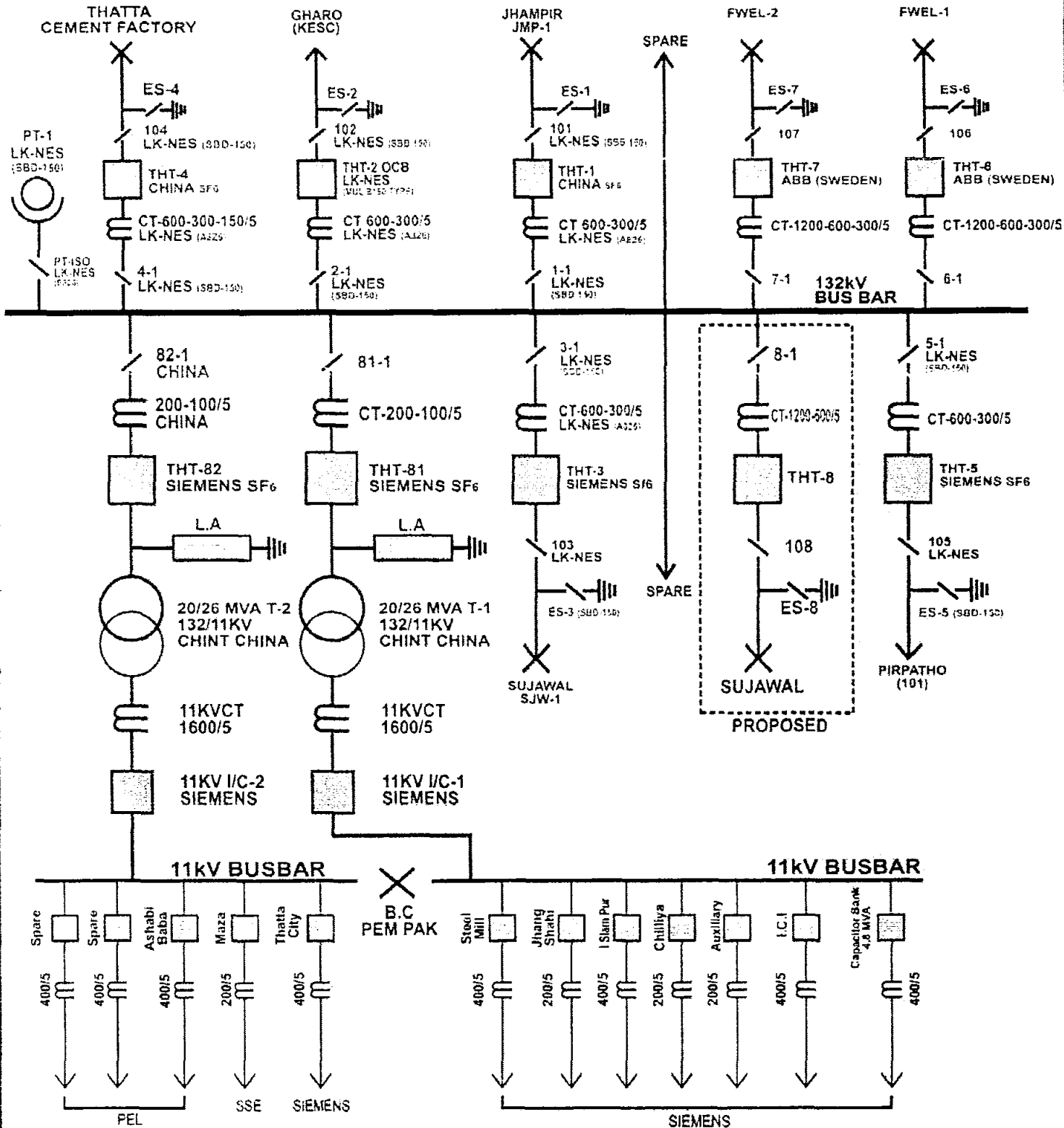
CHECKED &  
APPROVED BY

132 KV GRID STATION  
T.P.P.L

COMM: 13.11.2012



# 132kV THATTA



HYDERABAD ELECTRIC SUPPLY COMPANY HESCO (WAPDA)

### SINGLE LINE KEY DIAGRAM OF GRID STATION

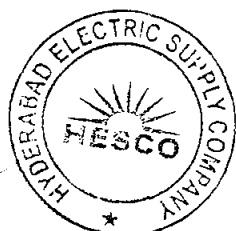
DRAWN BY

CHECKED &  
APPROVED BY

132 KV GRID STATION

THATTA

COMM:



- 244



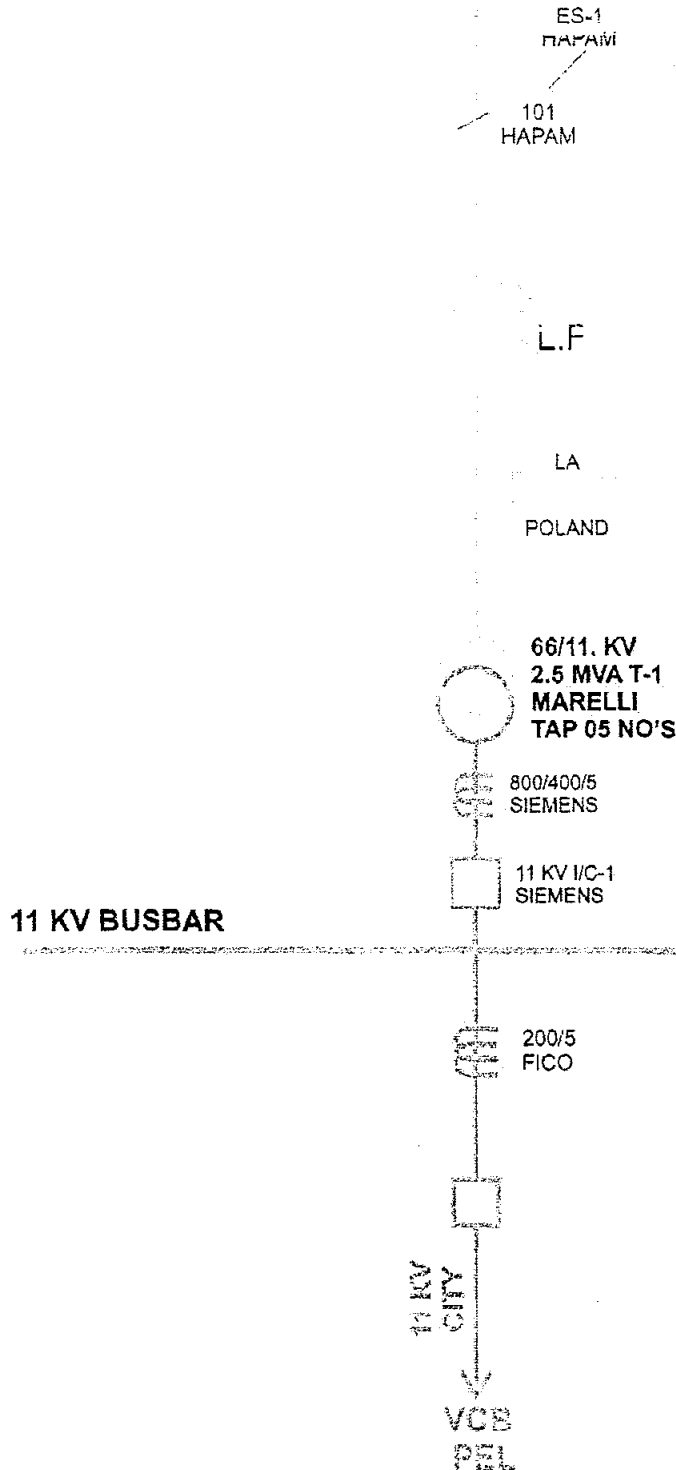
# 66 KV GRID STATION DIPLO

YEAR OF CONSTRUCTION 1999

UP TO DATE "JULY-2012"

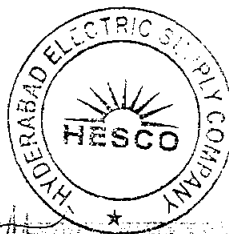
COVERED AREA MORE - 14

66KV MITHI  
(MTH-2)



## LEGEND

|                            |   |   |
|----------------------------|---|---|
| CKT. BREAKER               | → | ⊠ |
| TRANSFORMER                | → | ⊕ |
| L. ARRESTERS               | → | ⊥ |
| ISOLATOR                   | → | — |
| CURRENT TRANSFORMER        | → | ⊞ |
| EARTH SWITCH (ES-)         | → | ⊥ |
| POTENTIAL (PT) TRANSFORMER | → | ⊕ |



Presented by: Haris Ali SHAIKH

|                                                                                     |                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)<br>V&LT DIVISION 600 HESCO MIDPURKHAS |
| <b>SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION DIPLO</b>                           |                                                                                 |
| KHAMISO KHAN<br>ASSISTANT ENGINEER (T) NAUKOT                                       | ENGR: AMEER AHMED MEMON<br>EXECUTIVE ENGINEER                                   |

# 66 KV GRID STATION KALOI

DATE OF COMMISSIONING 1999

UPTO DATE "JULY-2022"

COVERED AREA "ACRE - 14"

66 KV  
NAUKOT  
(NUT-2)

T-OFF

66 KV  
PANGRIO  
(PGO-2)

ES-I

101  
CHINA

1600/800/5  
SIEMENS

LA

LA

5 MVAT-1  
SCICEM ITALY  
TAP 05 NO'S

1600/800/5  
SIEMENS

11 KV I/C-1  
SIEMENS

11 KV BUSBAR

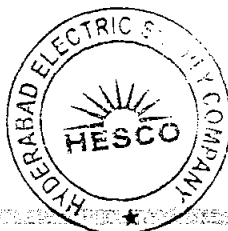
400/5

11 KV  
CITY

VCB  
PEL

## LEGEND

|                             |   |  |
|-----------------------------|---|--|
| CKT. BREAKER                | → |  |
| TRANSFORMER                 | → |  |
| L. ARRESTERS                | → |  |
| ISOLATOR                    | → |  |
| CURRENT TRANSFORMER         | → |  |
| EARTH SWITCH (ES-I)         | → |  |
| POTENTIAL (P.T) TRANSFORMER | → |  |



Prepared by: Haris Ali SHAIKH

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
|                                                    | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO) |
|                                                    | SS&T DIVISION GSO HESCO MIRPURKHAS        |
| SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION KALOI |                                           |
| KHAMISO KHAN                                       | ENGR: AMEER AHMED MEMON                   |
| ASSISTANT ENGINEER (T) NAUKOT                      | EXECUTIVE ENGINEER                        |

# 66 KV GRID STATION ISLAMKOT

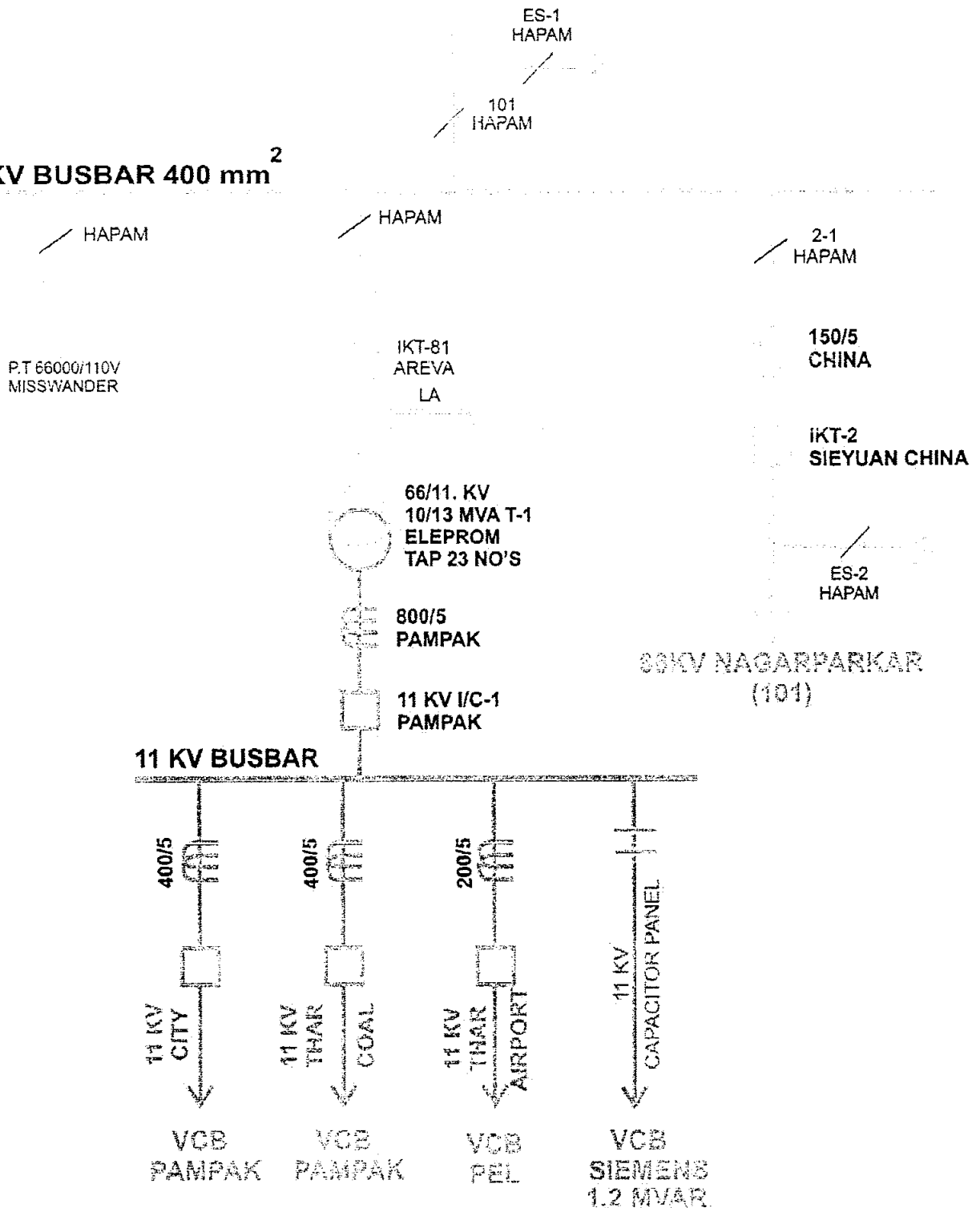
YEAR OF COMPLETION: 1997

UP TO DATE: "JULY-2022"

COVERED AREA: "ACRE - 00"

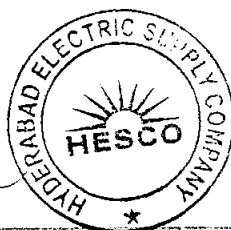
66KV MITHI  
(MTH-3)

66 KV BUSBAR 400 mm<sup>2</sup>



## LEGEND

|                              |   |   |
|------------------------------|---|---|
| CKT BREAKER                  | → | ⊠ |
| TRANSFORMER                  | → | ⊕ |
| L. ARRESTERS                 | → | ⊥ |
| ISOLATOR                     | → | ⊥ |
| CURRENT TRANSFORMER          | → | ⊥ |
| EARTH SWITCH (ES-)           | → | ⊥ |
| POTENTIAL (P.T.) TRANSFORMER | → | ⊥ |



Prepared by: Haris Ali SHAH

HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
SS&T DIVISION 680 HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION ISLAMKOT**

KHAMISO KHAN  
ASSISTANT ENGINEER (T) NAUKOT

ENGR: AMEER AHMED MEMON  
EXECUTIVE ENGINEER

2013年12月14日

56 KV T.JAN M:  
(TJD-1)

ES-4  
CHINA  
104  
CHINA  
SIEN-4  
SIYUAN CHINA  
600/5  
SIYUAN  
4-1  
SIYUAN

132 KV BUSBAR

81-1  
BUS ISO:  
20015  
CHINA SIEYUAN

DGR-81  
SIEYUAN CHINA.

20/26 MVA T-1  
LEECC CHINA  
TAP 23 NO'S.

1600/5

11KV I/C T-1  
PEMPAK

P.T 132KV/110V  
CHINA

11 KV BUSBAR

400:5

10005

6

2024

三

DE

4

Figure 1. A schematic diagram of the experimental design.

**Figure 6**

11 KV.  
CAPACITOR PANEL

FAMFAN

**FALSA**

PAGE 5

AMPA PA

**FAX FAX**

५३५

## LEGEND

|                       |   |                                                                                     |
|-----------------------|---|-------------------------------------------------------------------------------------|
| C.K.T.BREAKER         | → |  |
| TRANSFORMER           | → |  |
| L.ARRESTERS           | → |  |
| ISOLATOR              | → |  |
| CURRENT TRANSFORMER   | → |  |
| EARTH SWITCH (ES-1)   | → |  |
| POTENTIAL TRANSFORMER | → |  |

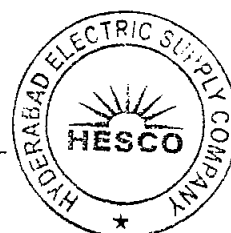
**NAME: Maris Ali SPARK**

HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
S&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION DIGRI**

KHAMISO KHAN  
ASSISTANT ENGINEER, TUN

ENGR. AMEER AHMED MEMON  
EXECUTIVE ENGINEER



# 132 KV GRID STATION CHAMBER

YEAR OF COMMISSIONING 2013

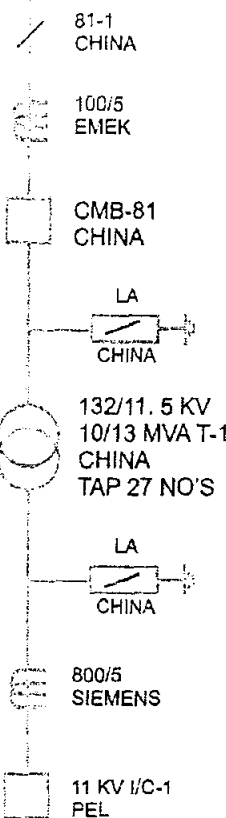
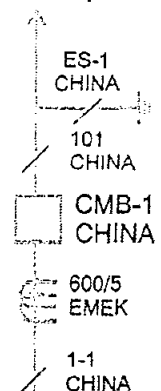
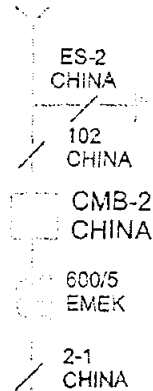
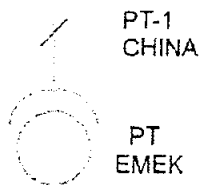
COVERED AREA WORK - 100

UPTO 132 KV 132KV-200KV

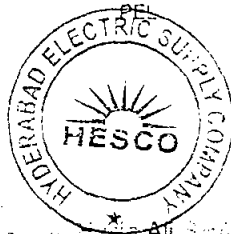
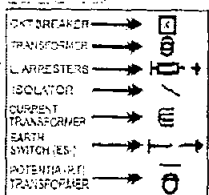
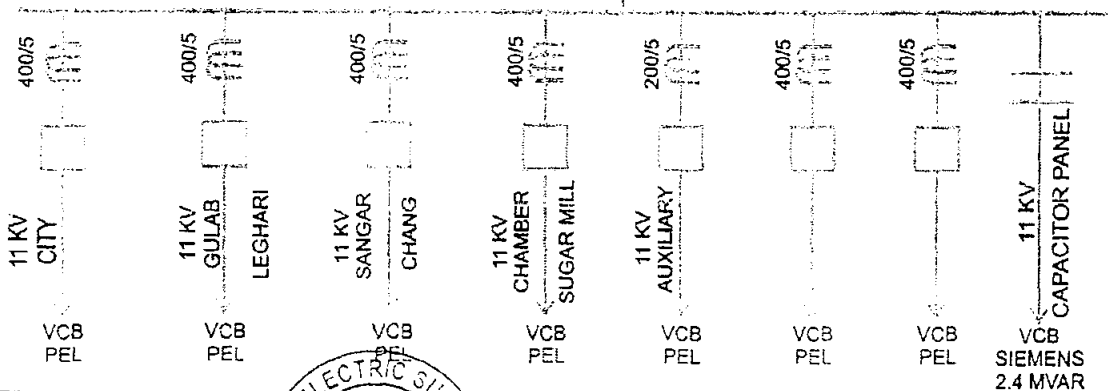
**TANDO JAM - T.A.YAR  
T/OFF CHAMBER**

**132KV SHAIKH BHIRKIO  
(SBO-I)**

**132 KV BUSBAR**



**11 KV BUSBAR**



HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
 DISTRIBUTION DIVISION HESCO NIKPURAHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION CHAMBER**

PARVAIZ SIDDIQUI  
 ASSISTANT ENGINEER TO MPK

ENGR. AMEER AHMED MEMON  
 EXECUTIVE ENGINEER

# 66 KV GRID STATION CHACHRO

DESIGN OF 66 KV GRID STATION CHACHRO  
UPTO DATE "JULY-2022"  
COVERED AREA MORE - 10

ES-1  
HAPAM

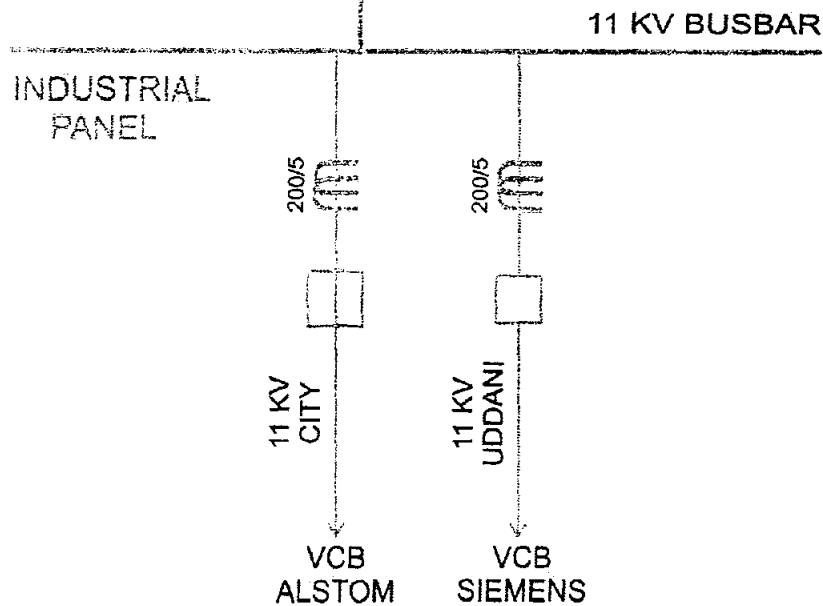
101  
HAPAM

FUSE

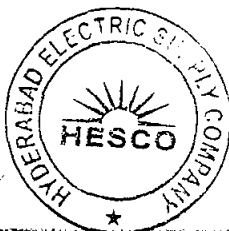
LA

ASEA

6.3 MVA T-1  
ELECTROPUTERE  
TAP 07 NO'S



Prepared by: Haris Ali SHAIKH



|                                                                                     |                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)<br>SS&T DIVISION GSO HESCO MIRPURKHAS |
| <b>SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION CHACHRO</b>                         |                                                                                 |
| <b>P</b> ARVAIZ SIDDQUI<br>ASSISTANT ENGINEER (T) MPK                               | ENGR: <b>A</b> MEER AHMED MEMON<br>EXECUTIVE ENGINEER                           |

# 132 KV GRID STATION UMERKOT

YEAR OF COMMISSIONING 1981

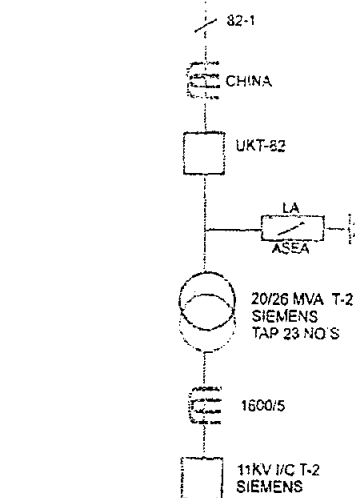
UPTO DATE "JULY-2022"

COVERED AREA "ACRE - 7.27"

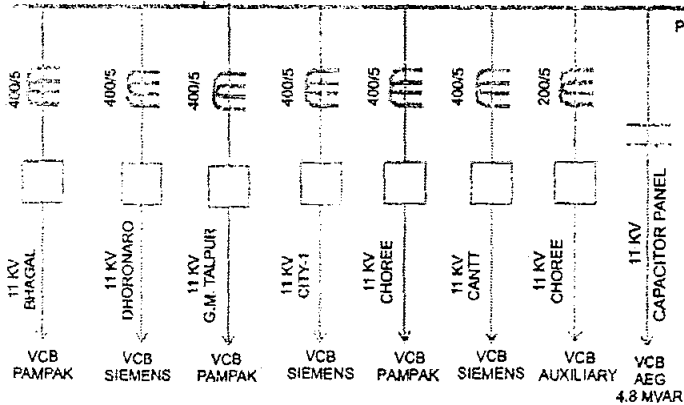
132kv SAMARO  
(SMO-6)

132/66 KV SAMARO  
(SMO-3)

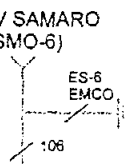
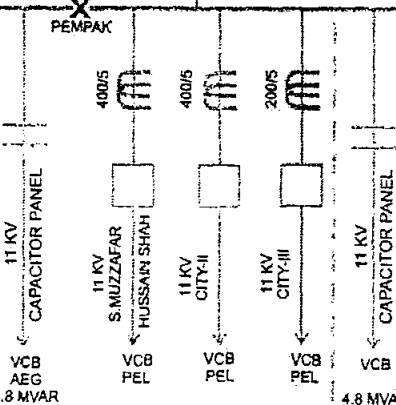
132 KV BUSBAR



11 KV BUSBAR



11KV BUS COUPLER



66 KV BUSBAR 400 mm<sup>2</sup>

PT-1  
HAPAM

P.T  
MISSWANDER

ES-1  
LK-NESS

101  
L-NESS

2-1  
HAPAM

150/5  
CHINA

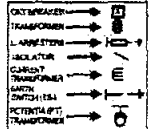
UKT-2  
CHINA SF<sub>6</sub>

102  
HAPAM

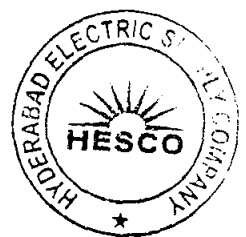
ES-2  
HAPAM

66KV CHACHRO  
(101)

## LEGEND

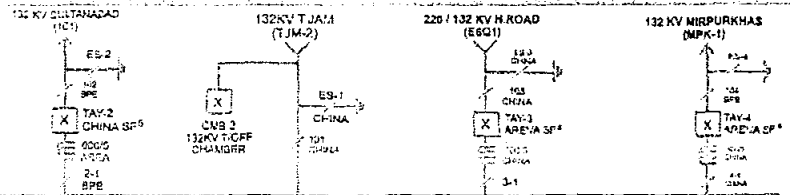


Hyderabad Electric Supply Company (HESCO) LIMITED  
SS&T DIVISION G-30 HESCO MP PURKHAS  
SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION UMERKOT  
PANKAJ SINGH  
DESIGN ENGINEER  
INCH AMIR AHMED MUMON  
DESIGN ENGINEER

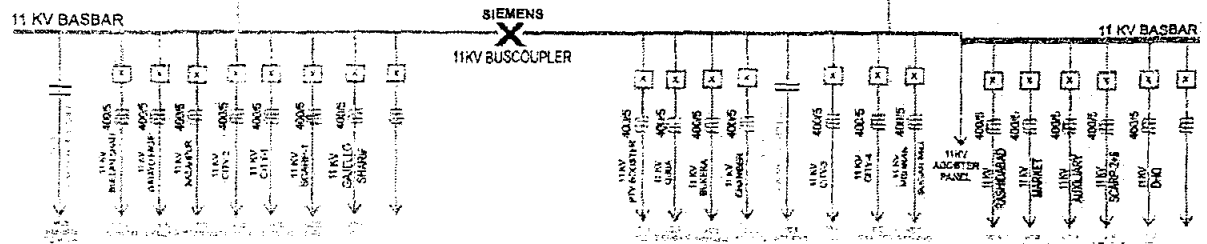
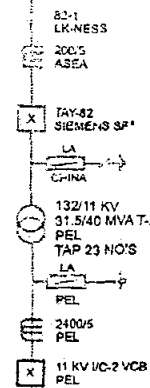
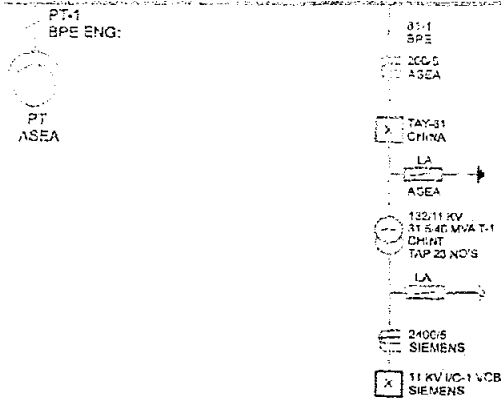


## YEAR OF COMMISSIONING 1751

— *Journal of the American Medical Association*, 1997

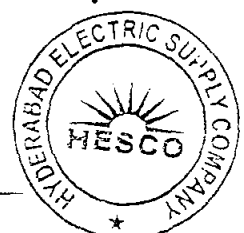
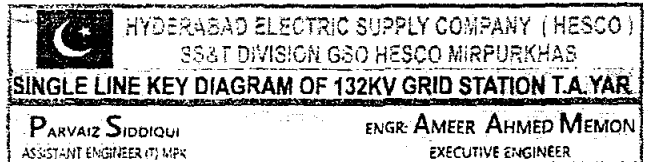


PT.1  
BPE ENG:



C.T. BREAKER →   
 TRANSFORMER →   
 L. ARRESTERS →   
 ISOLATOR →   
 CURRENT TRANSFORMER →   
 EARTH SWITCH (ES) →   
 POTENTIAL (PT) TRANSFORMER → 

Prepared by: **Haris Ali SHAIKH**





# 132 KV GRID STATION TANDO JAN MUHAMMAD

132 KV GRID STATION TANDO JAN MUHAMMAD  
 GRID (GRI) 132KV/110KV  
 GRID (GRI) 132KV/110KV  
 GRID (GRI) 132KV/110KV

66KV DIGRI  
 (DGR-2)

ES-2  
 CHINA

101  
 CHINA

TJD-1  
 AREVA

600/5  
 CHINA

2-1

PT-1  
 CHINA

PT 66000/110V  
 ASEA

66 KV BUSBAR 400 mm<sup>2</sup>

2-1  
 CHINA

300/5  
 EMEK

TJD-2  
 CHINA SF<sup>6</sup>

102  
 CHINA

ES-2  
 CHINA

66 KV NAUKOT  
 (NUT-3)

132 KV NAUKOT  
 (NUT-6)

ES-4  
 CHINA

104  
 CHINA

TJD-4  
 SIEYUAN CHINA

600/5  
 SIEYUAN

4-1  
 SIEYUAN

132 KV DIGRI  
 (DGR-4)

ES-3  
 CHINA

103  
 CHINA

TJD-3  
 SIEYUAN CHINA

600/5  
 SIEYUAN

3-1  
 SIEYUAN

PT-1  
 CHINA

PT 132KV/110V  
 CHINA

132 KV BUSBAR

81-1  
 BUS ISO:

200/5  
 CHINA SIEYUAN

TJD-81  
 SIEYUAN CHINA

LA  
 FEP

20/25 MVA T-1  
 LEEEC CHINA  
 TAP 23 NO'S

LA  
 FEP

1800/5

11KV VC T-1  
 PEMPAK

11 KV BUSBAR

400/5

11KV  
 AUXILIARY

VCS  
 PAMPAK

400/5

11KV  
 GRI 132

VCS  
 PAMPAK

400/5

11KV  
 GRI 132

VCS  
 PAMPAK

400/5

11KV  
 GRI 132

VCS  
 PAMPAK

400/5

11KV  
 GRI 132

VCS  
 PAMPAK

11KV

11KV  
 CAPACITOR PANEL

2.4  
 MVAR

## LEGEND

|                |   |   |
|----------------|---|---|
| DKT.BREAKER    | → | ⊞ |
| TRANSFORMER    | → | ⊞ |
| L ARRESTERS    | → | ⊞ |
| ISOLATOR       | → | ⊞ |
| CURRENT        | → | ⊞ |
| TRANSFORMER    | → | ⊞ |
| EARTH          | → | ⊞ |
| SWITCH (ES-1)  | → | ⊞ |
| POTENTIAL (PT) | → | ⊞ |
| TRANSFORMER    | → | ⊞ |

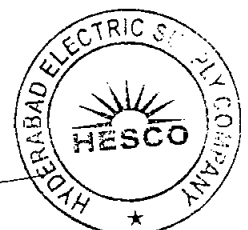
Prepared by: **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
 SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION T.J. MUHAMMAD**

**KHAMISO KHAN**  
 ASSISTANT ENGINEER IN CHARGE

**ENGR. AMEER AHMED MEMON**  
 EXECUTIVE ENGINEER

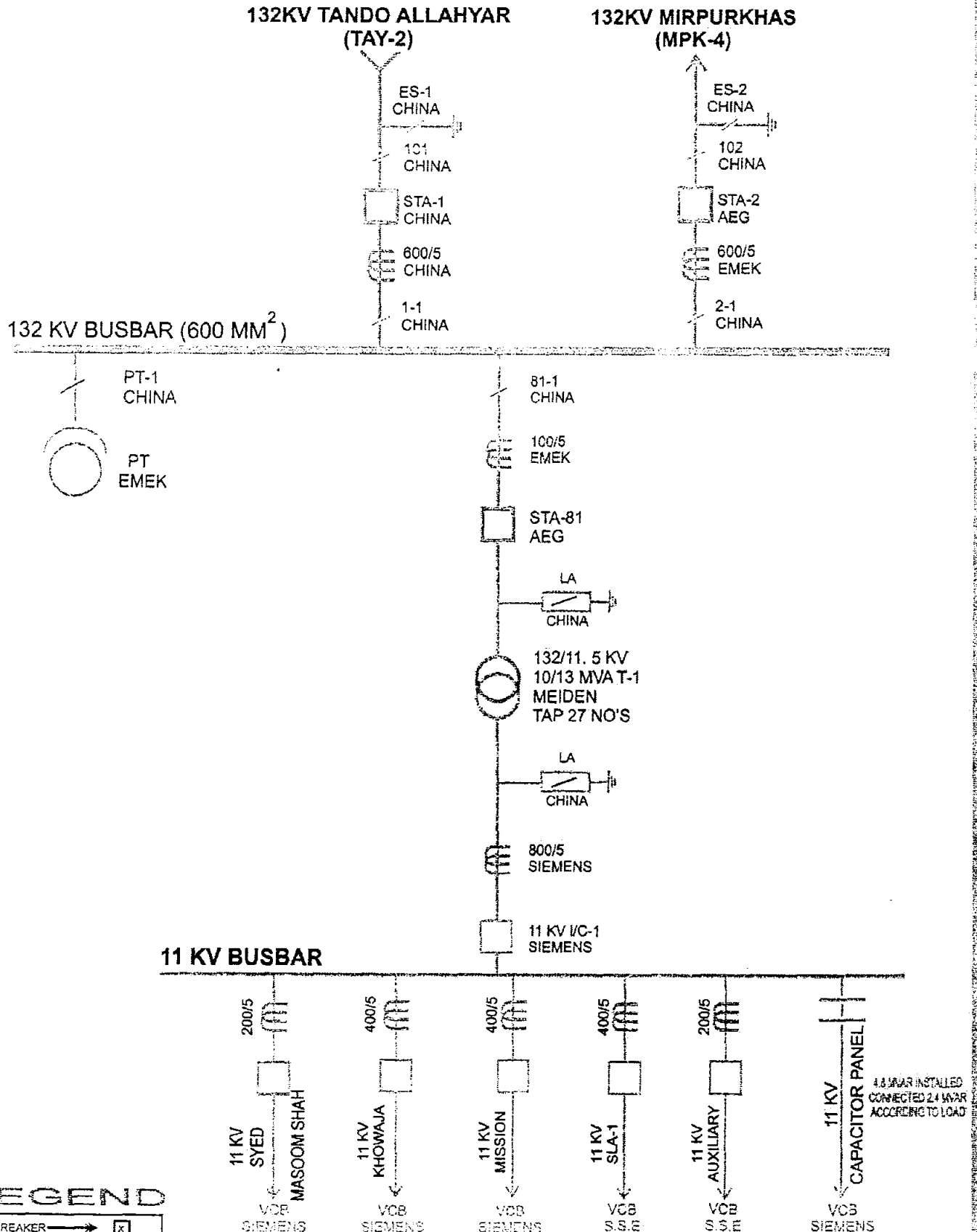


# 132 KV GRID STATION SULTANABAD

COVERED AREA "ACRE - 7.27"

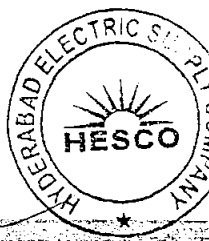
YEAR OF COMMISSIONING 2002

UPTO DATE "JULY-2022"



## LEGEND

|                             |  |
|-----------------------------|--|
| CKT. BREAKER                |  |
| TRANSFORMER                 |  |
| L. ARRESTERS                |  |
| ISOLATOR                    |  |
| CURRENT TRANSFORMER         |  |
| EARTH SWITCH (ES-)          |  |
| POTENTIAL (P.T) TRANSFORMER |  |



Prepared by: **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
 593T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION SULTANABAD**

**PARVAIZ SIDDQUI**  
 ASSISTANT ENGINEER (T) MK

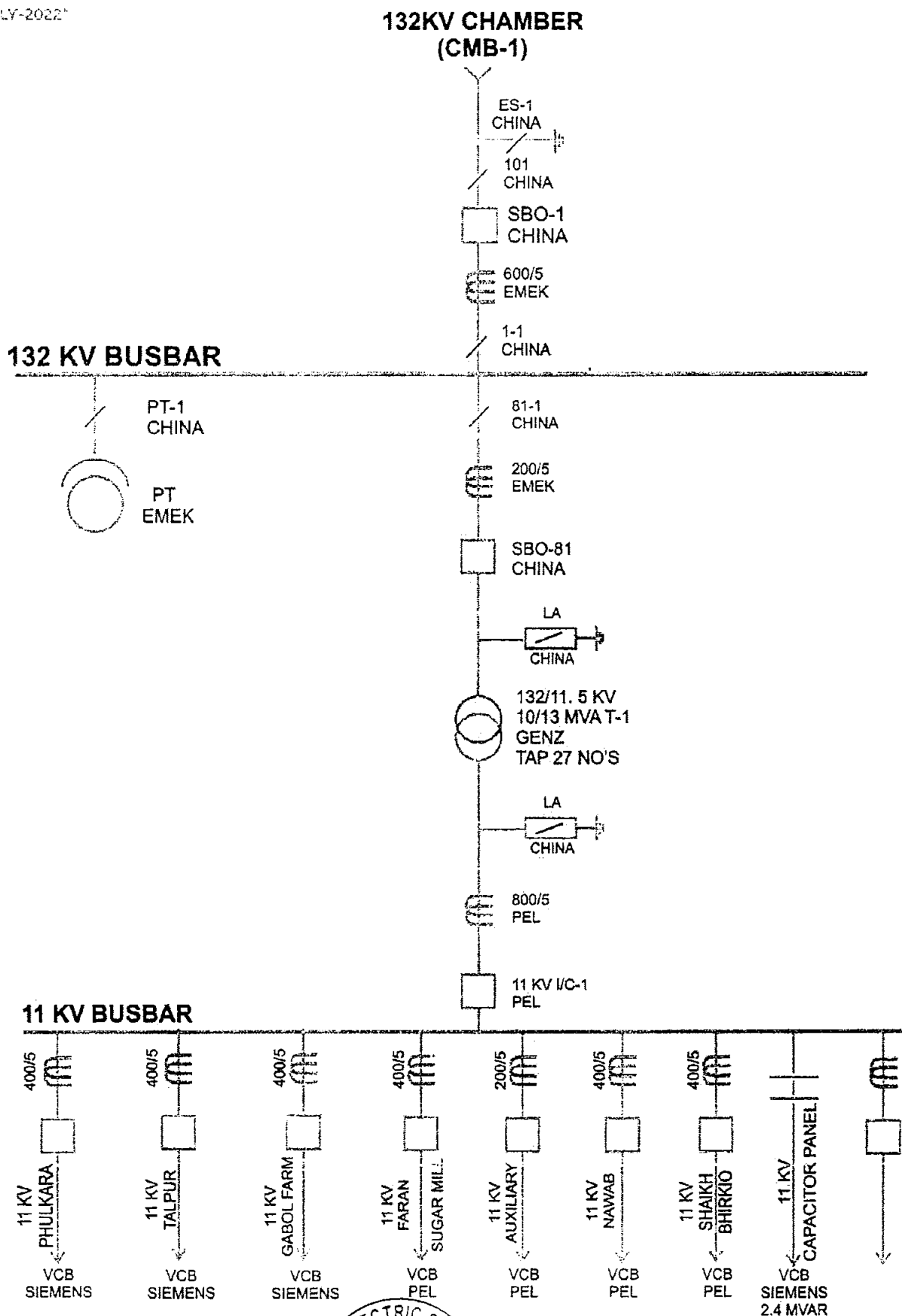
**ENGR. AMEER AHMED MEMON**  
 EXECUTIVE ENGINEER

# 132 KV GRID STATION SHAIKH BHIRKIO

YEAR OF COMMISSIONING 2016

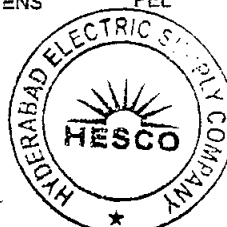
COVERED AREA "ACRE - 00"

UP TO DATE "JULY-2022"



## LEGEND

|                              |   |   |
|------------------------------|---|---|
| CIRCUIT BREAKER              | → | ⎓ |
| TRANSFORMER                  | → | ⊕ |
| C. ARRESTERS                 | → | ⎓ |
| ISOLATOR                     | → | ⎓ |
| CURRENT TRANSFORMER          | → | ⊕ |
| EARTH SWITCH (ES)            | → | ⎓ |
| POTENTIAL (P.T.) TRANSFORMER | → | ⊕ |



Prepared by **Haris Ali SHAIKH**

**HYDRABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION SHAIKH BHIRKIO**

**PARVAIZ SIDDIQUI**  
ASSISTANT ENGINEER (ELECTRIC)

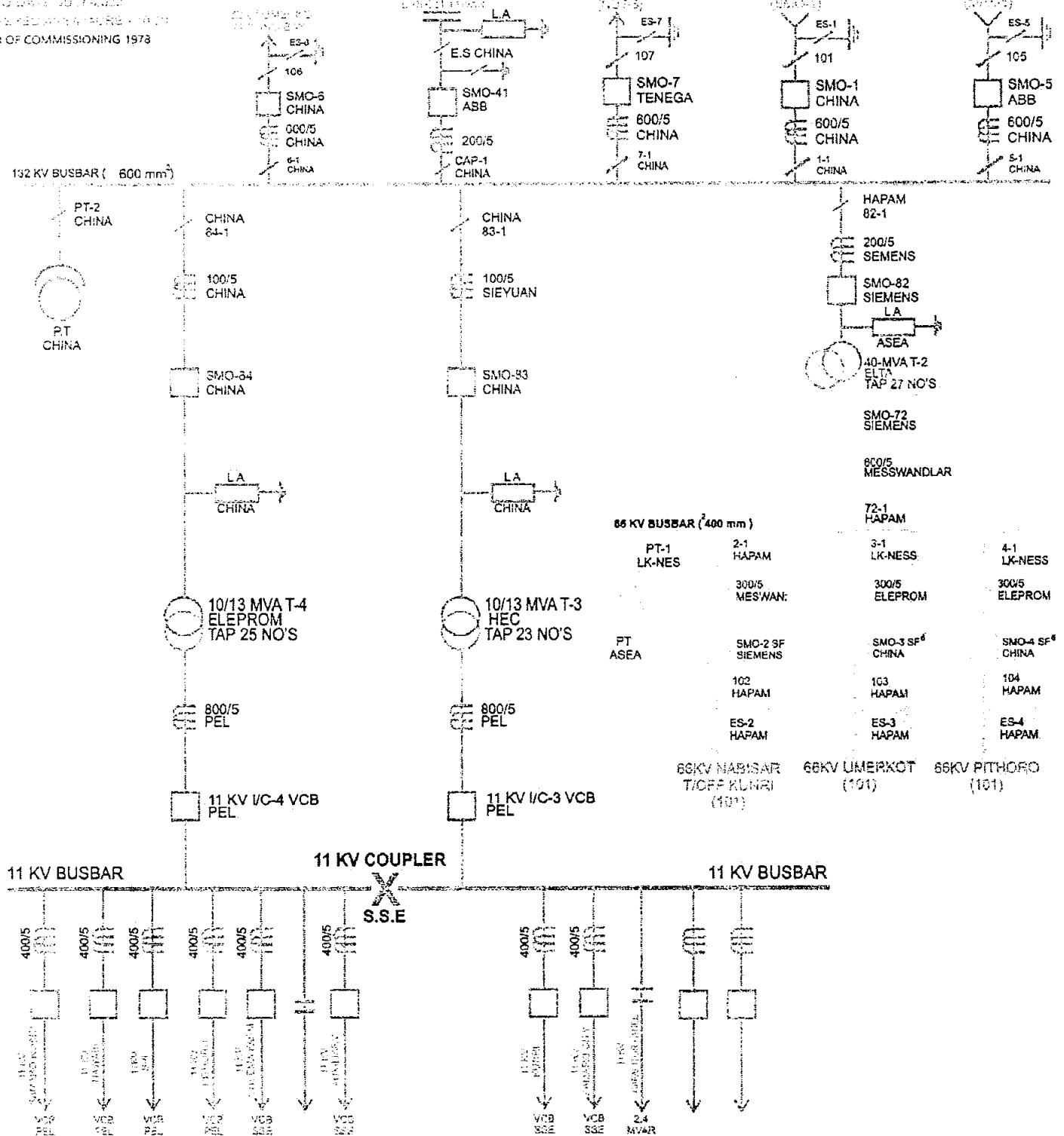
**ENGR. AMEER AHMED MEMON**  
EXECUTIVE ENGINEER

# 132 KV GRID STATION SAMARO

DATE: 12/07/2022

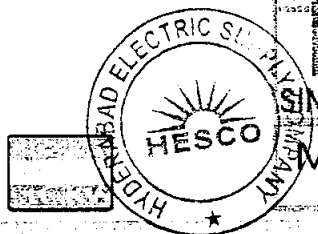
132KV GRID STATION SAMARO

YEAR OF COMMISSIONING 1978



## LEGEND

|                     |   |   |
|---------------------|---|---|
| CKT.BREAKER         | → | ⊠ |
| TRANSFORMER         | → | ⊞ |
| L. ARRESTERS        | → | ⊞ |
| ISOLATOR            | → | ⊞ |
| CURRENT TRANSFORMER | → | ⊞ |
| EARTH SWITCH (ES-)  | → | ⊞ |
| POTENT. (P.T.)      | → | ⊞ |
| TRANSFORMER         | → | ⊞ |



Prepared by: **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
**600T DIVISION 600 HESCO MIRPURKHAS**

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION SAMARO**

**MUHAMMAD AMJAD**  
 RESIDENT ENGINEER

**ENGR. AMEER AHMED MEMON**  
 EXECUTIVE ENGINEER

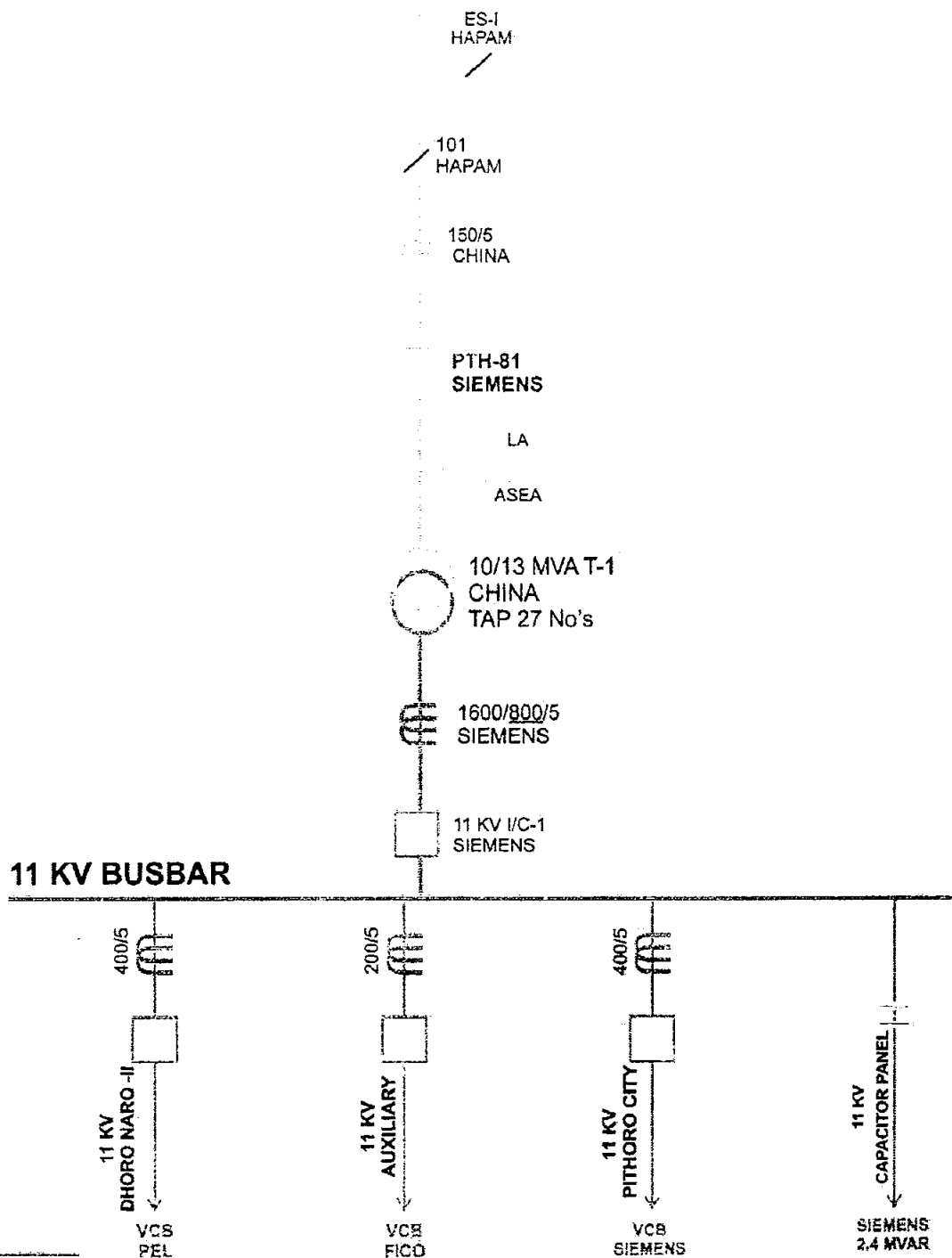
# 66 KV GRID STATION PITHORO

COVERED AREA "ACRE - 04

66 KV SAMARO  
(SMO-4)

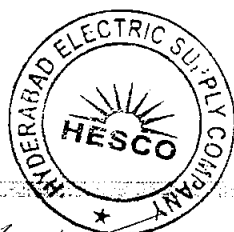
YEAR OF COMMISSIONING 1987

UPTO DATE "JULY-2022"



## LEGEND

|                             |   |  |
|-----------------------------|---|--|
| CKT.BREAKER                 | → |  |
| TRANSFORMER                 | → |  |
| L. ARRESTERS                | → |  |
| ISOLATOR                    | → |  |
| CURRENT TRANSFORMER         | → |  |
| EARTH SWITCH (ES-)          | → |  |
| POTENTIAL (P.T) TRANSFORMER | → |  |



Prepared by: **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION PITHORO**

**P ARVAIZ S IDDIQUI**  
ASSISTANT ENGINEER (T) MPK

**ENGR: AMEER AHMED MEMON**  
EXECUTIVE ENGINEER

*Handwritten signature*

# 66 KV GRID STATION PANGRIO

YEAR OF COMMISSIONING 1985

UPTO DATE "JULY-2022"

COVERED AREA "ACRE - 07"

66 KV NAUKOT  
(NUT-2)

ES-1

66 KV NAUKOT - PANGRIO  
T/OFF KALOI

101  
CHINA

66 KV BUSBAR

PT-1  
CHINA

81-1  
HAPAM

2-1  
CHINA

300/5

PT  
EMEK

L.F

PGO-2  
AREVA

102  
CHINA

ES-2  
CHINA

66 KV TANDO BAGO  
(TBG-2)

5 MVA T-1  
CHINA  
TAP 05 NO'S

800/5  
PEMPAK

11 KV I/C-1  
PEMPAK

11 KV BUSBAR

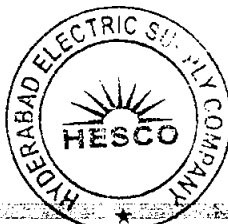
400/5

11 KV  
CITY

VCB  
PEMPAK

## LEGEND

|                             |   |    |
|-----------------------------|---|----|
| CKT.BREAKER                 | → | □  |
| TRANSFORMER                 | → | ⊙  |
| L. ARRESTERS                | → | ⊥  |
| ISOLATOR                    | → | /  |
| CURRENT TRANSFORMER         | → | E  |
| EARTH SWITCH (ES-)          | → | ⊥  |
| POTENTIAL (P.T) TRANSFORMER | → | HO |



Prepared by: Haris Ali SHAIKH



HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
SS&T DIVISION GSO HESCO MIRPURKHAS

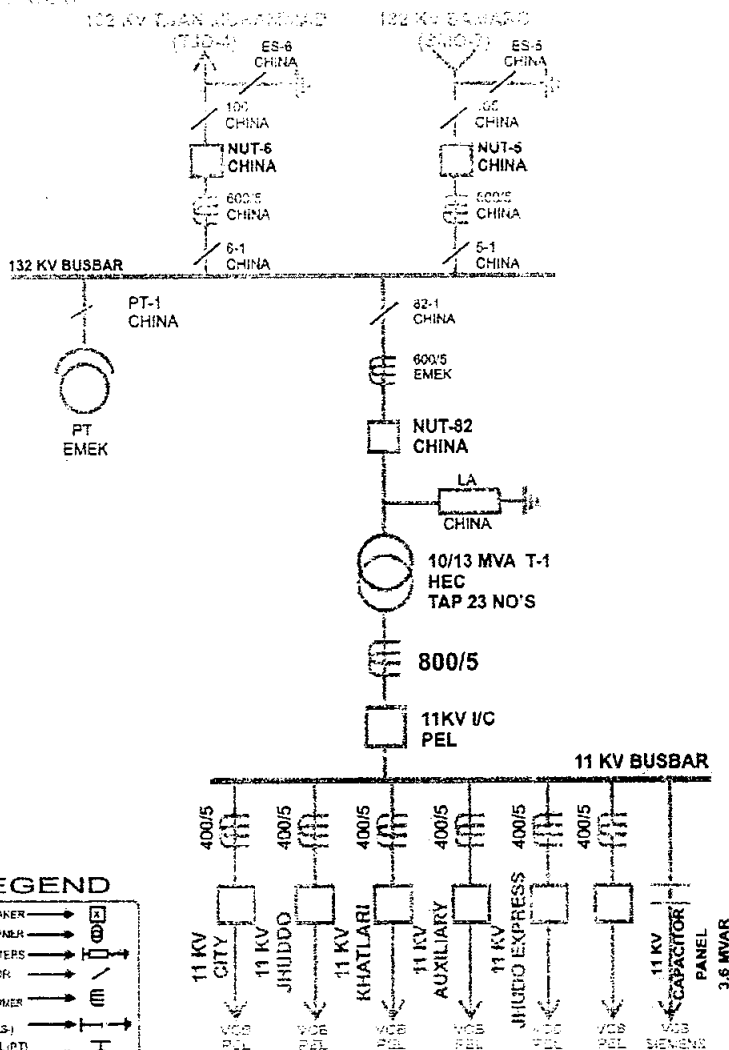
SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION PANGRIO

KHAMISO KHAN  
ASSISTANT ENGINEER (T) NAUKOT

ENGR: AMEER AHMED MEMON  
EXECUTIVE ENGINEER

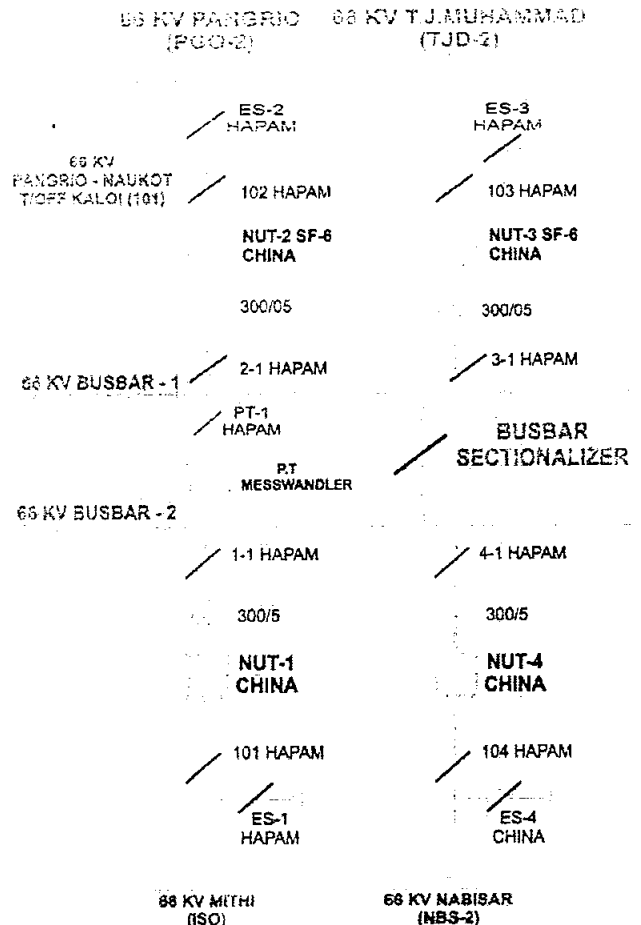
# 132KV GRID STATION NAUKOT

YEAR OF COMMISSIONING 66KV 1983 & 132KV 2014

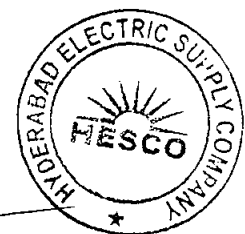


## LEGEND

|                            |   |
|----------------------------|---|
| CIRCUIT BREAKER            | → |
| TRANSFORMER                | → |
| L ARRESTERS                | → |
| ISOLATOR                   | → |
| CURRENT TRANSFORMER        | → |
| EARTH SWITCH (ES)          | → |
| POTENTIAL (PT) TRANSFORMER | → |



Prepared by: Haris Ali SHAIKH  
HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
SS&T DIVISION GSC HESCO MIRPURKHAS  
**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION NAUKOT**  
KHAMISO KHAN  
ASSISTANT ENGINEER (T) NAUKOT  
ENGR AMEER AHMED MEMON  
EXECUTIVE ENGINEER



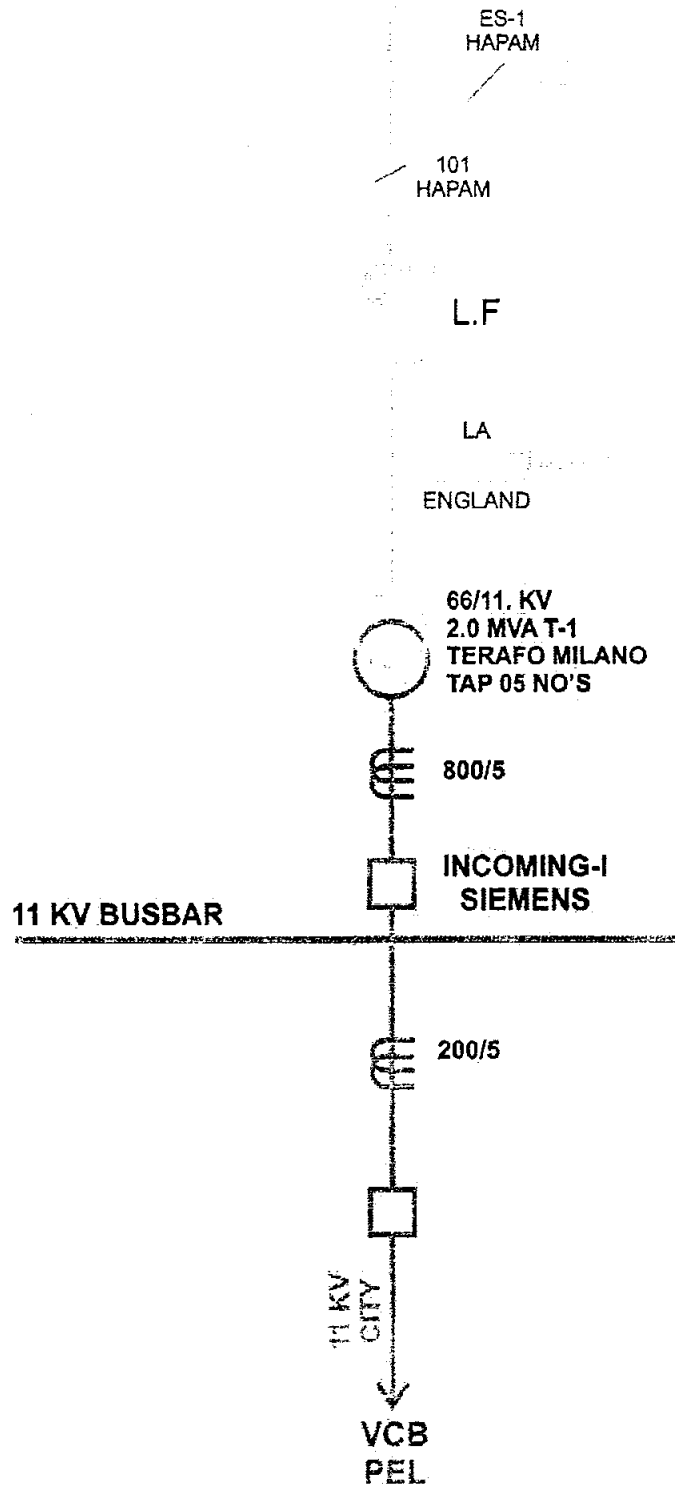
# 66 KV GRID STATION NAGARPARKAR

YEAR OF COMMISSIONING 2000

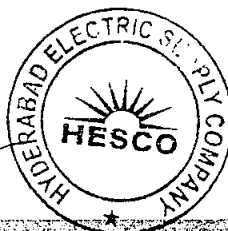
UPTO DATE 'JULY-2022'

COVERED AREA "ACRE - 10"

## 66KV ISLAMKOT (IKT-2)



Prepared by: Haris Ali SHAIKH



|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
|  | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)     |
|                                                                                     | SS&T DIVISION GSO HESCO MIRPURKHAS            |
| SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION NAGARPARKAR                            |                                               |
| KHAMISO KHAN<br>ASSISTANT ENGINEER (T) NAUKOT                                       | ENGR: AMEER AHMED MEMON<br>EXECUTIVE ENGINEER |



# 66 KV GRID STATION NABISAR

• PROJECT COMMISSIONED 1988

UP TO DATE "JULY-2022"

COVERED AREA "ACRE 93"

66KV SAMARO  
(SMO-2)

66 KV BUSBAR (400 mm<sup>2</sup>)

PT-1  
CHINA

66KV Samaro - Nabisar  
T.D. Line

2-1  
LK-NES

300/5  
ARTECH

PT  
DLBF

NBS-2  
SIEMENS

102  
LK-NES

ES-2  
LK-NES

ES-1  
LK-NES

101  
LK-NES

81-1  
LK-NES

FUSE

LA

JCAC

6.3 MVA T-1  
ELECTROPUTER  
TAP-10 NO'S

800/5

11 KV I/C-1  
PEMPAK

(NUT-4)  
66 KV NAUKOT

11 KV BUSBAR

200/5

200/5

400/5

200/5

11 KV  
TALHI

11 KV  
CITY

11 KV  
MEMON KUNRI

11 KV  
AUXILIARY

VCB  
REL

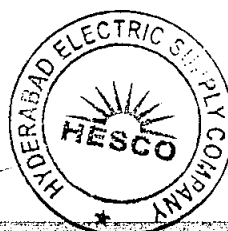
VCB  
SSE

VCB  
SSE

VCB  
FICO

## LEGEND

|                             |   |   |
|-----------------------------|---|---|
| CKT.BREAKER                 | → | ⊠ |
| TRANSFORMER                 | → | ⊙ |
| L. ARRESTERS                | → | ⊠ |
| ISOLATOR                    | → | / |
| CURRENT TRANSFORMER         | → | ⊞ |
| EARTH SWITCH (ES-)          | → | ⊞ |
| POTENTIAL (P.T) TRANSFORMER | → | ⊞ |



Drawn by: Haris Ali SHAICH

|                                                                                     |                                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------|
|  | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)                   |
|                                                                                     | SECT DIVISION GSO HESCO MIRPURKHAS                          |
|                                                                                     | <b>SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION NABISAR</b> |
| KHAMISO KHAN<br>ASSISTANT ENGINEER IN NAUKOT                                        | ENGR: AMEER AHMED MEMON<br>EXECUTIVE ENGINEER               |

# 66 KV GRID STATION MITHI

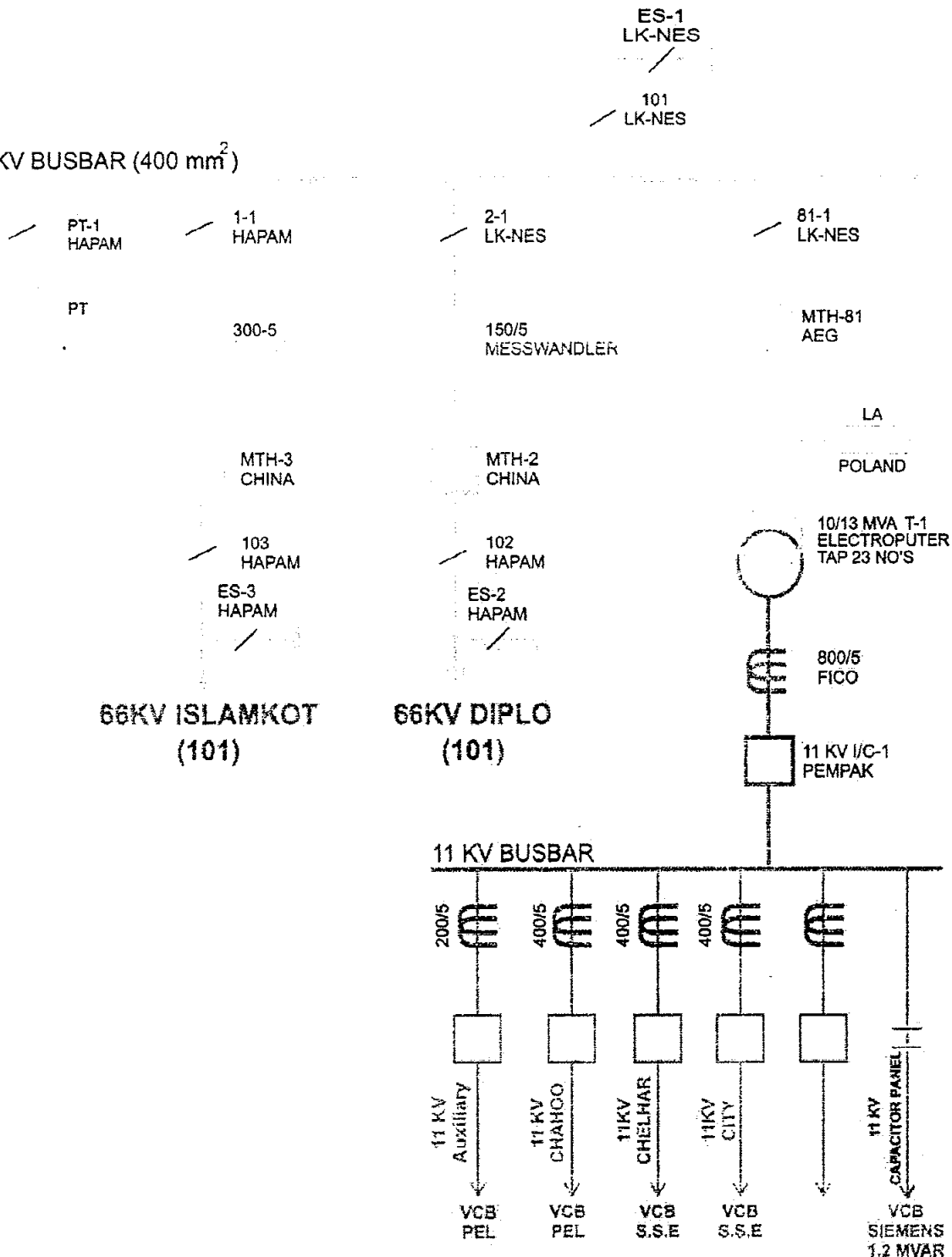
YEAR OF COMMISSIONING 1983

UPTO DATE "JULY-2022"

COVERED AREA "ACRE - 09"

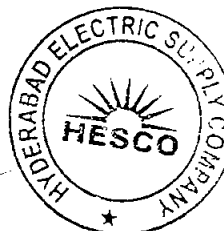
66KV NAUKOT  
(NUT-1)

66KV BUSBAR (400 mm<sup>2</sup>)



## LEGEND

|                             |   |   |
|-----------------------------|---|---|
| CKT.BREAKER                 | → | ⎓ |
| TRANSFORMER                 | → | ⊞ |
| L. ARRESTERS                | → | ⎓ |
| ISOLATOR                    | → | ⎓ |
| CURRENT TRANSFORMER         | → | ⊞ |
| EARTH SWITCH (ES-)          | → | ⎓ |
| POTENTIAL (P.T) TRANSFORMER | → | ⊞ |



Prepared by: **Haris Ali SHAIKH**

HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION MITHI**

**KHAMISO KHAN**  
ASSISTANT ENGINEER (T) NAUKOT

**ENGR. AMEER AHMED MEMON**  
EXECUTIVE ENGINEER

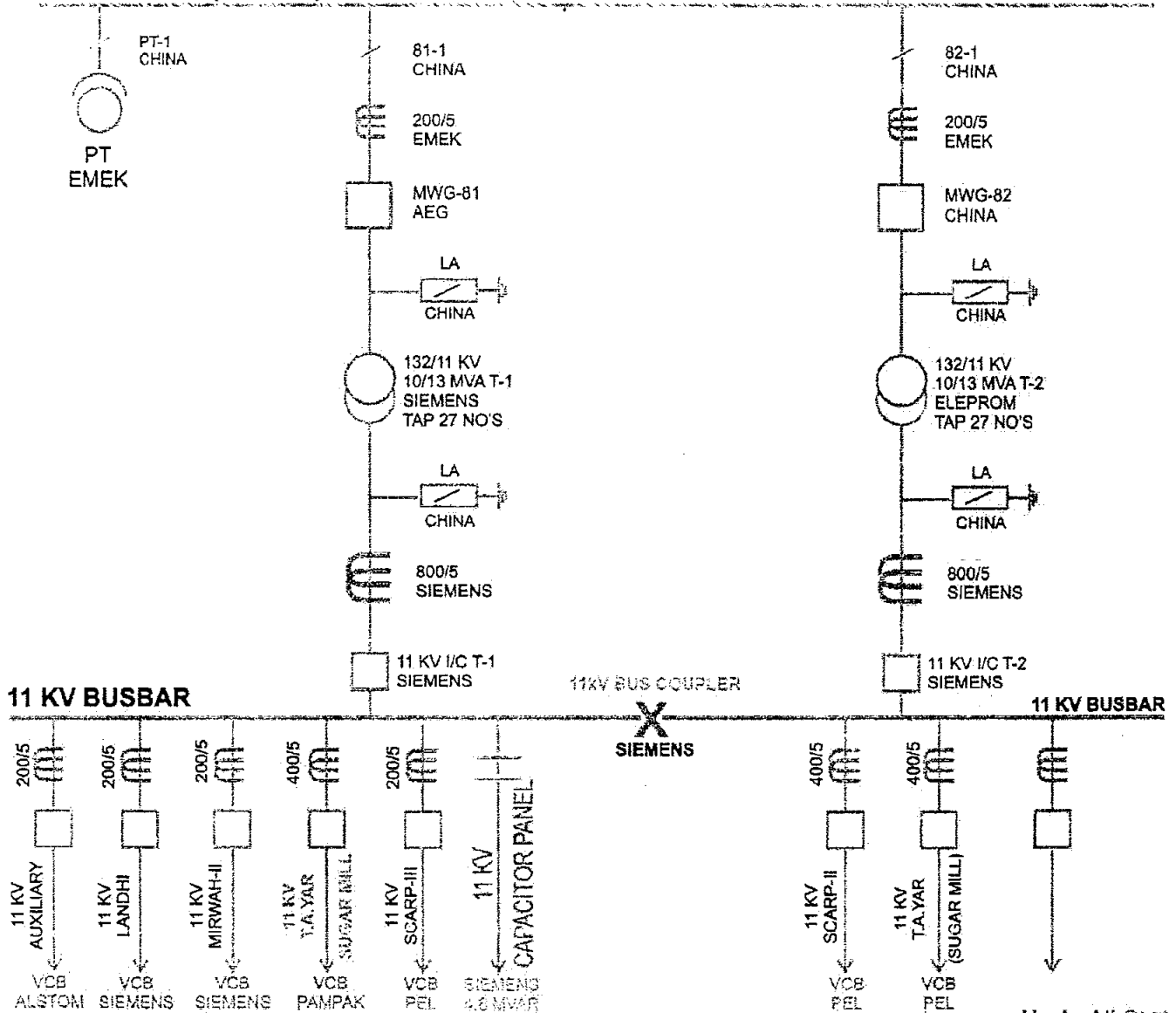
# 132 KV GRID STATION MIRWAH

YEAR OF COMMISSIONING 2002  
 UPTO DATE "JULY-2022"  
 COVERED AREA "ACRE - 12"

132KV MIRPURKHAS  
 (MPK-6)

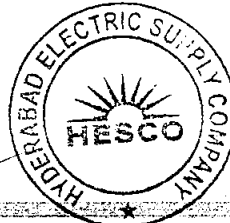
132KV K.M. BHURGARI  
 (KHB-2)

132 KV BUSBAR (600 MM<sup>2</sup>)



## LEGEND

|                            |   |   |
|----------------------------|---|---|
| CKT. BREAKER               | → | ⊞ |
| TRANSFORMER                | → | ⊞ |
| L. ARRESTERS               | → | ⊞ |
| ISOLATOR                   | → | ⊞ |
| CURRENT TRANSFORMER        | → | ⊞ |
| EARTH SWITCH (ES-)         | → | ⊞ |
| POTENTIAL (PT) TRANSFORMER | → | ⊞ |



HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
 SS&T DIVISION GSO HESCO MIRPURKHAS  
**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION MIRWAH**  
 PARVAIZ SIDDIQUI  
 ASSISTANT ENGINEER (T) MPK  
 ENGR. AMEER AHMED MEMON  
 EXECUTIVE ENGINEER

Prepared by: Haris Ali SHAIKH

YEAR OF COMMISSIONING 1976  
UPTO DATE "JULY - 2022"  
COVERED AREA "ACRE - 22"

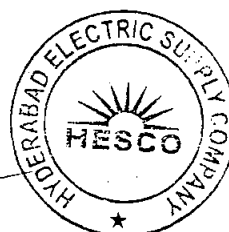
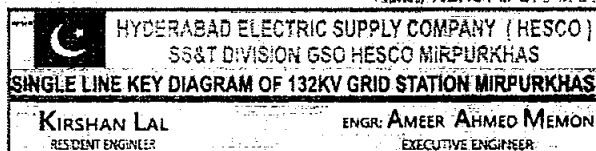


- |                              |   |                                                                                     |
|------------------------------|---|-------------------------------------------------------------------------------------|
| CKT. BREAKER                 | → |  |
| TRANSFORMER                  | → |  |
| L. ARRESTERS                 | → |  |
| ISOLATOR                     | → |  |
| CURRENT TRANSFORMER          | → |  |
| EARTH SWITCH (E.S.)          | → |  |
| POTENTIAL (P.T.) TRANSFORMER | → |  |

KH(PRO  
(101)



Prepared by: **Haris Ali SHAIKH**



# 66 KV GRID STATION KUNRI

UPTO DATE "JULY-2022"

YEAR OF COMMISSIONING 2010

COVERED AREA "ACRE - 04"

66 KV  
NAGISAP  
(101)

T-OFF

66 KV  
SAMARO  
(SMO-2)

101  
ELIMSTER

600/5A

KUN-81 SF<sub>6</sub>  
SIEMENS

LA

CHINA

10/13 MVA T-1  
ELECTROPUTERE  
TAP 27 NO'S

800/5  
SIEMENS

11 KV I/C-1  
SIEMENS

11 KV BUSBAR

200/5

400/5

400/5

200/5

400/5

11 KV  
AUXILIARY

11 KV  
TALPUR

11 KV  
CITY-2

11 KV  
CITY-3

11 KV  
KUNRI

11 KV  
CITY-4

PEL

PEMPAK

PEMPAK

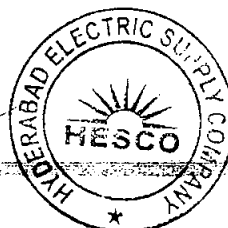
SIEMENS

SIEMENS

SIEMENS  
2.4 MVAR

## LEGEND

|                            |   |   |
|----------------------------|---|---|
| CKT.BREAKER                | → | ⊠ |
| TRANSFORMER                | → | ⊕ |
| L. ARRESTERS               | → | ⊠ |
| ISOLATOR                   | → | — |
| CURRENT TRANSFORMER        | → | ⊕ |
| EARTH SWITCH (ES-)         | → | ⊠ |
| POTENTIAL (PT) TRANSFORMER | → | ⊕ |



Prepared by Haris Ali SHAIKH

|                                                                                     |                                                    |                         |
|-------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------|
|  | HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)          |                         |
|                                                                                     | SSST DIVISION GSO HESCO MIRPURKHAS                 |                         |
|                                                                                     | SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION KUNRI |                         |
| KHAMISO KHAN                                                                        |                                                    | ENGR: AMEER AHMED MEMON |
| ASSISTANT ENGINEER (T) NAIKOT                                                       |                                                    | EXECUTIVE ENGINEER      |

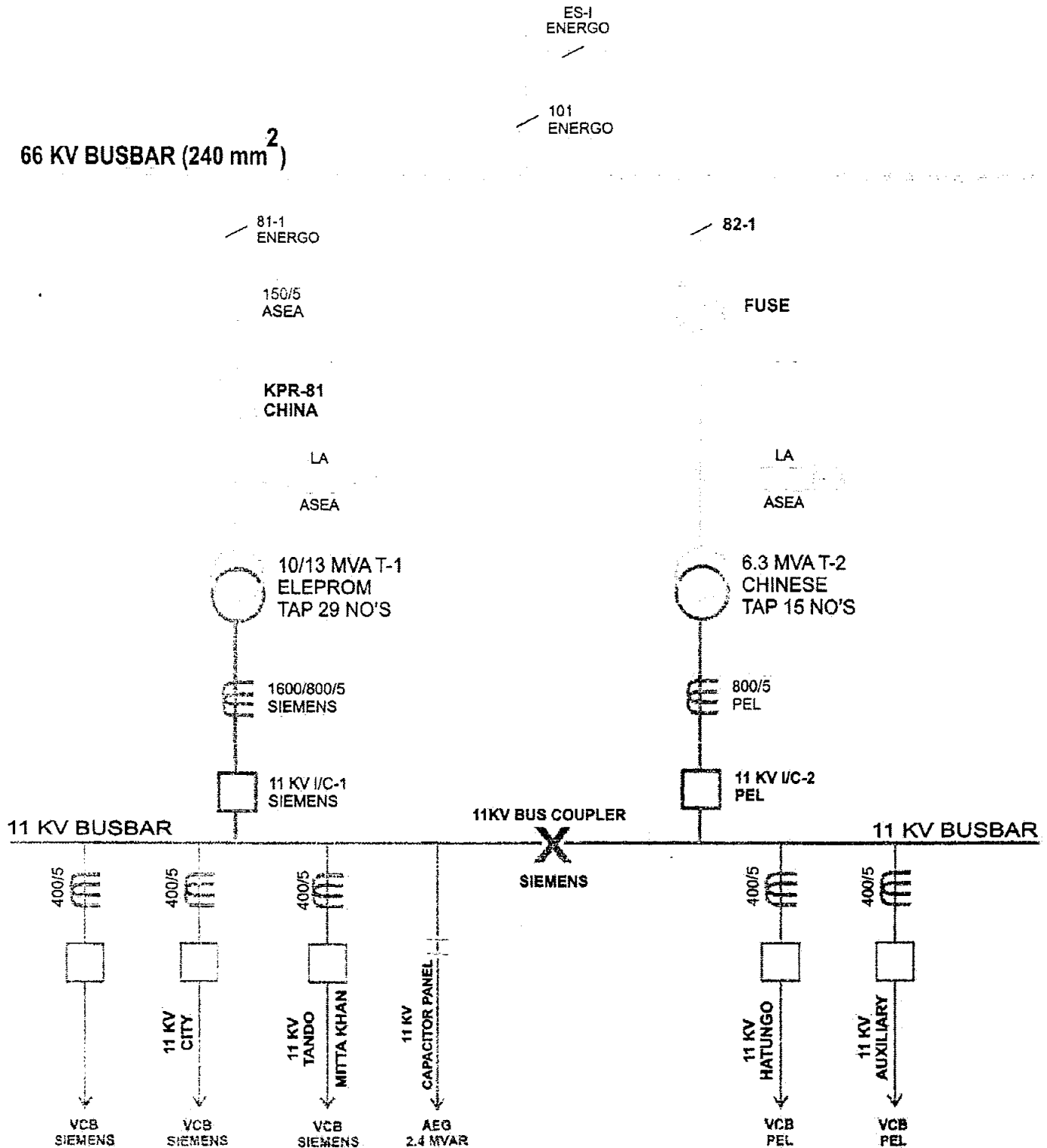
# 66 KV GRID STATION KHIPRO

YEAR OF COMMISSIONING 1977

UPTO DATE "JULY-2022"

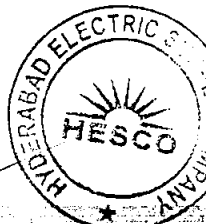
COVERED AREA \*ACRE - 3.3

66 KV MIRPURKHAS  
(MPK-7)



## LEGEND

- CBT BREAKER → [Symbol]
- TRANSFORMER → [Symbol]
- L ARRESTERS → [Symbol]
- ISOLATOR → [Symbol]
- CURRENT TRANSFORMER → [Symbol]
- EARTH SWITCH (ES) → [Symbol]
- POTENTIAL (PT) TRANSFORMER → [Symbol]



Prepared by **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 66KV GRID STATION KHIPRO**

**PARVAIZ SIDDIQUI**  
ASSISTANT ENGINEER (T) MPK

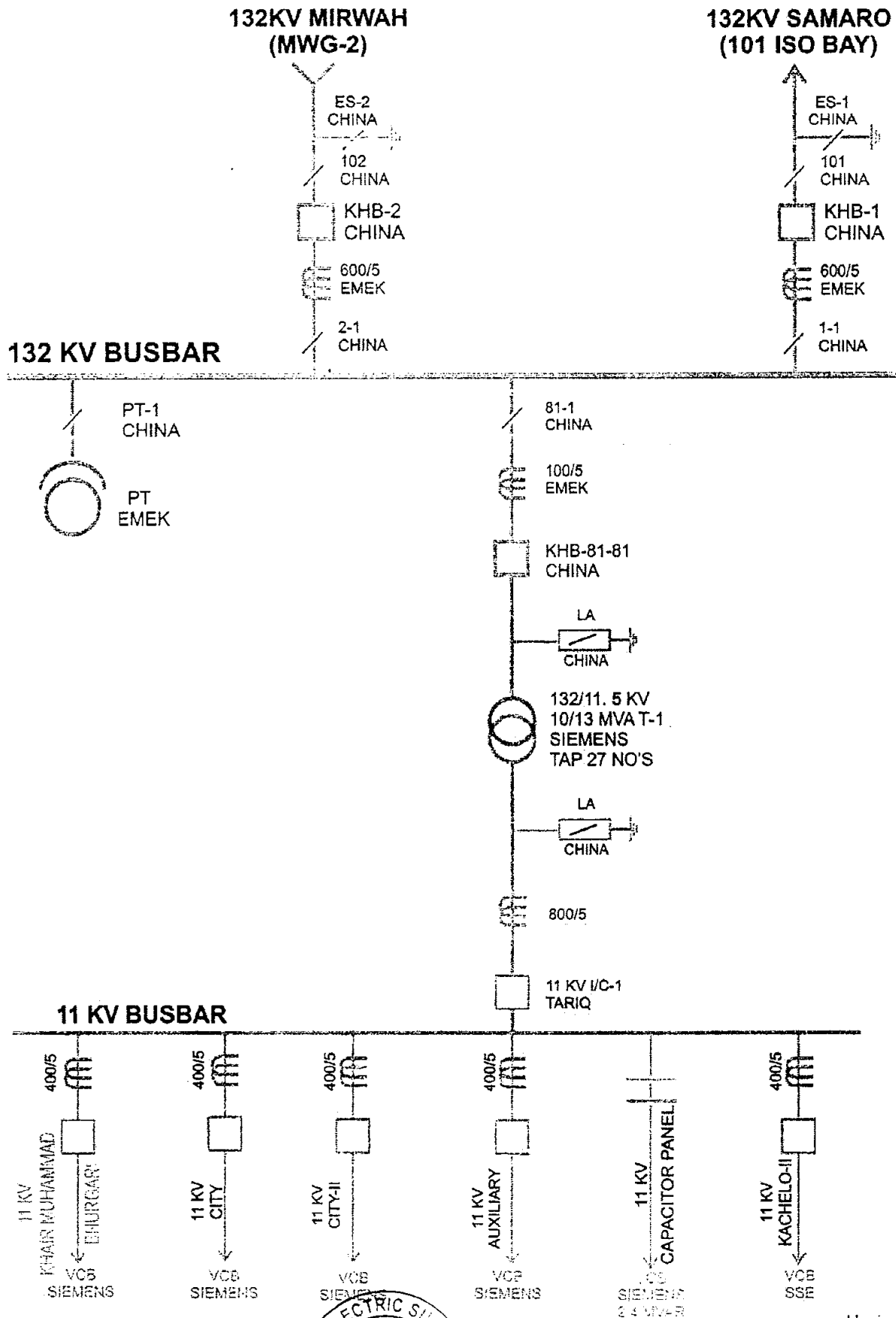
**ENGR: AMEER AHMED MEMON**  
EXECUTIVE ENGINEER

# 132 KV GRID STATION KHAIR MUHAMMAD BHURGARI

COVERED AREA (ACRE) = 0.25

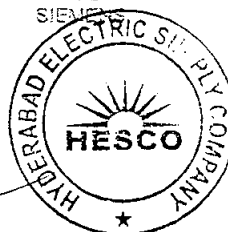
YEAR OF COMMISSIONING 2017

UPTO DATE "JULY-2022"



## LEGEND

|                            |   |   |
|----------------------------|---|---|
| CUT BREAKER                | → | ⊞ |
| TRANSFORMER                | → | ⊞ |
| L ARRESTERS                | → | ⊞ |
| ISOLATOR                   | → | ⊞ |
| CURRENT TRANSFORMER        | → | ⊞ |
| EARTH SWITCH (ES)          | → | ⊞ |
| POTENTIAL (PT) TRANSFORMER | → | ⊞ |



Prepared by: Haris Ali SHAIKH

HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)  
SS&T DIVISION GSO HESCO MIRPURKHAS

**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION K.M.BHURGARI**

P ARVAIZ S IDDIQUI  
ASS. STANT ENGINEER (IT, MPK)

ENGR: AMEER AHMED MEMON  
EXECUTIVE ENGINEER

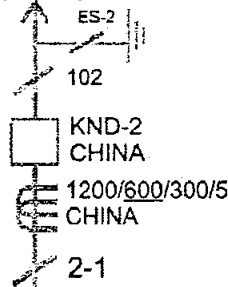
# 132 KV GRID STATION KANDIARI

YEAR OF COMMISSIONING 2014

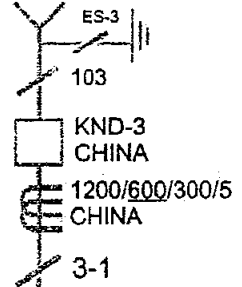
UPTO DATE "JULY-2022"

COVERED AREA \*ACRE - 8.5"

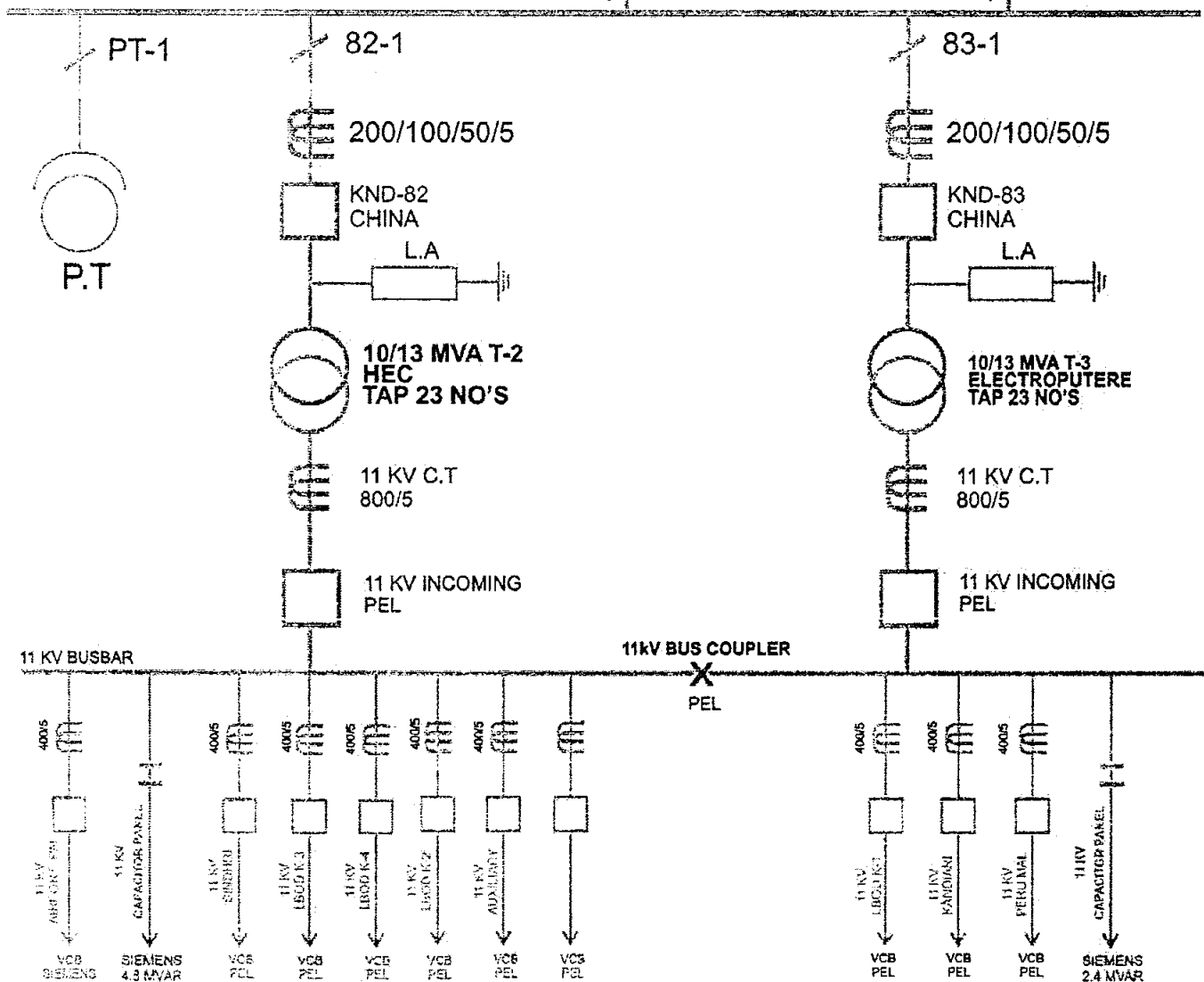
132 KV SANGHAR  
(SGR-4)



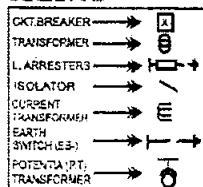
132 KV MIRPURKHAS  
MPK-2



132 KV BUSBAR



## LEGEND

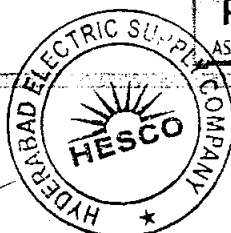


Prepared by: **Haris Ali SHAIKH**

**HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO)**  
SS&T DIVISION GSO HESCO MIRPURKHAS  
**SINGLE LINE KEY DIAGRAM OF 132KV GRID STATION KANDIARI**

**PARVAIZ SIDDIQUI**  
ASSISTANT ENGINEER (T) MPK

**ENGR: AMEER AHMED MEMON**  
EXECUTIVE ENGINEER



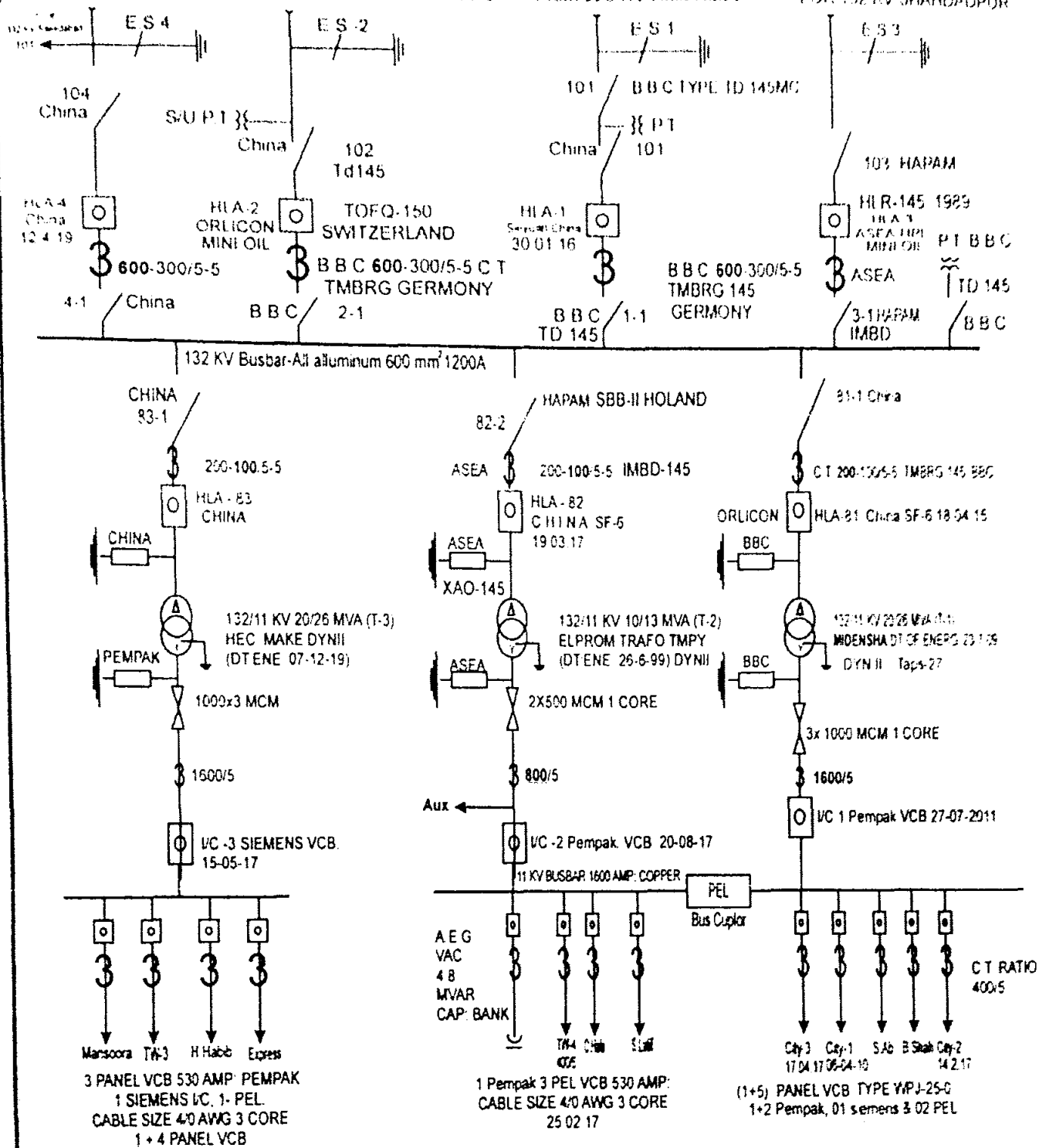


For 132 KV Sakrand SKD-2

FROM: 220 KV HALLA ROAD HRD-3

From 220 KV Hala Road

FOR 132 KV SHAHDADPUR



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

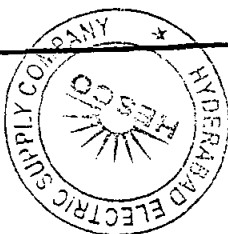
HALA (D.O.C. 06-11-74)

DRWN BY:

APPROVED BY:

DM-B

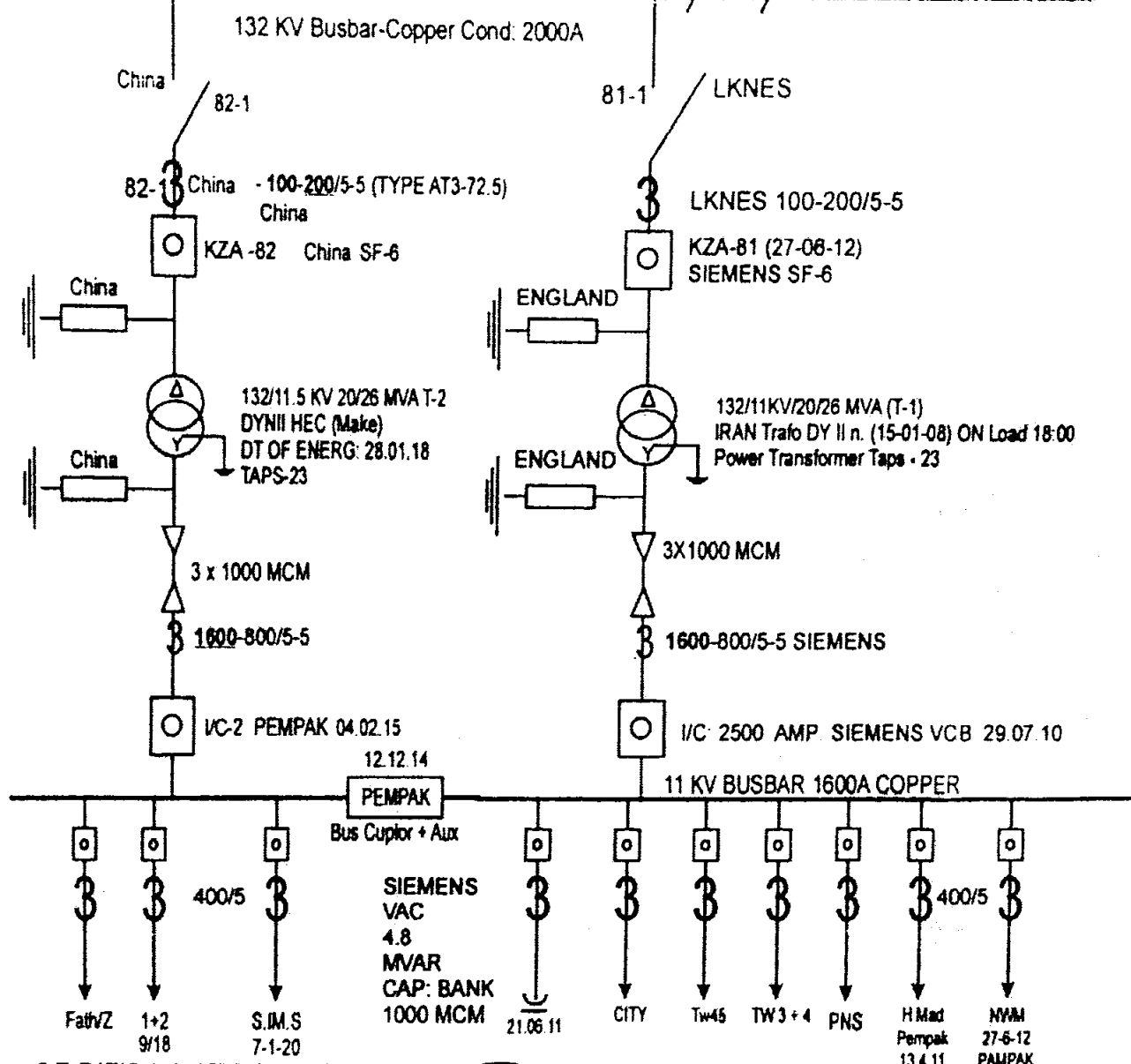
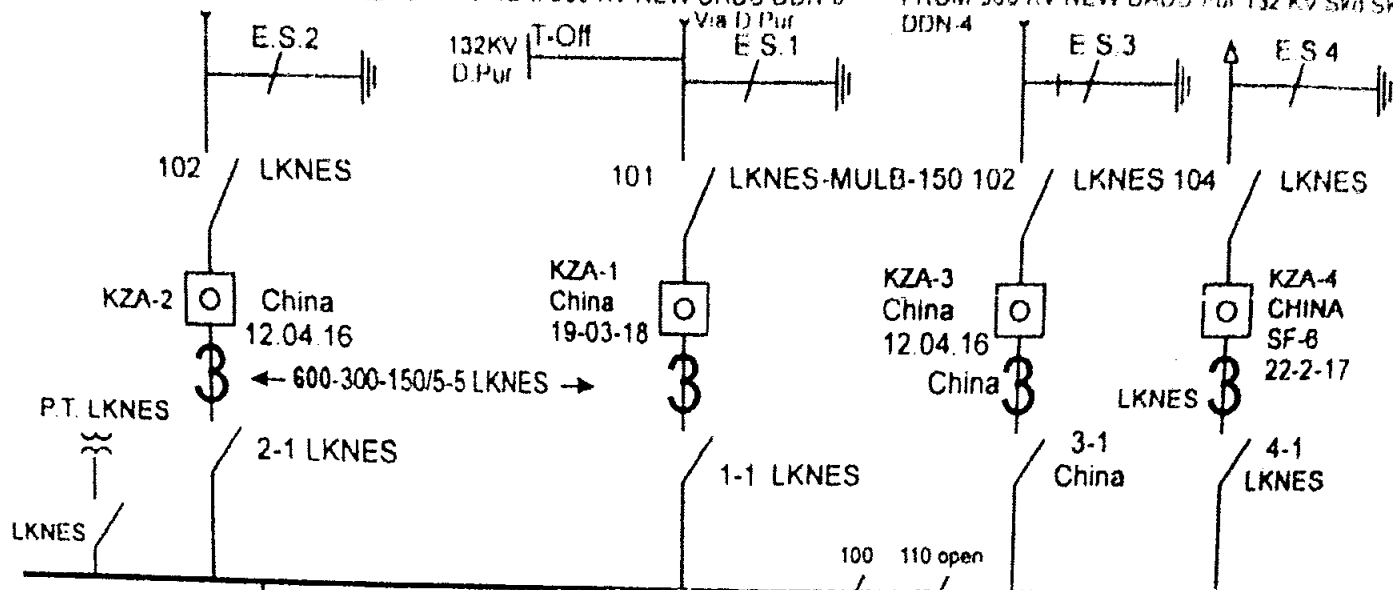
Executive Engineer  
SS&T Division GSO HESCO Nawabshah



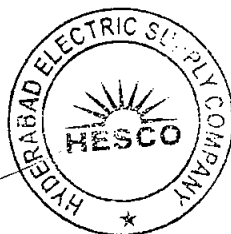
FROM HVDC Converter E2Q1- KZA-2

FROM 500 KV NEW DADU DDN-5

FROM 500 KV NEW DADU For 132 KV SKD SKD 1 DDN-4



C.T. RATIO ALL FEEDERS 200/5  
1+3 NOS. O/G FEEDERS  
1+1 PEMPAK SF-6, 1 Semence, 1 SSE



(1+6 NOS) 11KV Panels 04 SIEMENS VCB 29-07-2010 2 Nos PEMPAK

WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

KAZI AHMED (D.O.C. 17-05-1976)

DRWN BY:

DM-B

APPROVED BY:

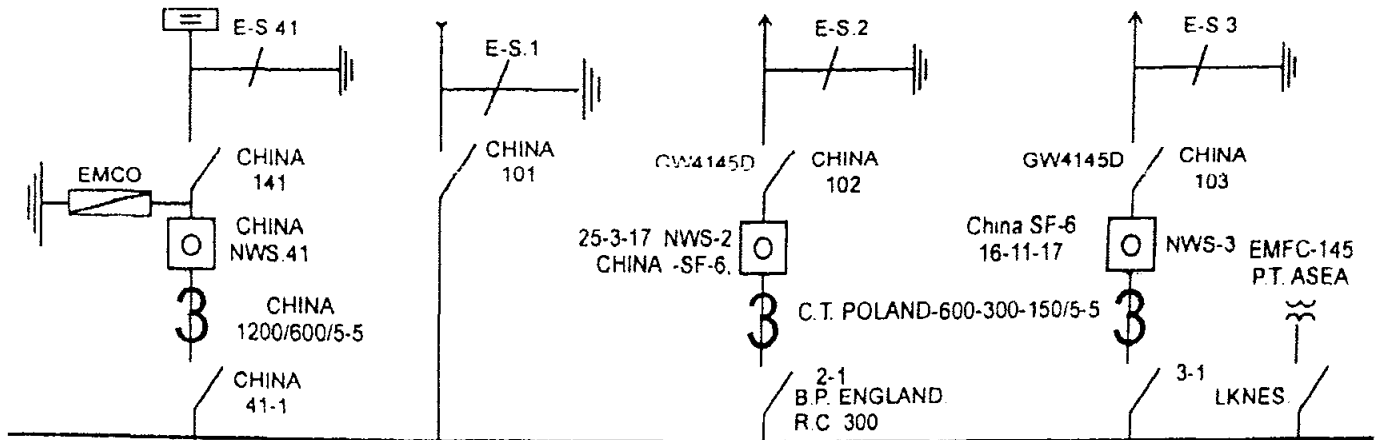
Executive Engineer  
S&T Division GSO HESCO Nawabshah

Date: 11-01-2018  
132 KV Capacitor Bank  
24 MVAR  
Harong China

FOR 132 KV Dour

FOR 132 KV NAWABSHAH-II (SR)

FROM 132 KV Nawabshah Site  
NSS-2



81-1 CHINA  
GWG 145D  
POLAND.400-200-100/5-5  
NWS-81, China SF-6  
dt:22.11.2016

ENGLAND  
132/11KV/31.5/40 MVA (T-1)  
PEL Make  
DYNII TYPE,  
Taps - 23 (22.11.16)

ASEA  
5x1000 MCM.

2400/5  
I/C 1 PEL VCB  
22/11/2016

11 KV BUSBAR 1600A COPPER

PEMPAK  
2013  
Bus Cuptor  
Aux

SIEMENS  
VAC. CAP  
BANK 4.8  
MVAR  
4/0 AWG

Mohini Bz 09-11-18 400/5  
GABAD 400/5  
B J Kuba 400/5  
Society 400/5  
DAUR 400/5  
University 500 mcm

(1 + 6 11 KV Panel) 3 PEMPAK, 3 Siemence VCB 830 A O/g;

SIEMNS  
VAC. CAP  
BANK 2.4  
MVAR  
4/0 AWG

200 KVA  
AUX. TRF.

82-1  
MESSWANDLER. 100-200/5-5  
NWS-82  
Siemens SF-6  
12 11 12

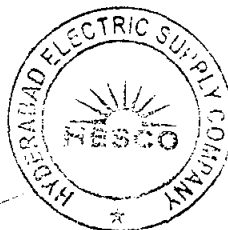
132/11KV/31.5/40 MVA (T-2)  
PEL 08-04-2013  
DYNII TYPE TLPN 7452  
Taps - 23

5 X 1000 MCM.

2400/5  
VC 2 PEL VCB  
23/06/11

400/5  
M Col 8-2-17  
H MK KShah  
MAHABAD HOSPITAL  
N/SHAH Z H  
PMC-1 23.6.11  
MCH 25.8.10  
PMC 2 02.02.16  
PMU-2 16.03.09  
A W Harip

4 KV Panel PAM Pak VCB, 2 Siemence, 3 PEL, 1 SSE, 1 T/EI



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

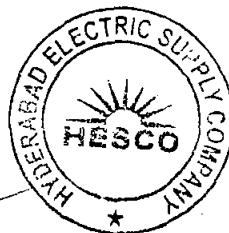
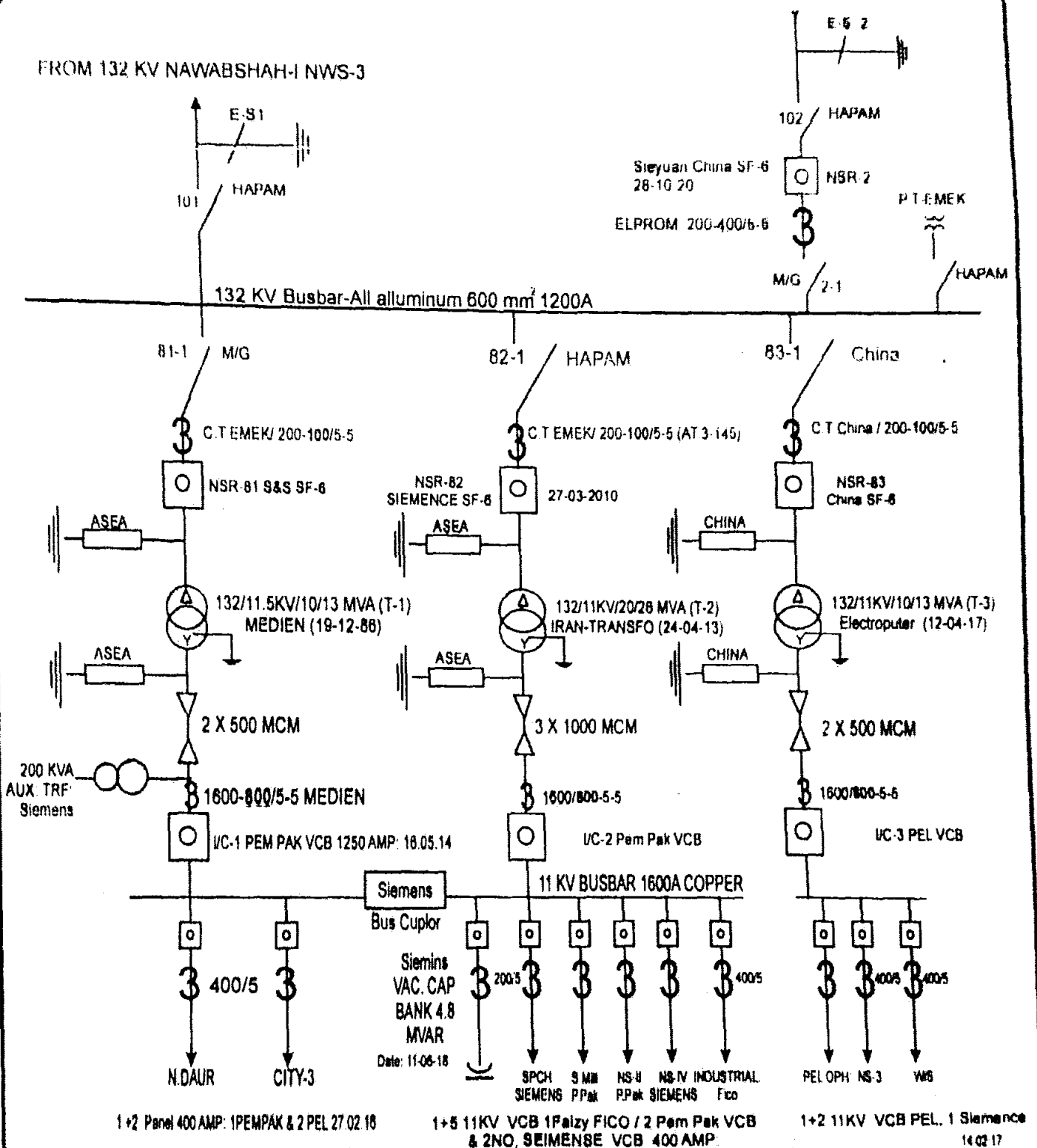
NAWABSHAH-I (SOCIETY D.O.C. 8-03-1979)

DRWN BY:

DM-B

APPROVED BY:

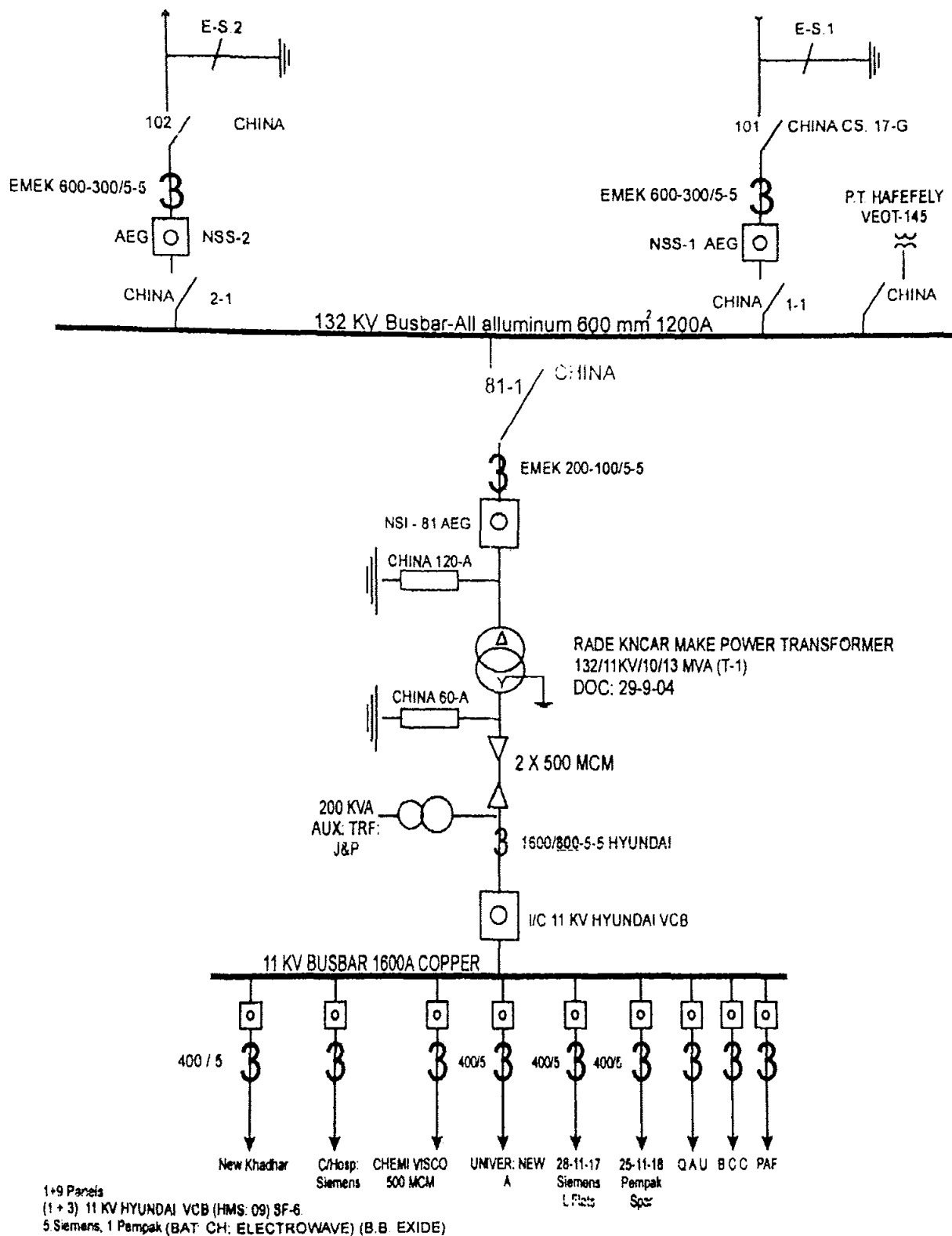
Executive Engineer  
SS&T Division GSO HESCO Nawabshah



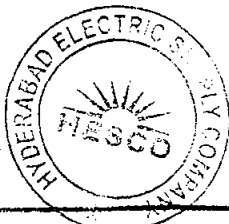
| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)    |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION |                                                         |
| NAWABSHAH-II (SANGHAR ROAD) 09-12-1986         |                                                         |
| DRWN BY:                                       | APPROVED BY:                                            |
| DM-8                                           | Executive Engineer<br>SS&T Division QSO HESCO Nawabshah |

FOR 132 KV NAWABSHAH-I (SOCIETY)

FROM 132 KV SAKRAND (SKD-3)



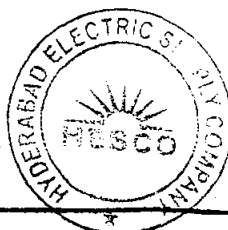
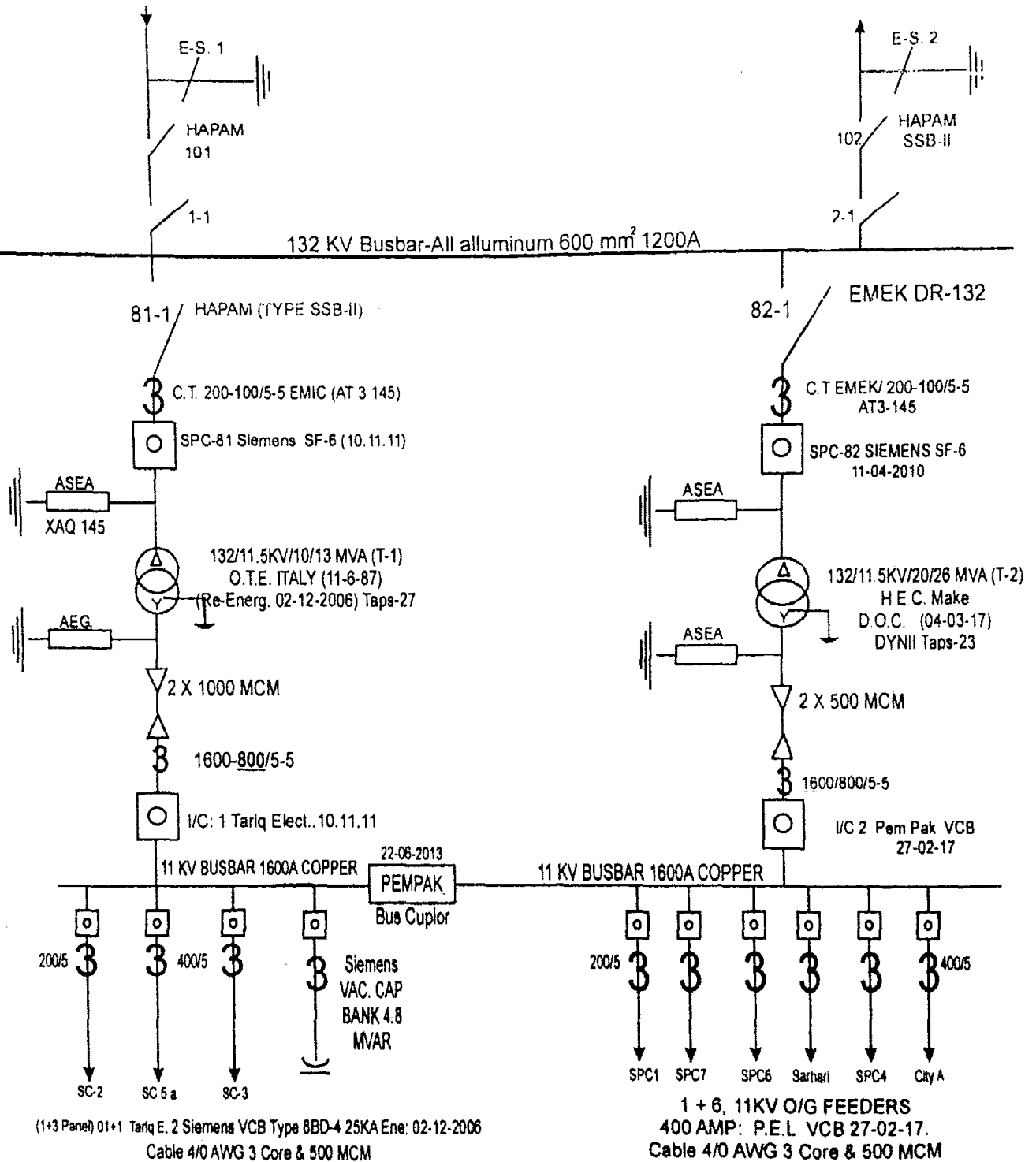
1+9 Panels  
(1 + 3) 11 KV HYUNDAI VCB (HMS: 09) SF-6  
5 Siemens, 1 Pempak (BAT: CH: ELECTROWAVE) (B.B. EXIDE)



| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)    |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION |                                                         |
| NAWABSHAH-III (SITE 10-12-1999)                |                                                         |
| DRWN BY:                                       | APPROVED BY:                                            |
| DM-B                                           | Executive Engineer<br>SS&T Division GSO HESCO Nawabshah |

FROM 132 KV NAWABSHAH-II (N.S.R-2)

FOR 132 KV SANGHAR.(101)



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

SHAHPUR CHAKAR (D.O.C. 11-6-87)

DRWN BY:

APPROVED BY:

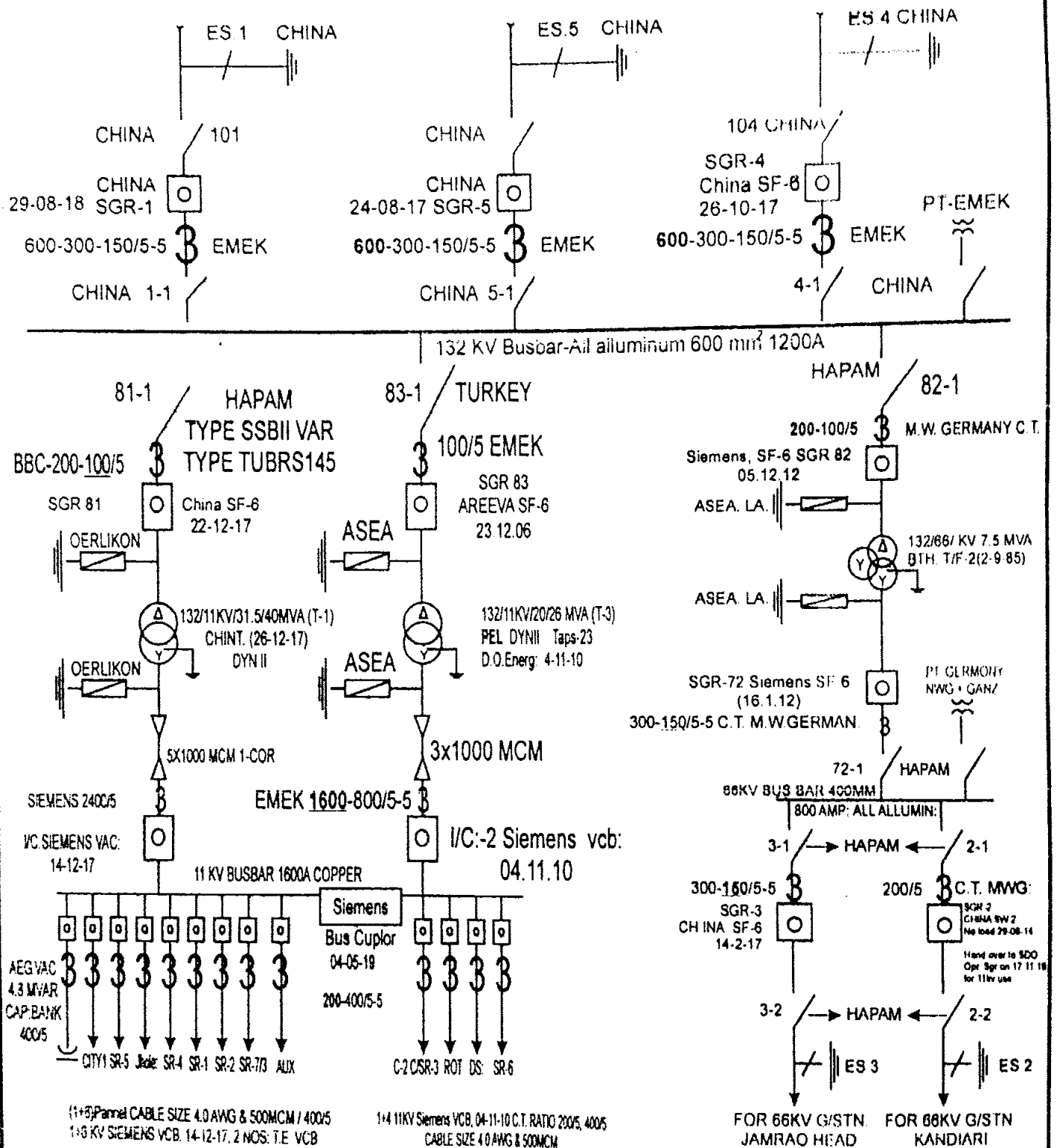
DM-B

Executive Engineer  
SS&T Division GSO HESCO Nawabshah

From 132KV M P Khas  
MPK 8

FOR 132KV S.P CHAKAR  
(102)

FROM: 132 KV Kandhari KND-2 (MPK-2)



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

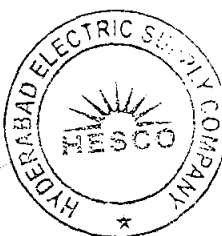
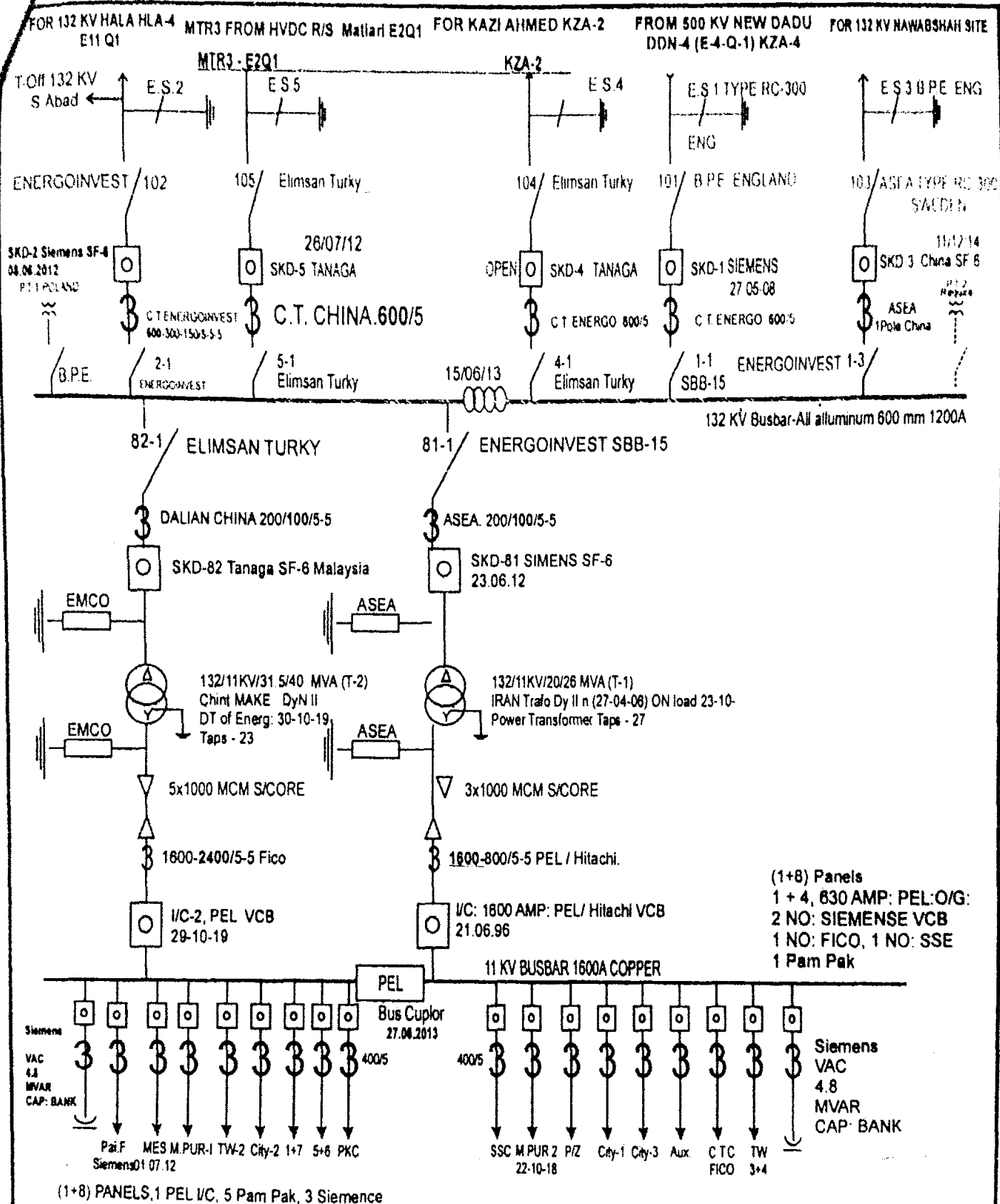
SANGHAR (D.O.C. 28-3-1978)

DRWN BY:

APPROVED BY:

DM-B

Executive Engineer  
88&T Division GSO HESCO Newatlah



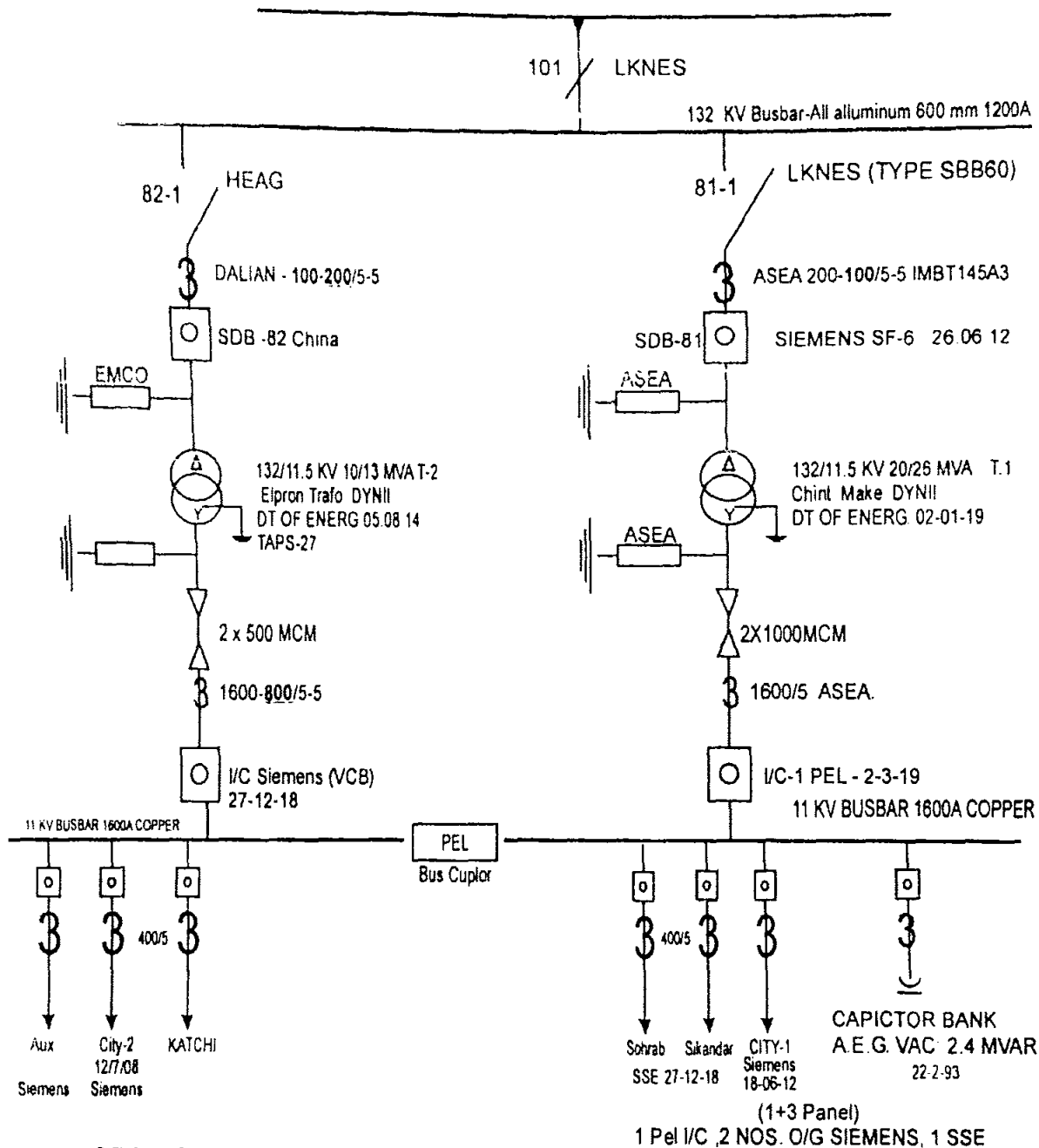
| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)    |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION |                                                         |
| SAKRAND (D.O.C. 1-3-1977)                      |                                                         |
| DRWN BY:                                       | APPROVED BY:                                            |
| DM-B                                           | Executive Engineer<br>SS&T Division GSO HESCO Nawabshah |



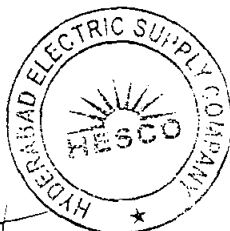
FROM. 132 KV HALA HLA-4 -132KV SAKRAND (SKD-2) - SECTION  
T-OFF Loc No: 264

HLA-4

(SKD-2)



C.T. RATIO ALL FEEDERS 400/5  
CABLE SIZE 4/0 AWG  
(1+3) Panel 400 Amp: 11 KV. 1 SSE, 1+2 Siemens



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

SAEED ABAD (D.O.C. 17-7-1982)

DRWN BY:

APPROVED BY:

DM-B

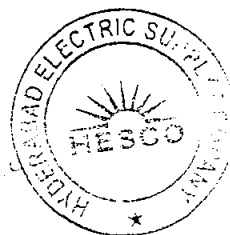
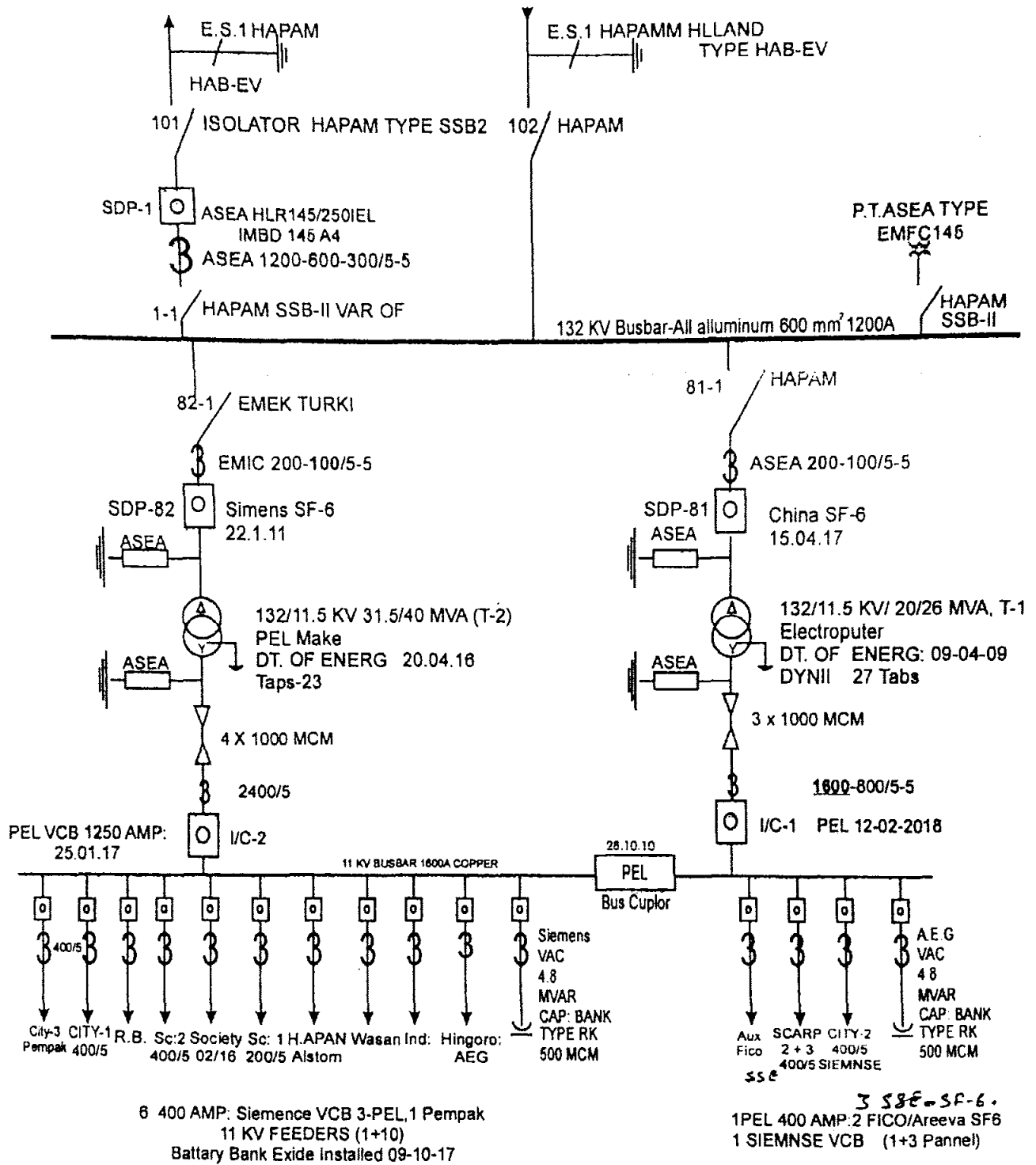
Executive Engineer  
SS&T Division GSO HESCO Nawabshah

8-4-19

D

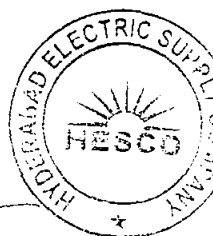
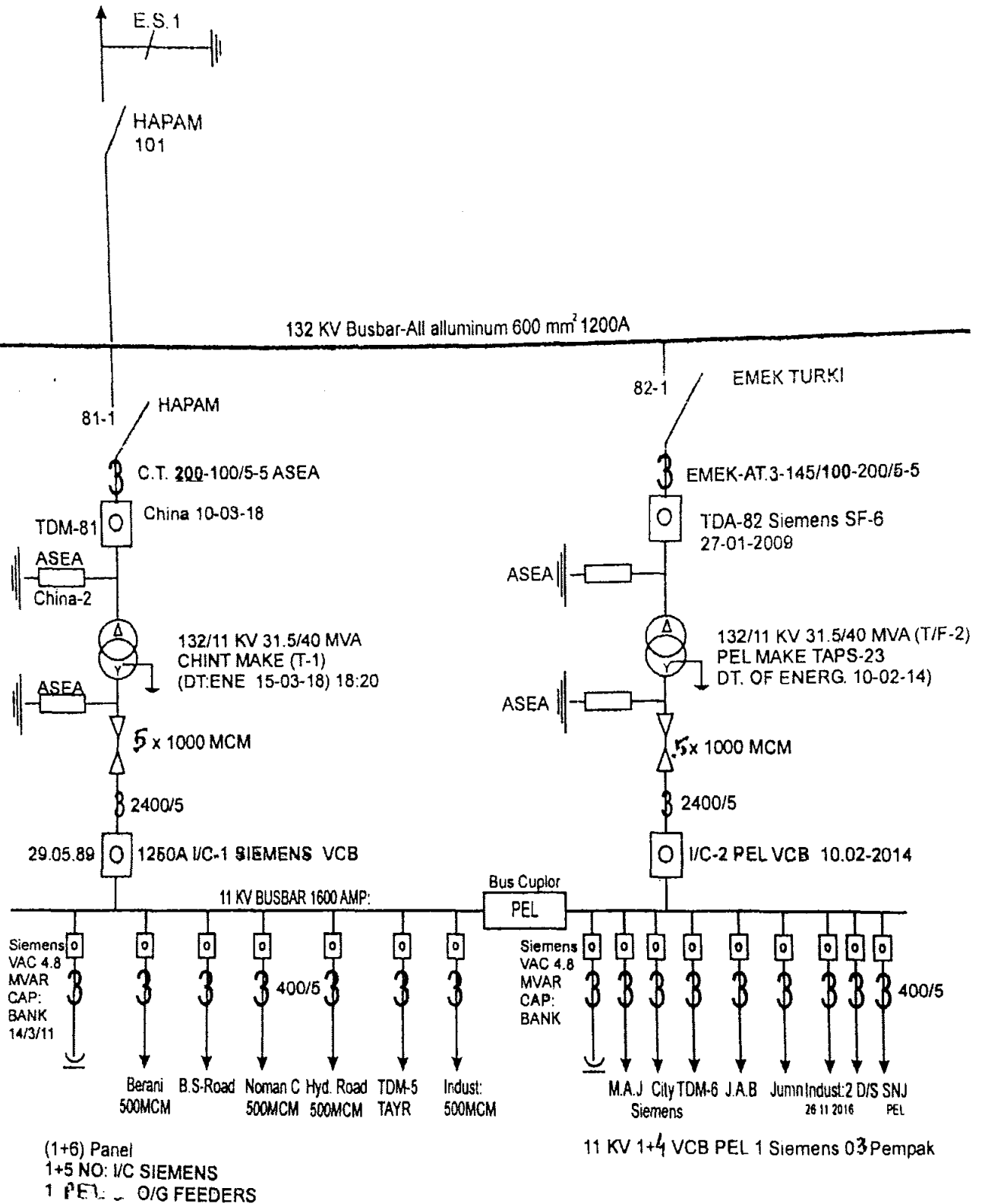
FOR 132 KV TANDO ADAM (101)

FROM 132 KV HALA (HLA-3)



| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)    |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION |                                                         |
| SHAHDADPUR (D.O.C. 28-6-1989)                  |                                                         |
| DRWN BY:                                       | APPROVED BY:                                            |
| DM-B                                           | Executive Engineer<br>SS&T Division GSO HESCO Nawabshah |

FROM 132 KV SHAHDADPUR (SDP-1)



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

TANDO ADAM (D.O.C. 29-05-89)

DRWN BY:

DM-B

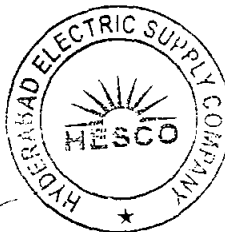
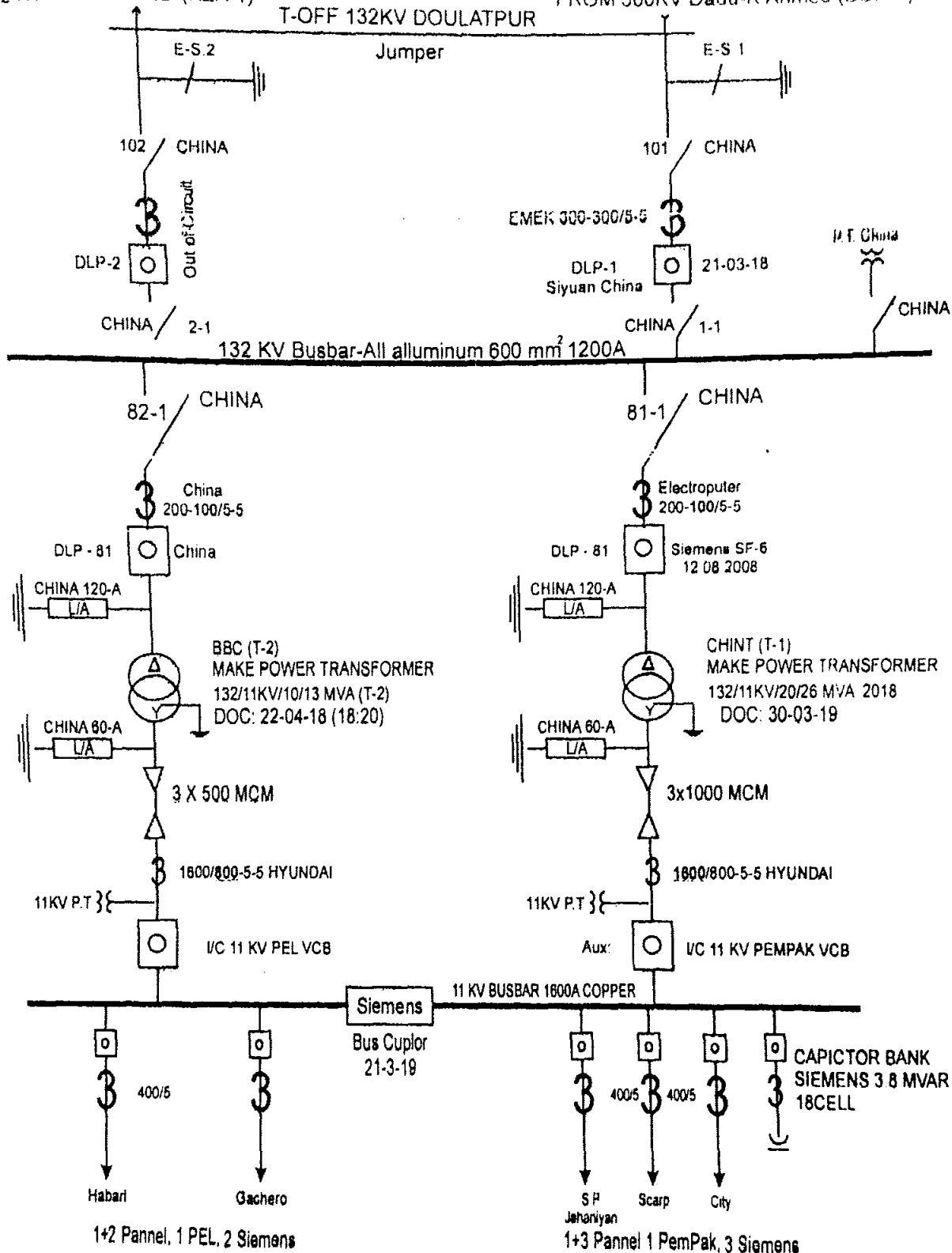
APPROVED BY:

Executive Engineer  
SS&T Division GSO HESCO Nawabshah

FOR 132 KV KAZI AHMED (KZA-1)

FROM 500KV Dadu-K Ahmed (DDN-5) E:5Q1

T-OFF 132KV DOULATPUR



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION

DOULATPUR ( 26-01-1995) 14.10.2016)

DRWN BY:

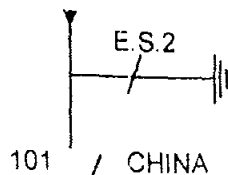
APPROVED BY:

DM-B

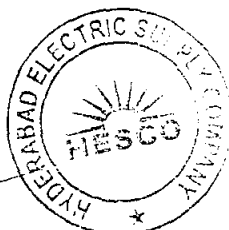
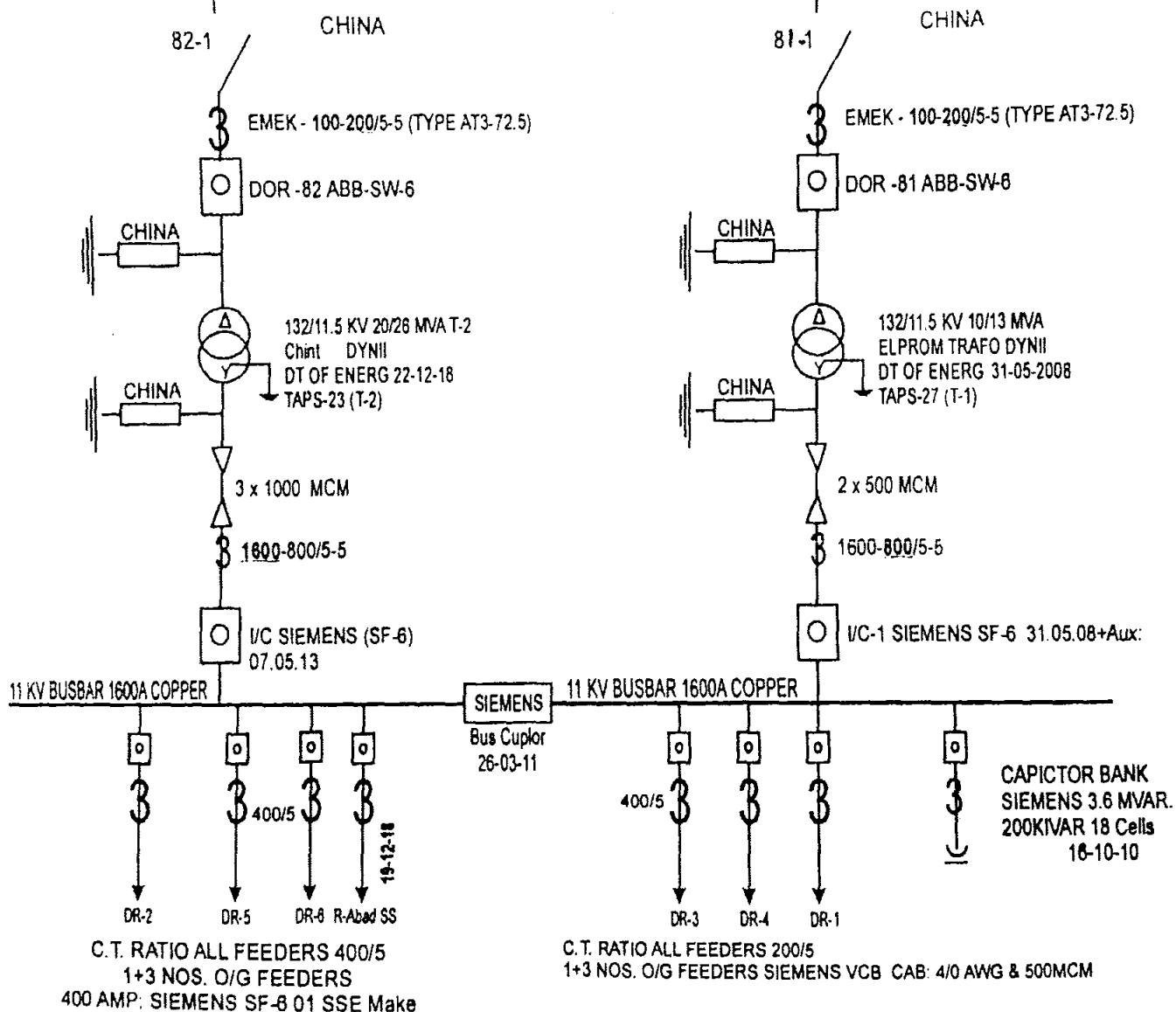
Executive Engineer  
SS&T Division GSO HESCO Nawabshah

6-4-19

FROM 132 KV NAWARSHAH-1 SOCIETY (NWS-2)



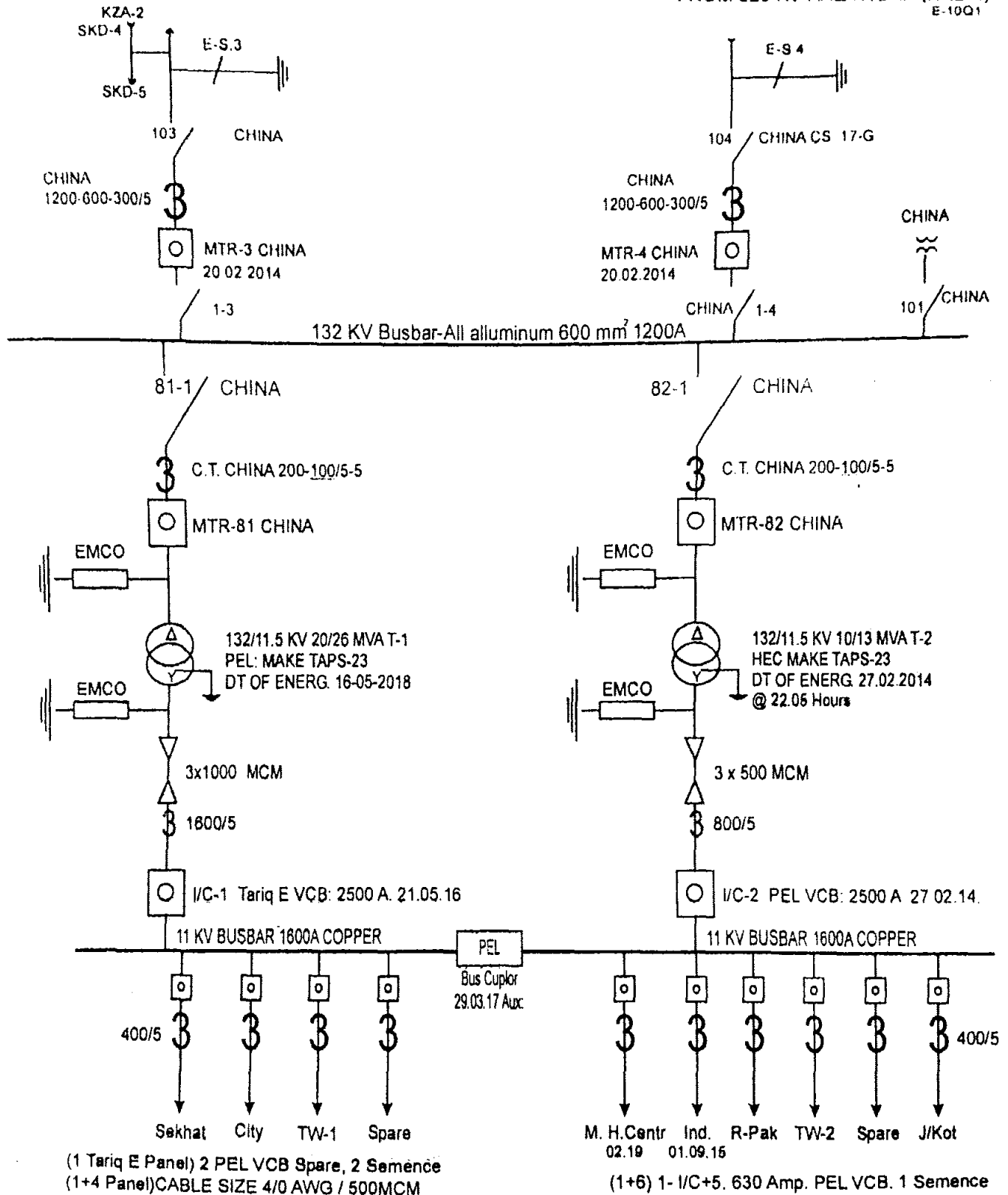
132 KV Busbar-All alluminum 600 mm 1200A



| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)    |                                                         |
|------------------------------------------------|---------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 132 KV GIRD STATION |                                                         |
| DAUR (D.O.C. 31-5-2008)                        |                                                         |
| DRWN BY:                                       | APPROVED BY:                                            |
| DM-B                                           | Executive Engineer<br>SS&T Division GSO HESCO Nawarshah |

FOR 132 KV HVDC Reserve Station Matiari E1Q1  
& For SAKRAND (SKD-5) -KZA-2

FROM 220 KV HALA ROAD (HRD-4)  
E-10Q1



WATER & POWER DEVELOPMENT AUTHORITY (HESCO)

SINGLE LINE KEY DIAGRAM OF 132 KV QIRD STATION

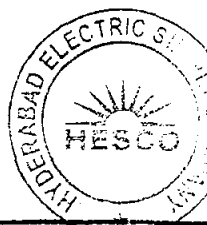
MATIARI (D.O.C. 27-02-2014)

DRWN BY:

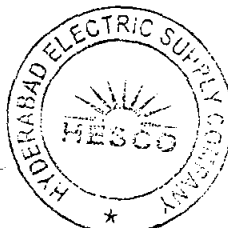
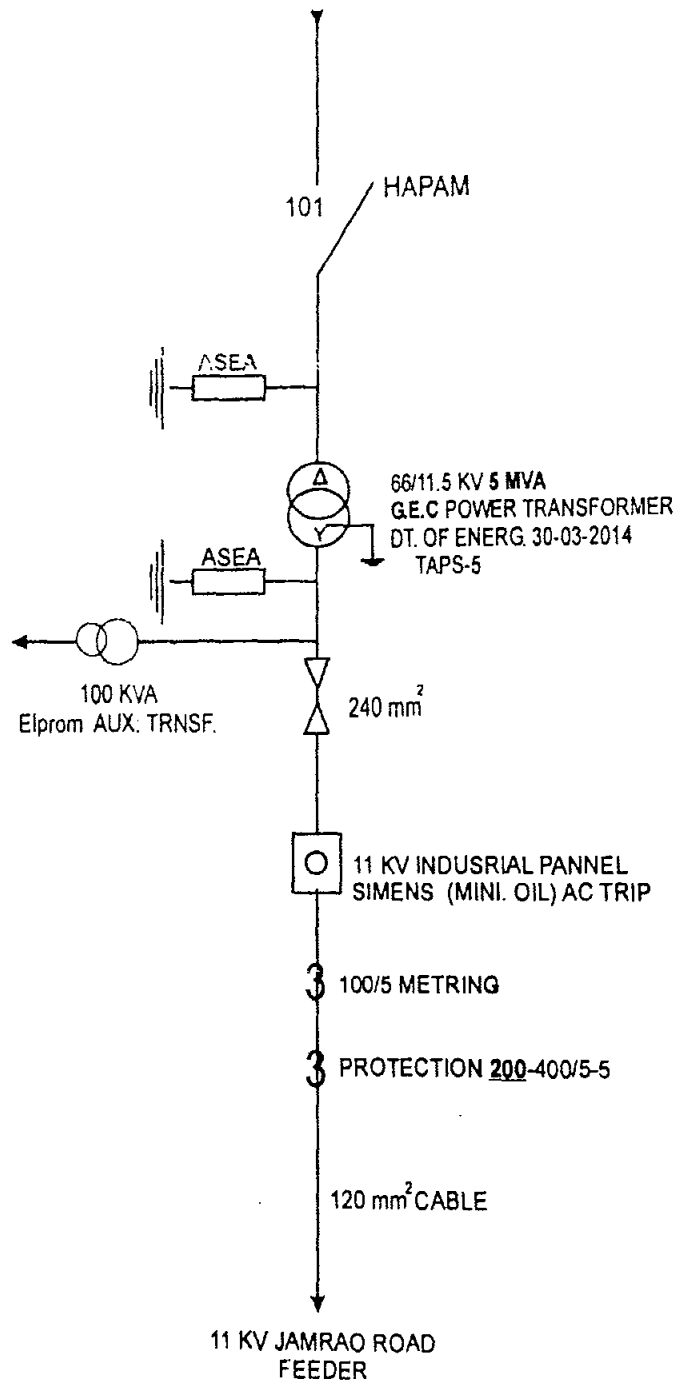
APPROVED BY:

DM-B

Executive Engineer  
SS&T Division GSO HESCO Nawabshah



FROM. 132 K.V SANGHAR (SGR-3)

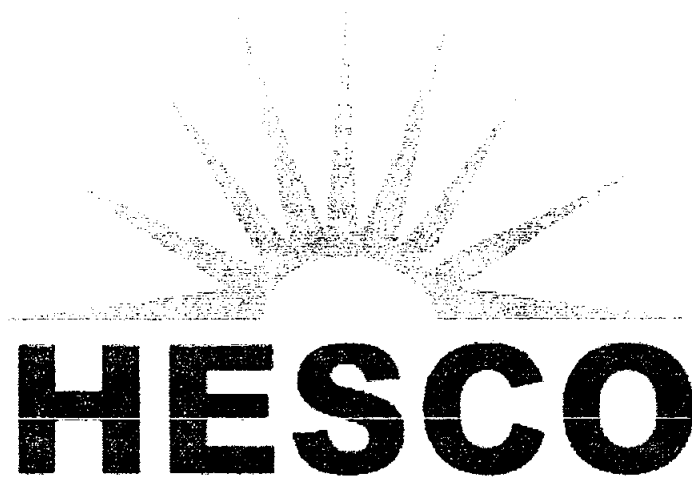


| WATER & POWER DEVELOPMENT AUTHORITY (HESCO)   |                                                          |
|-----------------------------------------------|----------------------------------------------------------|
| SINGLE LINE KEY DIAGRAM OF 66 KV GIRD STATION |                                                          |
| JAMRAO HEAD (D.O.C. 5-6-1999)                 |                                                          |
| DRWN BY:                                      | APPROVED BY;                                             |
| DM-B                                          | Executive Engineer<br>SS&T Division GSO HESCO Nawaabshah |

*Annexure - F*  
*(i)*

**HYDERABAD ELECTRIC SUPPLY COMPANY**

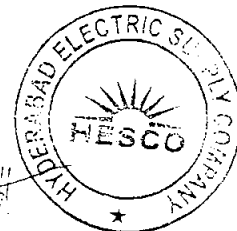
**FEEDER-WISE NUMBER OF  
CONSUMERS**



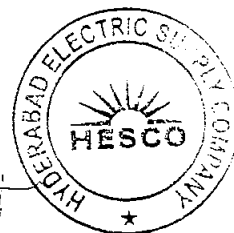


# FEEDER WISE NUMBER OF CONSUMERS OF HESCO

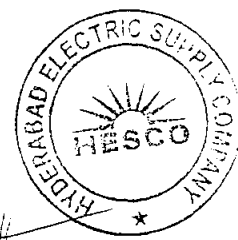
| S# | Grid Name            | Feeder Code | Feeder Name             | Domestic | Commercial | B1 | T/Well | B2_B3 | Bulk Supply | Public Lighting | A3  | Temp Supply | Grand Total |
|----|----------------------|-------------|-------------------------|----------|------------|----|--------|-------|-------------|-----------------|-----|-------------|-------------|
| 1  | 132 KOTRI GTPS       | 11407       | 11KN INDS-2             |          | 4          |    |        | 4     |             | 3               |     |             | 11          |
| 2  | 132 KOTRI GTPS       | 11408       | 11KV INDS-1             | 19       | 17         |    | 1      |       |             |                 |     |             | 37          |
| 3  | 132 KOTRI GTPS       | 11411       | 11KV INDS-3             |          | 1          |    |        | 6     |             | 2               |     |             | 9           |
| 4  | 132 KOTRI GTPS       | 11404       | 11KV INDS-4             |          | 1          |    |        | 6     |             | 1               | 1   |             | 9           |
| 5  | 132 KOTRI GTPS       | 11405       | 11KV INDS-5             | 17       | 5          |    | 3      | 2     | 1           | 1               |     |             | 29          |
| 6  | 132 KOTRI GTPS       | 11414       | 11KV INDS-8             | 116      | 78         |    |        | 1     |             | 1               |     |             | 196         |
| 7  | 132 KOTRI GTPS       | 11403       | 11KV KB-2 INDS-6        |          | 5          |    |        | 5     |             | 1               |     |             | 11          |
| 8  | 132 KOTRI GTPS       | 11410       | INDUSTRIAL NO.11        |          |            |    | 1      | 1     |             |                 |     |             | 2           |
| 9  | 132 KV Dolat Pur     | 26403       | 11KV CITY DAULAT PUR    | 1663     | 517        |    | 50     | 21    | 1           | 1               | 48  |             | 2301        |
| 10 | 132 KV Dolat Pur     | 26405       | 11KV HABARI             | 1629     | 67         |    | 19     | 2     |             |                 | 28  |             | 1745        |
| 11 | 132 KV Dolat Pur     | 26407       | 11KV NEW GECHERO        | 929      | 54         |    | 115    | 3     |             |                 | 30  |             | 1131        |
| 12 | 132 KV Dolat Pur     | 26404       | 11KV SCARP 11+12        | 471      | 16         |    | 138    |       |             |                 | 10  |             | 635         |
| 13 | 132 KV Dolat Pur     | 26406       | 11KV SHAHPUR JAHANIA    | 1352     | 210        |    | 19     | 2     |             | 1               | 27  | 1           | 1612        |
| 14 | 132/66/11kv Umer Kot | 39804       | 11KV BHAGAL             | 2710     | 104        |    | 5      | 1     |             |                 | 16  |             | 2836        |
| 15 | 132/66/11kv Umer Kot | 39808       | 11KV CANTT              |          |            |    |        |       | 1           |                 |     |             | 1           |
| 16 | 132/66/11kv Umer Kot | 39803       | 11KV CHORE              | 4615     | 324        |    | 23     | 8     | 6           | 2               | 97  |             | 5075        |
| 17 | 132/66/11kv Umer Kot | 39801       | 11KV CITY-I             | 5523     | 1724       | 1  | 9      | 16    |             | 6               | 64  |             | 7343        |
| 18 | 132/66/11kv Umer Kot | 39809       | 11KV CITY-II            | 1620     | 239        |    | 5      | 14    |             | 1               | 59  |             | 1948        |
| 19 | 132/66/11kv Umer Kot | 39810       | 11KV CITY-III           | 4922     | 383        |    | 3      |       |             |                 | 9   |             | 5317        |
| 20 | 132/66/11kv Umer Kot | 39802       | 11KV DHORO NARO         | 2771     | 292        |    | 32     |       |             | 1               | 40  |             | 3126        |
| 21 | 132/66/11kv Umer Kot | 39806       | 11KV MIR M. TALPUR      | 2565     | 100        |    | 26     | 2     |             | 2               | 29  |             | 2724        |
| 22 | 132/66/11kv Umer Kot | 39807       | 11KV SYED MUZAFFER HUS  | 2816     | 115        |    | 24     | 1     |             |                 | 40  |             | 2996        |
| 23 | 132/66kv Kandhari    | 30209       | 11KV AIRPORT            |          |            |    |        |       | 1           |                 |     |             | 1           |
| 24 | 132/66kv Kandhari    | 30202       | 11KV CITY               | 1164     | 347        |    | 4      | 5     |             | 2               | 40  |             | 1562        |
| 25 | 132/66kv Kandhari    | 30206       | 11KV K-1                | 391      | 26         |    | 40     |       |             |                 | 42  |             | 499         |
| 26 | 132/66kv Kandhari    | 30207       | 11KV K-2                | 903      | 15         |    |        | 1     |             |                 |     |             | 919         |
| 27 | 132/66kv Kandhari    | 30205       | 11KV K-4                | 1571     | 206        |    | 42     | 9     | 1           |                 | 44  |             | 1873        |
| 28 | 132/66kv Kandhari    | 30204       | 11KV LBOD K-3           | 3160     | 444        |    | 3      | 3     |             | 1               | 47  |             | 3658        |
| 29 | 132/66kv Kandhari    | 30208       | 11KV PERU MAL           | 1318     | 110        |    | 3      | 3     |             |                 | 9   |             | 1443        |
| 30 | 132/66kv Kandhari    | 30201       | 11KV SINDHRI            | 3062     | 408        |    | 53     | 3     | 1           | 1               | 63  |             | 3591        |
| 31 | 132/66kv Matlari     | 32502       | 11KV CITY               | 4023     | 1034       |    | 53     | 14    |             | 3               | 123 | 1           | 5251        |
| 32 | 132/66kv Matlari     | 32508       | 11KV HEALTH SERVICES    |          | 1          |    |        | 3     |             | 1               |     |             | 5           |
| 33 | 132/66kv Matlari     | 32507       | 11KV INDUSTRIAL         | 2        | 14         |    |        | 12    |             |                 |     | 1           | 29          |
| 34 | 132/66kv Matlari     | 32503       | 11KV J.KOT              | 2245     | 229        |    | 95     | 3     | 1           |                 | 56  |             | 2629        |
| 35 | 132/66kv Matlari     | 32504       | 11KV RADIO PAKISTAN     |          |            |    |        |       | 1           |                 |     |             | 1           |
| 36 | 132/66kv Matlari     | 32501       | 11KV SEKHAT             | 3492     | 466        |    | 205    | 13    |             |                 | 67  | 1           | 4244        |
| 37 | 132/66kv Matlari     | 32505       | 11KV TUBE WELL-1        | 3908     | 447        |    | 125    | 7     | 2           | 1               | 81  |             | 4571        |
| 38 | 132/66kv Matlari     | 32506       | 11KV TUBE WELL-2        | 1535     | 149        |    | 91     | 6     |             |                 | 31  |             | 1812        |
| 39 | 132/66kv Noukot      | 51904       | 11KV JHODO EXPRESS FEE  | 2488     | 301        |    |        | 5     |             | 4               | 24  |             | 2822        |
| 40 | 132/66kv Noukot      | 51901       | 11KV JHODO-1            | 2944     | 192        |    | 8      | 3     |             | 3               | 35  |             | 3185        |
| 41 | 132/66kv Noukot      | 51903       | 11KV KHETLARI           | 1040     | 55         |    | 4      |       | 1           |                 | 25  |             | 1125        |
| 42 | 132/66kv Noukot      | 51902       | 11KV N.KOT              | 4497     | 911        |    | 21     | 22    |             | 7               | 77  | 2           | 5537        |
| 43 | 132/66kv Samaro      | 43610       | 11KV CHEEMA FARM        | 1465     | 190        |    | 5      | 1     |             |                 |     |             | 1661        |
| 44 | 132/66kv Samaro      | 43603       | 11KV KUNRI              | 1696     | 56         |    | 4      |       |             |                 | 9   |             | 1765        |
| 45 | 132/66kv Samaro      | 43608       | 11KV NAWAB              | 997      | 75         |    | 31     |       |             |                 | 47  |             | 1150        |
| 46 | 132/66kv Samaro      | 43602       | 11KV S.ROAD             | 143      | 44         |    | 6      |       |             |                 | 12  |             | 205         |
| 47 | 132/66kv Samaro      | 43609       | 11KV S-2                | 2025     | 70         |    | 10     | 1     | 2           |                 | 10  |             | 2118        |
| 48 | 132/66kv Samaro      | 43604       | 11KV SAMARO             | 1904     | 539        |    | 6      | 4     | 2           | 2               | 41  |             | 2498        |
| 49 | 132/66kv Samaro      | 43605       | 11KV SARHANDI (Pithoro) | 1250     | 111        |    | 10     | 1     |             | 1               | 24  |             | 1397        |
| 50 | 132/66kv Talhar      | 116205      | 11KV CHANNAL            | 1054     | 158        |    | 4      | 5     |             | 1               | 4   |             | 1226        |
| 51 | 132/66kv Talhar      | 38801       | 11KV CITY               | 1774     | 147        |    | 12     | 8     | 2           | 1               | 13  |             | 1957        |
| 52 | 132/66kv Talhar      | 38804       | 11KV DEHI               | 2729     | 330        |    | 4      | 4     |             | 2               | 48  |             | 3117        |
| 53 | 132/66kv Talhar      | 38806       | 11KV INDUSTRIAL         |          | 3          |    |        | 22    |             |                 |     |             | 25          |
| 54 | 132/66kv Talhar      | 38803       | 11KV RAJO KHANANI       | 1579     | 283        |    | 28     | 10    |             | 1               | 23  |             | 1924        |
| 55 | 132/66kv Talhar      | 38802       | 11KV SUGAR MILLS        | 2415     | 726        |    | 3      | 11    | 1           | 2               | 28  |             | 3186        |
| 56 | 132kv Badin          | 26608       | 11KV BADIN CANTT        |          |            |    |        |       | 1           |                 | 1   |             | 2           |
| 57 | 132kv Badin          | 26601       | 11KV CITY-I             | 2869     | 1115       |    | 1      | 23    | 3           | 4               | 63  |             | 4078        |
| 58 | 132kv Badin          | 26607       | 11KV CITY-II            | 3539     | 1150       |    |        | 7     | 3           | 1               | 73  | 1           | 4774        |
| 59 | 132kv Badin          | 26604       | 11KV GOLARCHI           | 2075     | 154        | 1  | 1      | 10    | 1           |                 | 23  |             | 2266        |
| 60 | 132kv Badin          | 26602       | 11KV KHOSHKI            | 5219     | 630        |    | 8      | 22    |             | 4               | 56  |             | 5939        |
| 61 | 132kv Badin          | 26603       | 11KV P.A.F.             | 1351     | 225        |    |        | 4     | 3           | 1               | 68  |             | 1662        |
| 62 | 132kv Badin          | 26606       | 11KV PERO LASHARI       | 1447     | 104        |    | 2      | 9     |             |                 | 24  |             | 1586        |
| 63 | 132kv Badin          | 26605       | 11KV SEERANI            | 1110     | 65         |    |        | 1     |             |                 | 21  |             | 1197        |



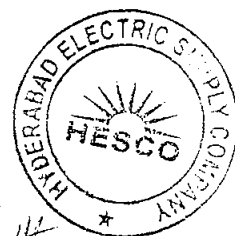
|     |                         |        |                            |      |      |    |     |    |    |   |     |      |
|-----|-------------------------|--------|----------------------------|------|------|----|-----|----|----|---|-----|------|
| 64  | 132kv Badin             | 26609  | 11KV SHAHEEN CORPORATION   | 1    |      |    | 3   |    |    |   |     | 4    |
| 65  | 132KV Bhan Saeedabad    | 90502  | 11KV BHAN-I                | 880  | 25   |    | 60  | 3  | 1  |   | 54  | 1023 |
| 66  | 132kv Bhulri Shah Karim | 45301  | 11 KV BANNU                | 1702 | 246  |    | 18  | 8  |    |   | 19  | 1993 |
| 67  | 132kv Bhulri Shah Karim | 45303  | 11KV DARO                  | 1695 | 390  |    | 10  | 13 |    | 1 | 14  | 2128 |
| 68  | 132kv Bhulri Shah Karim | 45302  | 11KV JHOK SHARIF           | 1340 | 329  |    | 3   | 21 |    | 2 | 17  | 1712 |
| 69  | 132KV Bypass HYD        | 116908 | 11KV ABDULLAH MALL         |      | 1    |    |     |    |    |   |     | 1    |
| 70  | 132KV Bypass HYD        | 116905 | 11KV AL ABBAS              | 1552 | 90   |    |     |    |    |   |     | 1642 |
| 71  | 132KV Bypass HYD        | 116904 | 11KV MEMON SOCIETY         | 1538 | 28   |    |     |    |    | 1 | 2   | 1569 |
| 72  | 132KV Bypass HYD        | 116906 | 11KV PHASE-I               | 2905 | 425  |    |     |    |    |   | 1   | 3331 |
| 73  | 132KV Bypass HYD        | 116907 | 11KV SINDHO                | 2630 | 127  |    |     |    |    |   | 4   | 2761 |
| 74  | 132KV Bypass HYD        | 116902 | 11KV ABDULLAH TOWN         | 1642 | 163  |    |     |    | 3  |   |     | 1815 |
| 75  | 132KV Bypass HYD        | 116903 | 11KV DATA NAGAR            | 1305 | 65   |    |     | 2  |    | 1 | 8   | 1381 |
| 76  | 132KV Chamber           | 107801 | 11KV CHAMBER FEEDER        | 3306 | 230  |    | 76  | 11 |    |   | 44  | 3667 |
| 77  | 132KV Chamber           | 107802 | 11KV GHULAB LEGHAR FEE     | 2399 | 228  |    | 41  |    |    |   | 25  | 2693 |
| 78  | 132KV Chamber           | 107805 | 11KV KAPRI MORI            | 475  | 53   |    | 42  |    |    |   |     | 570  |
| 79  | 132KV Chamber           | 107803 | 11KV SANGER CHANG          | 2395 | 405  |    | 62  | 4  |    |   | 26  | 2892 |
| 80  | 132KV Chamber           | 107804 | 11KV SUGAR MILL FEEDER     | 156  | 27   |    |     | 1  |    |   |     | 184  |
| 81  | 132KV DADA BHOY         | 72301  | 132KV DADA BHOY            |      |      |    |     | 1  |    |   |     | 1    |
| 82  | 132kv Digri             | 26701  | 11KV DEH-170               | 1397 | 59   | 1  | 6   | 2  |    |   | 43  | 1508 |
| 83  | 132kv Digri             | 26702  | 11KV DIGRI                 | 3730 | 574  |    | 31  | 8  |    | 3 | 79  | 4425 |
| 84  | 132kv Digri             | 26706  | 11KV DIGRI-2               | 2495 | 1090 |    | 24  | 5  |    | 1 | 17  | 3632 |
| 85  | 132kv Digri             | 26703  | 11KV DUMBELO               | 2673 | 398  |    | 22  | 4  |    | 1 | 40  | 4141 |
| 86  | 132kv Digri             | 26704  | 11KV KACHELO               | 1636 | 118  |    | 44  | 1  |    |   | 28  | 1827 |
| 87  | 132kv Digri             | 26705  | 11KV N.KOT                 | 1306 | 67   |    | 26  |    |    | 1 | 19  | 1419 |
| 88  | 132kv Dour              | 56302  | 11KV BANDHI                | 16   | 4    |    | 3   |    |    |   |     | 23   |
| 89  | 132kv Dour              | 56303  | 11KV DR-1                  | 1902 | 395  |    | 58  | 10 | 1  | 3 | 39  | 2406 |
| 90  | 132kv Dour              | 56304  | 11KV DR-2                  | 3937 | 1025 |    | 30  | 19 | 1  | 5 | 94  | 5111 |
| 91  | 132kv Dour              | 56305  | 11KV DR-3                  | 1318 | 127  |    | 37  | 8  |    | 1 | 37  | 2028 |
| 92  | 132kv Dour              | 56306  | 11KV DR-4                  | 2595 | 215  |    | 27  |    |    |   | 60  | 2897 |
| 93  | 132kv Dour              | 56307  | 11KV DR-5                  | 580  | 19   |    | 22  | 2  |    |   | 25  | 648  |
| 94  | 132kv Dour              | 56308  | 11KV DR-6                  | 1838 | 110  |    | 53  | 3  | 1  |   | 61  | 2066 |
| 95  | 132kv Dour              | 56311  | 11KV RAZA ABAD             | 1478 | 165  |    |     | 9  |    |   | 2   | 1655 |
| 96  | 132KV ESSA CEMENT FACT  | 80501  | 132KV ESSA CEMENT FACTORY  |      | 1    |    |     |    |    |   |     | 1    |
| 97  | 132kv G.Shahbaz         | 65603  | 11 KHUDA KI BASTI          | 1819 | 95   |    | 1   | 2  | 1  | 1 | 19  | 1938 |
| 98  | 132kv G.Shahbaz         | 65605  | 11 MEHRAN                  | 24   | 16   |    | 2   |    | 20 | 1 | 37  | 100  |
| 99  | 132kv G.Shahbaz         | 65604  | 11 MUSLIM TOWN             | 4040 | 507  |    | 3   | 7  | 4  |   | 33  | 4596 |
| 100 | 132kv G.Shahbaz         | 65602  | 11 UNIVERSITY              | 829  | 114  |    | 7   | 12 |    |   | 12  | 980  |
| 101 | 132kv G.Shahbaz         | 65606  | 11KV BHITTAI COLONY        | 2622 | 220  |    |     | 5  |    |   | 4   | 2851 |
| 102 | 132kv G.Shahbaz         | 65609  | 11KV MUHAMMADI             | 86   | 7    |    |     |    |    |   |     | 93   |
| 103 | 132kv G.Shahbaz         | 65608  | 11KV NEW INDUSTRIAL        |      | 2    |    | 3   | 2  | 3  |   | 8   | 18   |
| 104 | 132kv G.Shahbaz         | 65607  | 11KV ORIENT                |      |      |    |     | 1  |    |   |     | 1    |
| 105 | 132KV GARHO             | 61001  | 11KV CITY                  | 3    | 14   |    |     | 1  | 1  |   |     | 19   |
| 106 | 132KV GARHO             | 61003  | 11KV UDASI                 |      | 1    |    |     | 2  |    |   |     | 3    |
| 107 | 132kv Ghangramori       | 102908 | 11KV BOULVE VORD           |      | 1    |    |     |    |    |   |     | 1    |
| 108 | 132kv Ghangramori       | 102902 | 11KV INDUS                 | 2    | 20   |    | 1   | 33 |    | 3 | 1   | 60   |
| 109 | 132kv Ghangramori       | 102905 | 11KV NEW LIQUAT COLON      | 3512 | 1085 |    |     | 22 |    |   | 12  | 4632 |
| 110 | 132kv Ghangramori       | 102903 | 11KV NEW PARETABAD         | 2035 | 583  |    | 30  | 18 |    | 4 | 61  | 2741 |
| 111 | 132kv Ghangramori       | 102906 | 11KV OUTGOING INDUS DYEING |      | 1    |    |     |    |    |   |     | 1    |
| 112 | 132kv Ghangramori       | 102907 | 11KV PERATABAD-4           | 5599 | 1084 |    | 7   | 1  |    |   | 6   | 6697 |
| 113 | 132kv Ghangramori       | 102909 | 11KV QUAIDABAD             | 2494 | 311  |    |     | 30 |    |   |     | 2835 |
| 114 | 132kv Ghangramori       | 102904 | 11KV TANDO HYDER           | 1661 | 332  |    | 32  | 16 |    | 3 | 226 | 2272 |
| 115 | 132kv Ghangramori       | 102901 | 11KV TANDO YOUSUF          | 2559 | 400  |    |     | 5  | 1  |   | 6   | 2971 |
| 116 | 132kv Golarchi          | 102802 | 11KV AHMED RAJU            | 2512 | 78   |    | 1   | 6  |    |   | 24  | 2621 |
| 117 | 132kv Golarchi          | 102807 | 11KV BAKAR SHAH JILANI     |      | 1    |    |     | 13 |    |   |     | 14   |
| 118 | 132kv Golarchi          | 102801 | 11KV CITY                  | 3084 | 964  |    |     | 16 |    |   | 42  | 4106 |
| 119 | 132kv Golarchi          | 102808 | 11KV GHAREEB SONS          |      | 1    |    |     | 4  |    |   |     | 5    |
| 120 | 132kv Golarchi          | 102804 | 11KV KARIO GANHWAR         | 1491 | 268  |    | 5   | 24 |    |   | 22  | 1810 |
| 121 | 132kv Golarchi          | 102803 | 11KV KHOR WAH              | 682  | 49   |    |     | 6  |    |   | 5   | 742  |
| 122 | 132kv Golarchi          | 102806 | 11KV KOHISTANI             |      | 1    |    |     | 15 |    |   |     | 16   |
| 123 | 132kv Golarchi          | 102805 | 11KV MUHAMMAD IQBAL        |      |      |    |     | 22 |    |   |     | 22   |
| 124 | 132kv Hala              | 5601   | 11KV BHIT SHAH             | 3792 | 291  | 7  | 199 | 10 | 1  | 3 | 67  | 4370 |
| 125 | 132kv Hala              | 5612   | 11KV CITY-I                | 3207 | 928  | 10 | 36  | 7  |    |   | 35  | 4225 |
| 126 | 132kv Hala              | 5613   | 11KV CITY-II               | 1417 | 582  | 10 | 17  | 1  |    | 1 | 55  | 2083 |
| 127 | 132kv Hala              | 5617   | 11KV CITY-III              | 3712 | 422  | 19 | 74  | 4  |    |   |     | 4232 |
| 128 | 132kv Hala              | 5618   | 11KV EXPRESS               | 1803 | 159  | 1  | 75  | 1  |    |   | 33  | 2072 |
| 129 | 132kv Hala              | 5615   | 11KV MANSOORA              | 1555 | 75   | 6  | 70  | 4  | 1  |   | 46  | 1757 |
| 130 | 132kv Hala              | 5603   | 11KV OLD HALA              | 481  | 9    | 1  | 103 | 2  | 2  |   | 16  | 614  |
| 131 | 132kv Hala              | 5604   | 11KV SAEED ABAD            | 1093 | 99   | 2  | 100 | 2  |    |   | 37  | 1333 |



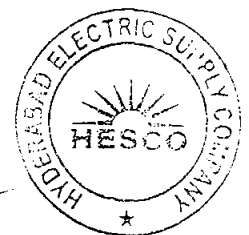
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|-----|------------------------|--------|---------------------------------|------|-----|---|-----|----|---|----|-----|-----|------|
| 132 | 132kv Hala             | 5602   | 11KV SHAH ABDUL LATIF           | 4112 | 622 | 7 | 13  | 12 | 1 | 1  | 34  | 186 | 4988 |
| 133 | 132kv Hala             | 5616   | 11KV SHAH HABIB                 | 311  | 5   |   | 201 |    |   |    | 7   | 1   | 525  |
| 134 | 132kv Hala             | 5609   | 11KV TUBE WELL-1                | 1    |     |   |     |    |   |    |     |     | 1    |
| 135 | 132kv Hala             | 5610   | 11KV TUBE WELL-3                | 1185 | 102 | 6 | 262 |    |   |    | 41  | 2   | 1598 |
| 136 | 132kv Hala             | 5611   | 11KV TUBE WELL-4                | 701  | 40  | 1 | 111 | 5  | 1 | 4  | 23  | 1   | 887  |
| 137 | 66KV HVDC NTDC CONV S  | 121201 | 132KV HVDC GRID STATION MATIARI |      |     |   |     |    | 1 |    |     |     | 1    |
| 138 | 132KV Jamshoro         | 7211   | 11KV ALLAMA I.I.KAZI            | 2870 | 258 |   | 5   | 3  |   |    | 7   |     | 3143 |
| 139 | 132KV Jamshoro         | 7214   | 11KV CHINA                      | 1    |     |   |     |    |   |    |     |     | 1    |
| 140 | 132KV Jamshoro         | 7201   | 11KV L.M.C                      | 1332 | 117 |   | 4   | 5  | 5 |    | 56  | 3   | 1522 |
| 141 | 132KV Jamshoro         | 7202   | 11KV LINKING                    | 19   | 7   |   |     |    |   |    |     |     | 26   |
| 142 | 132KV Jamshoro         | 7213   | 11KV NEW L.M.C.                 | 5    | 3   |   | 6   | 2  |   |    | 13  |     | 29   |
| 143 | 132KV Jamshoro         | 7210   | 11KV PAK ARMY                   |      |     |   |     |    | 1 |    |     |     | 1    |
| 144 | 132KV Jamshoro         | 7203   | 11KV PETARO NEW                 | 476  | 59  |   | 24  | 10 | 3 |    | 28  | 2   | 602  |
| 145 | 132KV Jamshoro         | 7204   | 11KV PETARO OLD                 | 2316 | 110 |   | 38  | 6  | 3 | 1  | 54  |     | 2528 |
| 146 | 132KV Jamshoro         | 7212   | 11KV SANDOZ                     |      |     |   |     | 2  |   |    |     |     | 2    |
| 147 | 132KV Jamshoro         | 7206   | 11KV T.B.KHAN                   | 35   | 12  |   | 4   | 3  |   |    | 1   |     | 55   |
| 148 | 132KV Jamshoro         | 7208   | OCF-1                           | 413  | 12  |   |     | 1  | 1 |    | 37  |     | 464  |
| 149 | 132KV Jamshoro         | 7209   | OCF-2                           | 899  | 43  |   | 1   |    | 2 | 35 | 12  |     | 992  |
| 150 | 132KV Jamshoro         | 7205   | Tube Well                       | 1777 | 409 |   | 21  | 3  | 1 | 2  | 53  | 2   | 2268 |
| 151 | 132KV Jhampir          | 8103   | 11KV AGRICULTURE                | 80   | 5   |   | 57  | 9  |   |    | 2   |     | 153  |
| 152 | 132KV Jhampir          | 8101   | 11KV CITY                       | 557  | 104 |   | 4   | 1  | 2 |    | 6   |     | 684  |
| 153 | 132KV Jhampir          | 8102   | 11KV STEEL MILLS                | 41   | 4   |   |     | 1  | 1 |    | 2   |     | 52   |
| 154 | 132KV Jhampir          | 8105   | 11KV TGF CHINA                  |      |     |   |     | 1  |   |    |     |     | 1    |
| 155 | 132KV Jhampir          | 8104   | 11KV ZEPL                       | 1    |     |   |     |    |   |    |     |     | 1    |
| 156 | 132kv Jherruk          | 8002   | 11KV CHULH FEEDER               | 138  | 23  |   | 30  |    |   |    | 2   |     | 193  |
| 157 | 132kv Jherruk          | 8001   | 11KV JHERRUCK                   | 686  | 162 |   | 11  | 5  | 1 |    | 26  | 1   | 892  |
| 158 | 132kv Jherruk          | 8003   | 11KV SABIR POULTRY              |      |     |   |     | 1  |   |    |     |     | 1    |
| 159 | 132kv Kalu Kohar       | 9216   | 11KV AL KARAM                   |      |     |   |     | 1  |   |    |     |     | 1    |
| 160 | 132kv Kalu Kohar       | 9204   | 11KV FEEDER-1                   | 357  | 42  |   | 12  | 14 |   | 2  | 20  | 1   | 448  |
| 161 | 132kv Kalu Kohar       | 9206   | 11KV FEEDER-2                   | 18   | 10  |   | 6   | 2  |   |    |     |     | 36   |
| 162 | 132kv Kalu Kohar       | 9210   | 11KV FEEDER-3                   | 1563 | 173 |   | 168 | 26 |   | 5  | 17  | 20  | 1972 |
| 163 | 132kv Kalu Kohar       | 9207   | 11KV FEEDER-4                   |      | 12  |   | 4   | 24 |   | 7  |     | 5   | 52   |
| 164 | 132kv Kalu Kohar       | 9208   | 11KV FEEDER-5                   | 21   | 6   |   | 1   | 6  |   |    | 2   |     | 36   |
| 165 | 132kv Kalu Kohar       | 9209   | 11KV FEEDER-6                   | 33   | 47  |   | 5   | 7  |   |    | 1   | 3   | 96   |
| 166 | 132kv Kalu Kohar       | 9211   | 11KV FEEDER-8                   | 17   | 20  |   | 2   | 36 |   | 4  | 3   | 5   | 87   |
| 167 | 132kv Kalu Kohar       | 9203   | 11KV HAFIZ INDUSTRY             | 1    |     |   |     | 3  |   |    |     |     | 4    |
| 168 | 132kv Kalu Kohar       | 9213   | 11KV LUCKY CEMENT               |      | 1   |   |     |    |   |    |     |     | 1    |
| 169 | 132kv Kalu Kohar       | 9214   | 11KV P.E.C EXPRESS (Pak Army)   |      | 1   |   |     |    | 1 |    |     |     | 2    |
| 170 | 132kv Kalu Kohar       | 9215   | 11KV PREMIUM-2                  |      |     |   |     | 1  |   |    |     |     | 1    |
| 171 | 132kv Kalu Kohar       | 9201   | 11KV SERI                       | 52   | 58  |   | 9   | 26 | 1 | 8  | 3   | 1   | 158  |
| 172 | 132kv Kalu Kohar       | 9202   | 11KVSIND GLASS                  | 8    | 41  |   |     | 26 |   | 5  | 1   |     | 81   |
| 173 | 132kv Kalu Kohar       | 9212   | 132KV SONEX STEEL               |      | 1   |   |     |    |   |    |     |     | 1    |
| 174 | 132kv Kazi Ahmed       | 57801  | 11KV CITY                       | 2048 | 565 |   | 53  | 4  |   | 2  | 67  |     | 2739 |
| 175 | 132kv Kazi Ahmed       | 57810  | 11KV CITY-2                     | 2364 | 544 |   | 18  |    |   |    |     |     | 2926 |
| 176 | 132kv Kazi Ahmed       | 57806  | 11KV FATUHAL ZARDARI            | 797  | 125 |   | 171 | 11 |   | 1  | 12  |     | 1117 |
| 177 | 132kv Kazi Ahmed       | 57808  | 11KV HAQ MADINA                 | 1047 | 31  |   | 128 |    |   |    | 21  |     | 1227 |
| 178 | 132kv Kazi Ahmed       | 57807  | 11KV NAWAB WALI MUHAMMAD        | 1624 | 155 |   | 153 | 3  |   |    | 12  |     | 1947 |
| 179 | 132kv Kazi Ahmed       | 57805  | 11KV PIR NOOR SHAH              | 555  | 43  |   | 195 |    |   |    | 40  |     | 833  |
| 180 | 132kv Kazi Ahmed       | 57809  | 11KV SYED IMDAD SHAH            | 104  | 4   |   | 84  |    |   |    |     |     | 192  |
| 181 | 132kv Kazi Ahmed       | 57802  | 11KV T W NO.1+2                 | 612  | 38  |   | 197 |    |   |    | 107 |     | 954  |
| 182 | 132kv Kazi Ahmed       | 57803  | 11KV T W NO.3+4                 | 1547 | 55  |   | 50  | 3  |   |    | 37  |     | 1692 |
| 183 | 132kv Kazi Ahmed       | 57804  | 11KV T W NO.45                  | 2174 | 143 |   | 129 | 4  |   | 1  | 49  |     | 2500 |
| 184 | 132KV Khair Muhammad B | 116003 | 11KV CITY-2                     | 1668 | 411 | 1 | 10  | 4  |   | 1  | 1   |     | 2096 |
| 185 | 132KV Khair Muhammad B | 116004 | 11KV KACHELO-2                  | 2070 | 46  |   | 14  |    |   |    |     |     | 2130 |
| 186 | 132KV Khair Muhammad B | 116001 | 11KV KHAIR MUHAMMAD             | 2732 | 551 |   | 13  | 7  |   | 2  | 41  |     | 3346 |
| 187 | 132KV Khair Muhammad B | 116002 | 11KV KOT GH: MUHAMMAD           | 742  | 19  |   | 3   |    |   |    |     |     | 764  |
| 188 | 132KV Khanote          | 10503  | 11KV INDUS COAL                 | 203  | 81  |   | 2   | 5  | 2 |    | 1   |     | 294  |
| 189 | 132KV Khanote          | 10501  | 11KV KHANOTE                    | 1418 | 195 |   | 15  | 10 | 1 | 1  | 52  |     | 1692 |
| 190 | 132KV Khanote          | 10502  | 11KV LAKHRA                     | 4    |     |   |     |    |   |    | 1   |     | 5    |
| 191 | 132kv Kohsar           | 81109  | 11KV AMANI SHAH                 | 2525 | 190 |   |     |    |   |    | 22  |     | 2737 |
| 192 | 132kv Kohsar           | 81107  | 11KV BISMALLAH CITY             | 3606 | 334 |   |     |    |   |    |     |     | 3940 |
| 193 | 132kv Kohsar           | 81114  | 11KV BOARD STADIUM              | 1513 | 78  |   |     | 3  |   |    | 4   |     | 1598 |
| 194 | 132kv Kohsar           | 81106  | 11KV CAA CIVIL AVIATION         |      |     |   |     |    | 1 |    |     |     | 1    |
| 195 | 132kv Kohsar           | 81101  | 11KV KOHSAR                     | 2905 | 200 |   | 20  | 3  |   | 8  | 13  | 1   | 3150 |
| 196 | 132kv Kohsar           | 81102  | 11KV L-10                       | 1243 | 160 |   |     | 1  |   | 4  | 9   |     | 1417 |
| 197 | 132kv Kohsar           | 81104  | 11KV L-4                        | 2482 | 238 |   | 7   | 4  |   | 3  | 18  |     | 2752 |
| 198 | 132kv Kohsar           | 81105  | 11KV L-5                        | 1376 | 281 |   |     | 1  |   | 4  | 7   |     | 1669 |
| 199 | 132kv Kohsar           | 81103  | 11KV L-9                        | 3140 | 346 |   | 1   |    |   | 1  | 19  |     | 3507 |



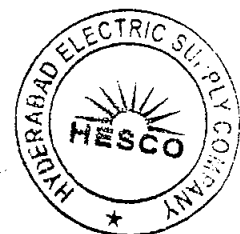
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|-----|--------------------|--------|----------------------------|------|------|---|-----|----|---|---|-----|----|------|
| 200 | 132kv Kohsar       | 81108  | 11KV L-II                  | 2627 | 646  |   |     | 6  | 1 |   | 4   |    | 3284 |
| 201 | 132kv Kohsar       | 81113  | 11KV MOHAMMADI HOSP        | 2765 | 395  |   |     |    |   |   | 2   |    | 3162 |
| 202 | 132kv Kohsar       | 81112  | 11KV NEW STADIUM           | 1623 | 351  |   |     |    |   |   |     |    | 1974 |
| 203 | 132kv Kohsar       | 81111  | 11KV PUBLIC SCHOOL         | 2283 | 224  |   |     |    | 2 | 1 | 34  | 1  | 2545 |
| 204 | 132kv Kohsar       | 81110  | 11KV S.R.C                 | 1    |      |   |     |    | 1 |   |     | 1  | 3    |
| 205 | 132kv Kohsar       | 81115  | 11KV COMPREHENSIVE         | 3224 | 188  |   |     |    |   |   |     |    | 3412 |
| 206 | 132kv Kotri Site   | 63901  | 11KV AGRI-1                | 417  | 36   |   | 190 | 14 | 1 |   | 25  |    | 683  |
| 207 | 132kv Kotri Site   | 63911  | 11KV BABA SALAHUDDIN       | 2405 | 579  |   | 1   | 9  |   | 1 | 15  | 1  | 3011 |
| 208 | 132kv Kotri Site   | 63910  | 11KV HI-TECH               |      |      |   |     | 1  |   |   |     |    | 1    |
| 209 | 132kv Kotri Site   | 63915  | 11KV ISLANAD TEXTILE MILLS |      |      |   |     | 1  |   |   |     |    | 1    |
| 210 | 132kv Kotri Site   | 63904  | 11KV N.G.1                 | 43   | 12   |   | 17  | 49 |   |   | 4   | 1  | 126  |
| 211 | 132kv Kotri Site   | 63902  | 11KV N.G.2                 | 118  | 38   |   | 1   | 45 |   |   | 6   |    | 208  |
| 212 | 132kv Kotri Site   | 63903  | 11KV N.G.3                 | 1298 | 152  |   | 152 | 21 | 2 | 2 | 44  | 2  | 1673 |
| 213 | 132kv Kotri Site   | 63905  | 11KV N.G.4                 | 4596 | 282  |   |     | 4  | 2 | 2 | 29  | 5  | 4920 |
| 214 | 132kv Kotri Site   | 63906  | 11KV N.G.5                 | 1    | 14   |   | 3   | 40 |   | 3 | 4   |    | 65   |
| 215 | 132kv Kotri Site   | 63908  | 11KV N.G.6                 |      |      |   |     | 18 |   |   | 1   |    | 20   |
| 216 | 132kv Kotri Site   | 63909  | 11KV N.G.7                 | 3164 | 995  |   | 42  | 6  | 4 | 7 | 52  | 1  | 4271 |
| 217 | 132kv Kotri Site   | 63917  | 11KV N.G.8                 |      | 2    |   |     | 20 |   |   | 1   |    | 23   |
| 218 | 132kv Kotri Site   | 63918  | 11KV N.G.9                 |      | 8    |   |     | 23 |   |   |     |    | 31   |
| 219 | 132kv Kotri Site   | 63914  | 11KV NAGEENA               |      |      |   |     | 1  |   |   |     |    | 1    |
| 220 | 132kv Kotri Site   | 63916  | 11KV QUETTA TEXTILE MILLS  |      |      |   |     | 2  |   |   |     |    | 2    |
| 221 | 132kv Kotri Site   | 63912  | 11KV RAFHAN MAIZE          |      |      |   |     | 1  |   |   |     |    | 1    |
| 222 | 132kv Kotri Site   | 63913  | 11KV SAPPHIRE              |      |      |   |     | 1  |   |   |     |    | 1    |
| 223 | 132kv Ladiun       | 75801  | 11KV LADIUN CITY           | 1285 | 552  |   | 21  | 16 | 1 | 1 | 39  |    | 1915 |
| 224 | 132kv Latifabad    | 11901  | 11KV AIR PORT              | 4118 | 856  |   |     | 5  |   |   | 7   | 25 | 5011 |
| 225 | 132kv Latifabad    | 11902  | 11KV BAND                  | 2807 | 375  |   | 1   | 1  |   |   |     |    | 3184 |
| 226 | 132kv Latifabad    | 11903  | 11KV CANTT                 | 33   | 43   |   |     |    |   |   |     | 1  | 77   |
| 227 | 132kv Latifabad    | 11915  | 11KV COFCOT                |      | 43   |   |     | 23 |   |   |     |    | 66   |
| 228 | 132kv Latifabad    | 11917  | 11KV DAWOOD MART           |      | 1    |   |     |    |   |   |     |    | 1    |
| 229 | 132kv Latifabad    | 11904  | 11KV FATEH                 | 2833 | 707  |   |     | 1  |   |   | 5   | 15 | 3561 |
| 230 | 132kv Latifabad    | 11905  | 11KV FAZAL GULZAR Old      | 3216 | 909  |   | 4   | 3  |   |   |     | 13 | 4145 |
| 231 | 132kv Latifabad    | 11913  | 11KV FAZAL-E-GULZAR Ne     | 1147 | 124  |   |     | 18 |   |   |     | 2  | 1291 |
| 232 | 132kv Latifabad    | 11906  | 11KV FORT                  | 2984 | 2199 |   | 1   | 2  | 1 | 9 | 3   | 1  | 5200 |
| 233 | 132kv Latifabad    | 11916  | 11KV HALLI NAGAR           | 1571 | 405  |   |     | 2  |   |   |     |    | 1978 |
| 234 | 132kv Latifabad    | 11914  | 11KV L-3                   | 1458 | 472  |   |     | 1  | 1 | 3 | 92  |    | 2027 |
| 235 | 132kv Latifabad    | 11907  | 11KV L-7                   | 3344 | 1512 |   |     | 5  |   | 1 | 38  | 4  | 4904 |
| 236 | 132kv Latifabad    | 11912  | 11KV L-8                   | 2739 | 540  |   |     | 5  |   |   | 4   | 8  | 3296 |
| 237 | 132kv Latifabad    | 11908  | 11KV LATIF ABAD-10         | 1851 | 365  |   | 3   | 7  |   |   | 4   | 31 | 2261 |
| 238 | 132kv Latifabad    | 11910  | 11KV SHAH BHITAI           | 2592 | 458  |   | 5   | 8  | 4 | 4 | 20  | 1  | 3092 |
| 239 | 132kv Latifabad    | 11909  | 11KV STADIUM               | 2462 | 590  |   |     | 7  |   | 5 | 16  | 2  | 3082 |
| 240 | 132kv M.P.Khas     | 13513  | 11KV M.P.K-5               |      | 2    |   |     |    |   |   |     | 1  | 3    |
| 241 | 132KV Matli        | 32602  | 11KV CITY                  | 338  | 161  |   | 65  | 1  |   |   | 7   |    | 572  |
| 242 | 132KV Matli        | 116201 | 11KV CITY-2                | 1161 | 225  | 1 | 3   | 10 | 1 | 1 | 18  |    | 1420 |
| 243 | 132KV Matli        | 116207 | 11KV DARYANO MAL           |      |      |   |     | 15 |   |   |     |    | 15   |
| 244 | 132KV MATLI        | 116206 | 11KV NEW CITY              | 4737 | 1317 |   | 2   | 5  |   | 2 | 50  | 1  | 6114 |
| 245 | 132KV MATLI        | 116202 | 11KV New Omni              |      |      |   |     | 2  |   |   |     |    | 2    |
| 246 | 132kv Mir Pur Khas | 13527  | 11KV BISMILLAH TOWN        | 2476 | 214  |   | 36  | 3  |   |   | 60  |    | 2789 |
| 247 | 132kv Mir Pur Khas | 13525  | 11KV CHAND MORO            | 5277 | 420  | 1 | 53  | 7  |   |   | 132 | 1  | 5891 |
| 248 | 132kv Mir Pur Khas | 13501  | 11KV CITY                  | 1985 | 1404 |   | 8   | 1  | 9 | 6 | 60  | 1  | 3474 |
| 249 | 132kv Mir Pur Khas | 13532  | 11KV DHQ                   |      |      |   |     |    |   |   | 1   |    | 1    |
| 250 | 132kv Mir Pur Khas | 13530  | 11KV GAREEBABAD MPK        | 2472 | 734  |   |     | 2  |   |   | 3   |    | 3211 |
| 251 | 132kv Mir Pur Khas | 13502  | 11KV HIRABAD               | 2525 | 461  |   |     | 2  |   | 1 | 106 | 1  | 3096 |
| 252 | 132kv Mir Pur Khas | 13503  | 11KV INDUSTRIAL            | 6190 | 821  | 1 | 9   | 20 |   | 6 | 107 | 1  | 7155 |
| 253 | 132kv Mir Pur Khas | 13528  | 11KV ISMAIL SHAH BABA      | 1559 | 390  |   |     |    |   |   |     |    | 1949 |
| 254 | 132kv Mir Pur Khas | 13526  | 11KV KISHORI LAL           | 2651 | 260  |   | 2   | 1  |   | 1 | 18  |    | 2933 |
| 255 | 132kv Mir Pur Khas | 13504  | 11KV LINKING               | 4949 | 1836 |   | 6   | 4  |   | 1 | 95  |    | 6891 |
| 256 | 132kv Mir Pur Khas | 13510  | 11KV M.P.K-1+4             |      | 5    |   | 6   | 1  |   |   | 13  |    | 25   |
| 257 | 132kv Mir Pur Khas | 13512  | 11KV M.P.K-2+3             | 656  | 61   |   | 1   | 3  |   | 1 | 63  |    | 785  |
| 258 | 132kv Mir Pur Khas | 13515  | 11KV M.P.K-6               | 5366 | 423  |   | 123 | 10 | 2 |   | 34  | 2  | 5960 |
| 259 | 132kv Mir Pur Khas | 13514  | 11KV MEHMOOD ABAD          | 1778 | 404  |   | 43  | 2  | 1 | 2 | 35  | 1  | 2266 |
| 260 | 132kv Mir Pur Khas | 13505  | 11KV MIRABAD               | 2272 | 266  | 1 | 105 |    | 1 |   | 38  |    | 2683 |
| 261 | 132kv Mir Pur Khas | 13506  | 11KV MIRWAH/Jarwari Sh     | 4328 | 520  |   | 56  | 3  |   |   | 16  | 4  | 4927 |
| 262 | 132kv Mir Pur Khas | 13507  | 11KV NAWAZ ABAD            | 790  | 150  |   | 25  | 5  | 1 | 3 |     |    | 974  |
| 263 | 132kv Mir Pur Khas | 13524  | 11KV NOOR SHAH             | 21   | 72   |   | 1   | 46 |   |   | 5   | 1  | 146  |
| 264 | 132kv Mir Pur Khas | 13531  | 11KV S.M.RIZVI             | 1002 | 1246 |   | 1   |    |   |   | 3   |    | 2252 |
| 265 | 132kv Mir Pur Khas | 13521  | 11KV SCARP-9+10 (MPK)      | 440  | 73   |   | 1   | 41 |   | 1 | 75  |    | 631  |
| 266 | 132kv Mir Pur Khas | 13508  | 11KV SETALLITE TOWN        | 5024 | 379  |   | 23  | 8  | 3 | 5 | 41  |    | 5483 |
| 267 | 132kv Mir Pur Khas | 13529  | 11KV UMAID ALI BARI        | 3340 | 297  |   | 1   | 5  |   |   | 22  |    | 3665 |



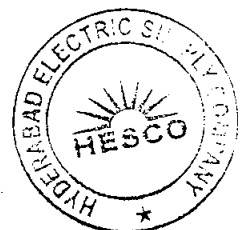
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|-----|-----------------------------|-------|------------------------------|------|------|--|----|----|---|----|-----|---|------|
| 263 | 132KV MIRPUR KHAS           | 13522 | 11KV LBOD SCARP-10           |      |      |  |    |    |   |    | 1   |   | 1    |
| 269 | 132KV Mirpur Sakro          | 55802 | 11KV GARHO                   | 1325 | 379  |  | 14 | 26 | 1 | 1  | 28  |   | 1774 |
| 270 | 132KV Mirpur Sakro          | 55804 | 11KV LATT STOP               | 807  | 109  |  | 27 | 4  |   | 1  | 6   |   | 954  |
| 271 | 132KV Mirpur Sakro          | 55801 | 11KV SAKRO                   | 1439 | 458  |  | 14 | 16 | 1 | 2  | 12  |   | 1942 |
| 272 | 132KV Mirpur Sakro          | 55803 | 11KV TAPAL FEEDER            | 16   | 31   |  | 15 | 39 |   |    |     |   | 101  |
| 273 | 132kv Mirwah Gorchani       | 86103 | 11KV JHILORI                 | 3992 | 513  |  | 90 | 14 | 1 | 1  | 54  |   | 4665 |
| 274 | 132kv Mirwah Gorchani       | 85102 | 11KV LANDHI                  | 822  | 106  |  | 16 |    |   |    | 13  |   | 957  |
| 275 | 132kv Mirwah Gorchani       | 13519 | 11KV SCARP-II                | 706  | 104  |  | 11 | 1  |   |    | 21  |   | 843  |
| 276 | 132kv Mirwah Gorchani       | 13520 | 11KV SCARP-III               | 1095 | 67   |  | 45 | 4  |   | 1  | 21  |   | 1233 |
| 277 | 132kv Mirwah Gorchani       | 86104 | 11KV LANDHI                  | 1404 | 105  |  | 6  | 11 |   | 2  | 51  |   | 1577 |
| 278 | 132KV MORO                  | 13603 | 11KV GECHORO-6               | 106  | 81   |  |    |    |   |    |     |   | 187  |
| 279 | 132kv Nawab Shah Site (III) | 85907 | 11KV BAKHTAWAR CADET COLLEGE |      |      |  |    |    |   |    | 1   |   | 1    |
| 280 | 132kv Nawab Shah Site (III) | 85902 | 11KV CHEMI VISCO FIBRE       |      | 1    |  |    | 1  |   |    |     |   | 2    |
| 281 | 132kv Nawab Shah Site (III) | 85906 | 11KV LOUGER FLATS            | 1    |      |  |    |    |   |    |     |   | 1    |
| 282 | 132kv Nawab Shah Site (III) | 85905 | 11KV NEW KHADAR              | 662  | 63   |  | 14 |    | 2 |    | 55  |   | 796  |
| 283 | 132kv Nawab Shah Site (III) | 85909 | 11KV PAF                     |      |      |  |    |    | 1 |    |     |   | 1    |
| 284 | 132kv Nawab Shah Site (III) | 85908 | 11KV QUAID-E-AWAM            |      |      |  |    |    | 1 |    |     |   | 1    |
| 285 | 132kv Nawab Shah Site (III) | 85910 | 11KV SHAHEED BENAZIRABAD     |      |      |  |    |    |   |    | 1   |   | 1    |
| 286 | 132kv Nawab Shah Site (III) | 85901 | 11KV UNIVERSITY NEW          | 1497 | 193  |  | 11 | 5  |   | 1  | 61  |   | 1678 |
| 287 | 132kv Nawab Shah Site (III) | 85904 | Cancer Hospital              |      |      |  |    |    | 1 |    |     |   | 1    |
| 288 | 132KV NAWAB SHAH-I          | 14404 | 11KV KHADAR                  | 36   | 10   |  | 5  |    |   | 1  | 10  |   | 62   |
| 289 | 132kv Nawab Shah-I          | 14419 | 11KV ALLAH WALI MASJID       | 3243 | 344  |  |    | 3  |   |    |     | 1 | 3591 |
| 290 | 132kv Nawab Shah-I          | 14418 | 11KV ASARPUR                 | 4001 | 832  |  |    | 1  |   |    |     | 1 | 4835 |
| 291 | 132kv Nawab Shah-I          | 14401 | 11KV CITY NO.1(SOCIETY)      | 3376 | 521  |  | 4  | 19 | 1 | 1  | 29  | 1 | 3952 |
| 292 | 132kv Nawab Shah-I          | 14403 | 11KV DAUR(SUCHARI)           | 2429 | 311  |  | 22 | 5  | 2 |    | 55  |   | 2824 |
| 293 | 132kv Nawab Shah-I          | 14402 | 11KV Ghareebad               | 3867 | 812  |  | 2  | 6  |   | 5  | 44  | 4 | 4740 |
| 294 | 132kv Nawab Shah-I          | 14412 | 11KV H. M. KHOJA             | 2688 | 636  |  | 15 |    | 3 |    | 11  | 2 | 3355 |
| 295 | 132kv Nawab Shah-I          | 14405 | 11KV KHAIR SHAH              | 786  | 64   |  | 43 | 3  |   |    | 9   | 3 | 908  |
| 296 | 132kv Nawab Shah-I          | 14416 | 11KV M.C. Hospital           |      |      |  |    |    |   |    | 1   |   | 1    |
| 297 | 132kv Nawab Shah-I          | 14408 | 11KV MANOOABAD               | 4111 | 264  |  | 4  | 1  |   | 5  | 30  | 2 | 4417 |
| 298 | 132kv Nawab Shah-I          | 14415 | 11KV MEHRAN COLONY           | 3342 | 441  |  | 7  | 6  |   |    | 12  | 2 | 3810 |
| 299 | 132kv Nawab Shah-I          | 14417 | 11KV MOHINI BAZAR            | 1291 | 2481 |  | 1  |    |   |    | 4   | 1 | 3778 |
| 300 | 132kv Nawab Shah-I          | 14409 | 11KV N.SHAH                  | 2719 | 181  |  | 4  | 13 | 1 | 3  | 34  | 2 | 2957 |
| 301 | 132kv Nawab Shah-I          | 14407 | 11KV PMCH(TAJ COLONY)        | 1799 | 278  |  | 9  |    | 4 | 6  | 169 | 1 | 2266 |
| 302 | 132kv Nawab Shah-I          | 14413 | 11KV PMC-II                  |      |      |  |    |    | 1 |    | 30  |   | 31   |
| 303 | 132kv Nawab Shah-I          | 14414 | 11KV PMU                     |      |      |  |    |    | 1 |    |     |   | 1    |
| 304 | 132kv Nawab Shah-I          | 14420 | 11KV ROHRI KENNEL            |      |      |  |    |    |   |    | 1   |   | 1    |
| 305 | 132kv Nawab Shah-I          | 14406 | 11KV UNIVERSITY              | 390  | 7    |  | 13 |    | 7 |    | 30  | 1 | 448  |
| 306 | 132kv Nawab Shah-I          | 33514 | 11KV WATER SUPPLY            |      |      |  |    |    |   |    | 1   |   | 1    |
| 307 | 132kv Nawab Shah-I          | 14411 | 11KV ZARDARI HOUSE           | 4    | 1    |  | 1  |    |   |    | 6   |   | 12   |
| 308 | 132kv Nawab Shah-I          | 14410 | Balo Ja Quba                 | 674  | 33   |  | 15 |    |   |    | 36  |   | 758  |
| 309 | 132kv Nawab Shah-II (Sang)  | 33505 | 11KV CITY-3(LIAQAT MARK)     | 2011 | 910  |  | 16 | 4  | 2 | 2  | 32  | 2 | 2979 |
| 310 | 132kv Nawab Shah-II (Sang)  | 33501 | 11KV INDUSTRIAL              | 6521 | 1123 |  | 36 | 5  | 2 | 2  | 16  |   | 7705 |
| 311 | 132kv Nawab Shah-II (Sang)  | 33510 | 11KV NS-11                   | 700  | 63   |  | 5  | 4  |   |    | 21  |   | 793  |
| 312 | 132kv Nawab Shah-II (Sang)  | 33511 | 11KV NS-111                  | 398  | 50   |  | 4  |    |   |    | 28  |   | 480  |
| 313 | 132kv Nawab Shah-II (Sang)  | 33512 | 11KV NS-IV (Jam Shab)        | 2141 | 277  |  | 38 | 5  |   |    | 11  |   | 2472 |
| 314 | 132kv Nawab Shah-II (Sang)  | 33503 | 11KV OLD POWER HOUSE         | 5171 | 407  |  | 8  | 3  | 1 |    | 23  |   | 5613 |
| 315 | 132kv Nawab Shah-II (Sang)  | 33502 | 11KV SAATH MEEL DAUR         | 2268 | 434  |  | 22 | 8  |   | 3  | 61  |   | 2796 |
| 316 | 132kv Nawab Shah-II (Sang)  | 33504 | 11KV SP.CHAKAR               | 1307 | 168  |  | 27 | 7  | 1 | 1  | 57  | 1 | 1569 |
| 317 | 132kv Nawab Shah-II (Sang)  | 33513 | 11KV SUGAR MILL              | 3665 | 720  |  | 18 | 15 |   | 11 | 42  | 1 | 4472 |
| 318 | 132KV NOOR ABAD             | 73102 | 132KV N-4                    |      |      |  |    | 1  |   |    |     |   | 1    |
| 319 | 132KV NOOR ABAD             | 73103 | 132KV N-5                    |      | 1    |  |    |    |   |    |     |   | 1    |
| 320 | 132kv Nooriabad             | 73113 | 11KV PINNACLE FIBER          |      |      |  |    | 1  |   |    |     |   | 1    |
| 321 | 132kv Nooriabad             | 73111 | 11KV AL-MUQEET TEXTILE       |      |      |  |    | 1  |   |    |     |   | 1    |
| 322 | 132kv Nooriabad             | 73107 | 11KV ANOUD POWER             |      |      |  |    | 1  |   |    |     |   | 1    |
| 323 | 132kv Nooriabad             | 73110 | 11KV FAISAL TEXTILE MILLS    |      |      |  |    | 1  |   |    |     |   | 1    |
| 324 | 132kv Nooriabad             | 73116 | 11KV H.R COTTON              |      |      |  |    | 1  |   |    |     |   | 1    |
| 325 | 132kv Nooriabad             | 73101 | 11KV N-1                     | 23   | 5    |  | 4  | 12 |   |    | 2   |   | 46   |
| 326 | 132kv Nooriabad             | 73114 | 11KV NADEEM TEXTILE          |      |      |  |    | 1  |   |    |     |   | 1    |
| 327 | 132kv Nooriabad             | 73115 | 11KV NATIONAL FOOD           |      |      |  |    | 1  |   |    |     |   | 1    |
| 328 | 132kv Nooriabad             | 73105 | 11KV NG-2 ANOUD TEXTILE      |      |      |  |    | 1  |   |    |     |   | 1    |
| 329 | 132kv Nooriabad             | 73104 | 11KV NG-3                    | 5    | 5    |  |    | 19 |   | 2  |     | 2 | 33   |
| 330 | 132kv Nooriabad             | 73117 | 11KV SERVICE LONG MARCH      |      |      |  |    | 1  |   |    |     |   | 1    |
| 331 | 132kv Nooriabad             | 73109 | 11KV YOUNIS TEXTILE          |      |      |  |    | 1  |   |    |     |   | 1    |
| 332 | 132kv Nooriabad             | 73108 | 11KV ZARA TEXTILE            | 1    |      |  |    | 2  |   |    |     |   | 3    |
| 333 | 132KV NTPS                  | 6315  | 11KV AIRPORT-2               | 761  | 376  |  |    | 1  |   |    | 2   |   | 1140 |
| 334 | 132kv NTPS                  | 6313  | 11KV COLONY                  |      | 1    |  |    | 5  |   | 1  |     |   | 7    |
| 335 | 132KV NTPS                  | 6306  | 11KV GHEE-1                  | 1728 | 348  |  | 1  | 17 |   | 3  | 27  | 1 | 2125 |



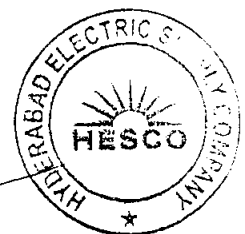
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|-----|-------------------------|--------|------------------------------|------|------|---|----|----|----|----|-----|----|------|
| 336 | 132KV NTPS              | 6319   | 11KV GHEE-111                | 16   | 11   |   | 1  | 33 |    |    | 8   |    | 69   |
| 337 | 132KV NTPS              | 6301   | 11KV GHEE-2                  | 44   | 54   |   | 1  | 73 | 2  | 2  | 4   |    | 180  |
| 338 | 132KV NTPS              | 6302   | 11KV GULZAR                  | 1637 | 276  |   | 6  | 13 |    | 1  | 9   |    | 1942 |
| 339 | 132KV NTPS              | 6309   | 11KV HOSERY                  | 519  | 154  |   | 37 | 41 | 1  |    | 24  |    | 776  |
| 340 | 132KV NTPS              | 6307   | 11KV KHATTAR                 | 2704 | 571  |   | 66 | 33 | 1  |    | 42  |    | 3417 |
| 341 | 132KV NTPS              | 6321   | 11KV KOHI NOOR               | 2912 | 2687 |   |    |    | 3  |    | 4   |    | 5606 |
| 342 | 132KV NTPS              | 6316   | 11KV L-9                     | 2470 | 487  |   | 4  |    |    | 2  | 5   |    | 2968 |
| 343 | 132KV NTPS              | 6303   | 11KV LINK-2(NTPS132)         | 6    | 5    |   | 1  | 5  | 1  | 1  | 1   |    | 20   |
| 344 | 132KV NTPS              | 6311   | 11KV POLY-1                  | 4680 | 351  |   |    | 9  |    | 4  | 51  |    | 5095 |
| 345 | 132KV NTPS              | 6312   | 11KV POLY-2                  | 2530 | 707  |   | 1  | 3  | 3  | 5  | 106 | 3  | 3358 |
| 346 | 132KV NTPS              | 6320   | 11KV SITE                    |      | 68   |   |    | 99 |    |    | 9   |    | 176  |
| 347 | 132KV NTPS              | 6314   | CF-2 ZEAL-PAK C.FACTORY      |      | 3    |   |    |    |    |    |     |    | 3    |
| 348 | 132KV PAF BHOLARI       | 116301 | 11KV PAF BHOLARI             |      |      |   |    |    | 1  |    |     |    | 1    |
| 349 | 132KV PARCO BUBAK DAD   | 74801  | 132KV M/S PARCO BUBAK        |      | 1    |   |    |    |    |    |     |    | 1    |
| 350 | 132kv Phulleli          | 15901  | 11KV CITY COLLEGE            | 2687 | 678  |   | 2  | 11 |    |    | 18  | 1  | 3397 |
| 351 | 132kv Phulleli          | 15907  | 11KV DOMANWAH                | 2486 | 900  |   |    | 11 |    | 9  | 13  |    | 3419 |
| 352 | 132kv Phulleli          | 15902  | 11KV FAKIR-KA-PIR            | 3292 | 729  |   |    | 6  |    | 6  | 3   |    | 4036 |
| 353 | 132kv Phulleli          | 15903  | 11KV ISLAMABAD               | 915  | 308  |   |    | 6  |    | 3  | 9   |    | 1241 |
| 354 | 132kv Phulleli          | 15908  | 11KV MEMON HOSPITAL          | 143  | 204  |   |    |    |    |    |     |    | 347  |
| 355 | 132kv Phulleli          | 15911  | 11KV NEW ISLAMABAD           | 3518 | 872  |   |    |    |    |    |     |    | 4390 |
| 356 | 132kv Phulleli          | 15912  | 11KV NEW MEMON               | 1710 | 1135 |   |    | 2  |    | 11 | 7   |    | 2855 |
| 357 | 132kv Phulleli          | 15913  | 11KV NOORANI BASTI           | 3523 | 527  |   |    | 6  |    |    | 3   |    | 4059 |
| 358 | 132kv Phulleli          | 15904  | 11KV OLD P/H NO.1            | 2293 | 650  |   |    | 17 |    |    | 40  |    | 3000 |
| 359 | 132kv Phulleli          | 15905  | 11KV OLD P/H NO.2            | 3517 | 2331 |   |    | 1  |    | 3  | 18  | 1  | 5871 |
| 360 | 132kv Phulleli          | 15909  | 11KV PAKKA QILA              | 2622 | 1528 |   |    | 2  |    | 2  | 15  |    | 4169 |
| 361 | 132kv Phulleli          | 15906  | 11KV PARETABAD-2             | 1410 | 359  |   | 8  | 19 |    | 2  | 22  |    | 1620 |
| 362 | 132kv Phulleli          | 15910  | 11KV SHAHI BAZAR             | 4803 | 2859 |   |    |    | 1  |    | 4   | 1  | 7668 |
| 363 | 132kv Pir Patho         | 56005  | 11KV INDUSTRIAL              |      |      |   |    | 5  |    |    |     |    | 5    |
| 364 | 132kv Pir Patho         | 56004  | 11KV PAF                     |      |      |   |    |    | 1  |    |     |    | 1    |
| 365 | 132kv Pir Patho         | 56003  | 11KV PIR PATHO               | 823  | 207  |   | 62 | 9  |    |    | 43  |    | 1144 |
| 366 | 132kv Pir Patho         | 56002  | 11KV VERGHULAMULLAH          | 1168 | 308  |   | 7  | 19 | 1  |    | 5   |    | 1508 |
| 367 | 132KV POPULAR CEMENT    | 125901 | 11KV POPULAR CEMENT INDUSTR: |      | 1    |   |    |    |    |    |     |    | 1    |
| 368 | 132KV Qasimabad         | 73112  | 11KV AL RAHIM                |      |      |   |    | 1  |    |    |     |    | 1    |
| 369 | 132KV Qasimabad         | 62118  | 11KV ANWAR VILLAS            | 880  | 112  |   |    |    |    |    | 19  | 2  | 1014 |
| 370 | 132KV Qasimabad         | 62114  | 11KV BALDIA                  | 382  | 49   |   | 4  | 3  | 2  | 2  | 13  | 2  | 457  |
| 371 | 132KV Qasimabad         | 62126  | 11KV BOHRI BAZAR             | 648  | 680  |   |    |    |    |    | 49  | 2  | 1379 |
| 372 | 132KV Qasimabad         | 62109  | 11KV CANT (NEW)              | 2535 | 2069 |   |    | 1  |    |    | 51  |    | 4656 |
| 373 | 132KV Qasimabad         | 62119  | 11KV CITIZEN COLONY          | 1825 | 237  |   |    | 1  |    | 2  | 3   | 2  | 2070 |
| 374 | 132KV Qasimabad         | 62105  | 11KV DEFENCE                 | 2114 | 890  |   |    | 1  | 8  |    | 114 | 4  | 3131 |
| 375 | 132KV Qasimabad         | 62101  | 11KV DOABBA                  | 4148 | 569  |   |    | 1  |    | 3  | 5   | 7  | 4733 |
| 376 | 132KV Qasimabad         | 62110  | 11KV FORT (NEW)              | 2361 | 2728 |   |    | 4  | 2  | 6  | 13  | 1  | 5115 |
| 377 | 132KV Qasimabad         | 62123  | 11KV G.M.SHAH                | 2490 | 242  |   | 1  | 4  |    |    | 2   | 9  | 2748 |
| 378 | 132KV Qasimabad         | 62102  | 11KV G.O.R. COLONY           | 1574 | 254  |   |    | 1  | 2  | 17 | 28  |    | 1876 |
| 379 | 132KV Qasimabad         | 62122  | 11KV H.D.A                   | 1729 | 576  |   |    | 2  | 2  | 3  | 87  | 6  | 2405 |
| 380 | 132KV Qasimabad         | 62124  | 11KV HAYAT BABA              | 2213 | 747  |   | 1  | 4  | 2  |    | 22  |    | 2989 |
| 381 | 132KV Qasimabad         | 62128  | 11KV MAGNUM MALL             |      | 1    |   |    |    |    |    |     |    | 1    |
| 382 | 132KV Qasimabad         | 62121  | 11KV MEHRAN                  |      | 1    |   |    |    |    |    |     |    | 1    |
| 383 | 132KV Qasimabad         | 62116  | 11KV MES                     |      |      |   |    |    | 1  |    |     |    | 1    |
| 384 | 132KV Qasimabad         | 62125  | 11KV NAKASH VILLAS           | 1221 | 74   |   |    |    |    | 1  | 3   | 2  | 1301 |
| 385 | 132KV Qasimabad         | 62113  | 11KV NASEEM NAGAR            | 1309 | 173  |   |    | 6  |    | 6  | 9   | 1  | 1504 |
| 386 | 132KV Qasimabad         | 62127  | 11KV NASEEM SHOPPING         | 447  | 173  |   |    |    |    |    |     |    | 620  |
| 387 | 132KV Qasimabad         | 62115  | 11KV NERUN KOT               | 1875 | 222  |   |    | 1  |    | 2  | 9   | 7  | 2116 |
| 388 | 132KV Qasimabad         | 62104  | 11KV QASIM ABAD              | 2114 | 294  |   |    | 1  | 2  |    | 8   | 7  | 2428 |
| 389 | 132KV Qasimabad         | 62107  | 11KV SACHAL                  | 1818 | 150  | 1 | 3  | 1  | 2  | 1  | 4   | 4  | 1984 |
| 390 | 132KV Qasimabad         | 62103  | 11KV SADDAR                  | 2205 | 1876 |   |    | 3  | 13 | 8  | 57  | 2  | 4164 |
| 391 | 132KV Qasimabad         | 62106  | 11KV SARFARAZ BABA           | 4038 | 2322 |   | 1  |    |    | 10 | 39  |    | 6410 |
| 392 | 132KV Qasimabad         | 62120  | 11KV SEHRISH NAGAR           | 2348 | 246  |   | 6  | 1  |    | 2  | 25  | 8  | 2636 |
| 393 | 132KV Qasimabad         | 62117  | 11KV SHAH LATIF              | 1585 | 115  |   |    | 3  |    | 2  | 2   | 2  | 1709 |
| 394 | 132KV Qasimabad         | 62112  | 11KV SHAHBAZ                 | 7    | 8    |   |    |    |    | 1  |     | 1  | 17   |
| 395 | 132kv Rajputana Qasimab | 105706 | 11KV BHITAI TOWN             | 1911 | 186  |   |    | 2  | 1  | 4  | 15  |    | 2119 |
| 396 | 132kv Rajputana Qasimab | 105703 | 11KV CIVIL HOSPITAL          |      |      |   |    |    | 3  |    | 11  |    | 14   |
| 397 | 132kv Rajputana Qasimab | 105711 | 11KV MOTHER VILLAGE          | 61   |      |   |    |    |    |    |     |    | 61   |
| 398 | 132kv Rajputana Qasimab | 105704 | 11KV MUBARAK COLONY          | 4135 | 529  |   |    |    |    | 1  | 7   |    | 4672 |
| 399 | 132kv Rajputana Qasimab | 105702 | 11KV NEW AGHA KHAN           | 2523 | 170  |   | 3  | 3  | 2  | 3  | 11  | 10 | 2725 |
| 400 | 132kv Rajputana Qasimab | 105707 | 11KV NEW H.D.A               | 993  | 122  |   | 24 | 4  | 1  | 3  | 17  | 3  | 1167 |
| 401 | 132kv Rajputana Qasimab | 105705 | 11KV NEW SHAHBAZ             | 1407 | 101  |   |    |    |    |    | 1   | 1  | 1510 |
| 402 | 132kv Rajputana Qasimab | 105709 | 11KV PALM RESIDENCE          | 90   | 9    |   |    |    |    |    |     |    | 99   |
| 403 | 132kv Rajputana Qasimab | 105708 | 11KV QADIR AVENEU            | 821  | 34   |   |    |    |    |    |     |    | 855  |



|     |                         |        |                          |      |      |   |     |    |   |   |     |    |      |
|-----|-------------------------|--------|--------------------------|------|------|---|-----|----|---|---|-----|----|------|
| 404 | 132kv Rajputana Qasimab | 105710 | 11KV QAMAR HOSPITAL      | 16   | 3    |   | 1   |    |   |   |     | 1  | 21   |
| 405 | 132kv Rajputana Qasimab | 105712 | 11KV SADIQUE LEVNA       | 69   | 4    |   | 1   |    |   |   |     |    | 74   |
| 406 | 132kv Rajputana Qasimab | 105701 | 11KV SHAH BUKHARI(NEW    | 1790 | 530  | 1 | 43  | 9  | 1 | 3 | 53  | 27 | 2457 |
| 407 | 132KV S.P.CHAKAR        | 56203  | 11KV L.B.O.A.D.          | 1    |      |   |     |    |   |   |     |    | 1    |
| 408 | 132kv Saeedabad         | 18202  | 11KV 11KV CITY-2         | 2256 | 201  |   | 185 | 2  |   | 2 | 73  |    | 2719 |
| 409 | 132kv Saeedabad         | 18206  | 11KV CITY-1              | 3126 | 742  |   | 30  | 12 |   |   | 46  |    | 3956 |
| 410 | 132kv Saeedabad         | 18204  | 11KV KATCHI              | 302  | 15   |   | 39  |    |   |   | 31  |    | 388  |
| 411 | 132kv Saeedabad         | 18201  | 11KV S.JAMALI            | 3743 | 283  |   | 94  | 5  |   |   | 121 |    | 4251 |
| 412 | 132kv Saeedabad         | 18205  | 11KV SCHRA3 JAMALI       | 946  | 201  |   | 221 | 1  |   |   | 62  |    | 1431 |
| 413 | 132kv Sakrand           | 18501  | 11KV CITY FEEDER-1       | 2701 | 849  | 1 | 23  | 5  | 5 | 1 | 62  |    | 3617 |
| 414 | 132kv Sakrand           | 18507  | 11KV CITY-2              | 783  | 88   |   | 39  | 4  | 2 |   | 16  |    | 937  |
| 415 | 132kv Sakrand           | 18514  | 11KV CITY-III            | 3380 | 1025 |   | 6   | 4  |   | 1 | 36  |    | 4452 |
| 416 | 132kv Sakrand           | 18510  | 11KV COMMONDO            |      |      |   |     |    |   | 1 |     |    | 1    |
| 417 | 132kv Sakrand           | 18512  | 11KV M.E.S               |      |      |   | 5   |    |   | 1 |     |    | 6    |
| 418 | 132kv Sakrand           | 18508  | 11KV MEHRAB PUR CITY     | 852  | 97   |   | 122 | 1  | 1 |   | 58  |    | 1141 |
| 419 | 132kv Sakrand           | 18509  | 11KV MEHRAB PUR II       | 529  | 44   |   | 41  | 2  |   |   | 11  |    | 627  |
| 420 | 132kv Sakrand           | 18515  | 11KV PAI-FOREST          | 138  | 3    |   | 71  |    |   |   | 6   |    | 218  |
| 421 | 132kv Sakrand           | 18513  | 11KV PIR ZAKRI           | 25   | 4    |   |     |    |   |   |     |    | 29   |
| 422 | 132kv Sakrand           | 18511  | 11KV PUNHAL KHAN CHAN    | 549  | 17   |   | 28  | 1  |   |   | 7   |    | 602  |
| 423 | 132kv Sakrand           | 18502  | 11KV SIND SEED CORP.     | 32   | 55   |   | 2   | 10 |   |   |     |    | 99   |
| 424 | 132kv Sakrand           | 18504  | 11KV TUBE WELL-1 + 7     | 1553 | 103  |   | 242 | 2  |   | 2 | 49  |    | 1951 |
| 425 | 132kv Sakrand           | 18503  | 11KV TUBE WELL-2         | 569  | 17   |   | 66  |    |   |   | 20  |    | 672  |
| 426 | 132kv Sakrand           | 18505  | 11KV TUBE WELL-3 + 4     | 1175 | 68   |   | 179 | 1  |   |   | 41  |    | 1464 |
| 427 | 132kv Sakrand           | 18506  | 11KV TUBE WELL-5 + 6     | 1013 | 84   |   | 72  | 3  |   |   | 43  |    | 1215 |
| 428 | 132KV SANGARH           | 18804  | 11KV CITY-2              | 16   | 11   |   |     |    |   |   |     | 1  | 28   |
| 429 | 132KV SANGARH ROAD      | 33509  | 11KV NS-1                | 2    |      |   |     |    |   |   |     |    | 2    |
| 430 | 132kv Sanghar           | 18820  | 11 KV SR7/3 City-2       | 1779 | 67   |   | 32  | 2  |   |   | 2   |    | 1882 |
| 431 | 132kv Sanghar           | 18815  | 11 KV SR-II              | 3353 | 659  |   | 66  | 11 |   |   | 45  |    | 4134 |
| 432 | 132kv Sanghar           | 18801  | 11KV CITY-1              | 3150 | 434  |   | 10  | 4  | 8 |   | 124 | 1  | 3741 |
| 433 | 132kv Sanghar           | 18806  | 11KV DIL SHAKH           | 70   | 27   |   | 8   | 27 |   | 1 | 6   |    | 139  |
| 434 | 132kv Sanghar           | 18802  | 11KV JHOLE               | 5289 | 708  |   | 53  | 12 | 1 | 1 | 100 |    | 6164 |
| 435 | 132kv Sanghar           | 18803  | 11KV ROUTIANI            | 3293 | 296  |   | 46  | 12 |   | 1 | 59  |    | 3707 |
| 436 | 132kv Sanghar           | 18816  | 11KV SR-3                | 6550 | 1679 |   | 11  | 6  | 2 | 4 | 70  | 1  | 8423 |
| 437 | 132kv Sanghar           | 18817  | 11KV SR-4                | 2182 | 184  |   | 6   | 4  |   | 1 | 36  |    | 2413 |
| 438 | 132kv Sanghar           | 18818  | 11KV SR-5                | 321  | 4    |   | 21  | 9  |   |   | 1   |    | 356  |
| 439 | 132kv Sanghar           | 18819  | 11KV SR-6                | 4206 | 486  |   | 27  | 8  |   | 2 | 63  |    | 4792 |
| 440 | 132kv Sanghar           | 18814  | SR-I                     | 477  | 16   |   | 2   | 9  |   |   | 5   |    | 509  |
| 441 | 132kv Sehwan            | 19012  | 11 KV IRRIGATION         |      |      |   | 2   |    |   |   |     |    | 2    |
| 442 | 132kv Sehwan            | 19016  | 11KV ABDULLAH SHAH       |      |      |   |     |    |   |   | 1   |    | 1    |
| 443 | 132kv Sehwan            | 19006  | 11KV B.S.ABAD            | 2035 | 227  |   | 178 | 6  | 1 |   | 55  | 1  | 2503 |
| 444 | 132kv Sehwan            | 19009  | 11KV CITY 03             | 1339 | 446  |   | 6   | 5  |   |   | 28  |    | 1824 |
| 445 | 132kv Sehwan            | 19014  | 11KV CITY 05             | 656  | 76   |   |     | 1  |   |   |     |    | 733  |
| 446 | 132kv Sehwan            | 19015  | 11KV CITY 06             | 862  | 16   |   |     |    |   |   |     |    | 878  |
| 447 | 132kv Sehwan            | 19013  | 11KV CITY-4              | 503  | 112  |   | 1   | 13 | 2 | 4 | 16  |    | 651  |
| 448 | 132kv Sehwan            | 19017  | 11KV DANISH TAR          | 736  | 23   |   | 56  |    |   |   |     |    | 815  |
| 449 | 132kv Sehwan            | 19010  | 11KV DARGAH QALANDAR     | 3    |      |   |     | 1  |   |   | 1   |    | 5    |
| 450 | 132kv Sehwan            | 19011  | 11KV HOTEL SEHWAN DEVINE | 2    |      |   |     | 1  |   |   |     |    | 3    |
| 451 | 132kv Sehwan            | 19004  | 11KV JEHANGIRA           | 850  | 127  |   | 74  | 2  | 1 | 1 | 33  |    | 1088 |
| 452 | 132kv Sehwan            | 19008  | 11KV LAL SHAHBAZ         | 1204 | 249  |   |     | 3  |   | 1 | 82  | 1  | 1540 |
| 453 | 132kv Sehwan            | 19002  | 11KV SEHWAN SHARIF       | 2284 | 467  |   | 5   | 6  | 3 | 3 | 37  |    | 2805 |
| 454 | 132kv Shah Pur Chakar   | 56201  | 11KV SARHERI             | 1382 | 291  |   | 25  | 7  |   | 1 | 28  |    | 1734 |
| 455 | 132kv Shah Pur Chakar   | 56204  | 11KV SC-1                | 40   |      |   | 16  | 1  |   |   | 16  |    | 73   |
| 456 | 132kv Shah Pur Chakar   | 56207  | 11KV SC-1V               | 424  | 98   |   | 78  | 1  |   |   | 5   |    | 606  |
| 457 | 132kv Shah Pur Chakar   | 56205  | 11KV SC-2                | 500  | 57   |   | 30  | 6  |   |   | 30  |    | 623  |
| 458 | 132kv Shah Pur Chakar   | 56206  | 11KV SC-3                | 4847 | 487  |   | 112 | 10 | 2 | 1 | 55  |    | 5514 |
| 459 | 132kv Shah Pur Chakar   | 56209  | 11KV SC-6                | 536  | 22   |   | 55  |    | 1 | 3 | 33  |    | 650  |
| 460 | 132kv Shah Pur Chakar   | 56210  | 11KV SC-7                | 993  | 78   |   | 17  |    |   |   | 3   |    | 1091 |
| 461 | 132kv Shah Pur Chakar   | 56208  | 11KV SC-V /Auxiliary     | 1    |      |   | 1   |    | 1 |   | 1   |    | 4    |
| 462 | 132kv Shah Pur Chakar   | 56202  | 11KV SHAHPUR CHAKAR C    | 5333 | 1250 |   | 35  | 10 |   | 1 | 39  |    | 6668 |
| 463 | 132kv Shahdadpur        | 36801  | 11KV CITY-1              | 5610 | 1888 |   | 13  | 9  | 1 |   | 144 |    | 7665 |
| 464 | 132kv Shahdadpur        | 36810  | 11KV CITY-II             | 8014 | 1037 |   | 5   | 7  | 1 | 2 | 61  |    | 9127 |
| 465 | 132kv Shahdadpur        | 36811  | 11KV CITY-III            | 308  | 42   |   | 1   | 29 | 1 |   | 13  |    | 394  |
| 466 | 132kv Shahdadpur        | 36802  | 11KV H.APPAN             | 1570 | 74   |   | 21  | 6  |   |   | 13  |    | 1684 |
| 467 | 132kv Shahdadpur        | 36804  | 11KV HANAGORO            | 989  | 87   |   | 51  | 4  |   |   | 32  |    | 1163 |
| 468 | 132kv Shahdadpur        | 36813  | 11KV INDUSTRIAL          | 302  | 38   |   | 3   | 22 | 1 |   |     |    | 366  |
| 469 | 132kv Shahdadpur        | 36803  | 11KV R.B.                | 2073 | 149  |   | 18  | 3  | 1 |   | 35  |    | 2279 |
| 470 | 132kv Shahdadpur        | 36808  | 11KV SCARP-I             | 501  | 23   |   | 21  | 1  |   | 1 | 6   |    | 553  |
| 471 | 132kv Shahdadpur        | 36807  | 11KV SCARP-II            | 1629 | 134  |   | 58  | 4  |   |   | 14  |    | 1839 |

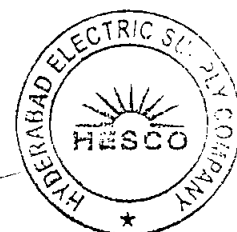


|     |                        |        |                           |      |      |   |     |    |   |    |     |      |      |
|-----|------------------------|--------|---------------------------|------|------|---|-----|----|---|----|-----|------|------|
| 472 | 132kv Shahdaddpur      | 36812  | 11KV SOCIETY SHD-I        | 3696 | 559  |   |     | 2  |   |    |     | 4257 |      |
| 473 | 132kv Shahdaddpur      | 36809  | 11KV SP-2+3               | 1241 | 49   |   | 64  | 2  |   |    | 38  | 1394 |      |
| 474 | 132kv Shahdaddpur      | 36814  | 11KV WASAN                | 2908 | 457  |   | 4   | 5  |   |    | 8   | 3382 |      |
| 475 | 132KV Shaikh Bhirkio   | 113801 | 11 KV Nawab               | 294  | 45   |   | 32  |    |   |    |     | 371  |      |
| 476 | 132KV Shaikh Bhirkio   | 113803 | 11KV CITY                 | 592  | 130  |   | 112 | 2  |   |    | 3   | 839  |      |
| 477 | 132KV Shaikh Bhirkio   | 113802 | 11KV FARAN SUGAR MILL     |      |      |   |     | 1  |   | 1  |     | 2    |      |
| 478 | 132KV Shaikh Bhirkio   | 113804 | 11KV GABOL FARM           | 962  | 32   |   | 111 | 1  |   |    |     | 1106 |      |
| 479 | 132KV Shaikh Bhirkio   | 113806 | 11KV PHULKARA             | 500  | 50   |   | 14  | 2  |   |    | 3   | 569  |      |
| 480 | 132KV Shaikh Bhirkio   | 113805 | 11KV TALPUR               | 259  | 8    |   | 26  |    |   |    |     | 293  |      |
| 481 | 132kv Shalmani         | 305    | 11 KV PAK ARMY            |      |      |   |     |    | 1 |    |     | 1    |      |
| 482 | 132kv Shalmani         | 301    | 11KV AMRI                 | 954  | 76   | 4 | 89  | 15 | 3 |    | 25  | 1166 |      |
| 483 | 132kv Shalmani         | 304    | 11KV IRRIGATION           |      |      |   | 3   |    |   |    | 2   | 5    |      |
| 484 | 132kv Shalmani         | 302    | 11KV SANN                 | 2434 | 310  | 3 | 49  | 3  | 4 | 4  | 65  | 2872 |      |
| 485 | 132kv Sujawal          | 20304  | 11KV BHUDHO TALPUR        | 390  | 106  |   |     | 16 |   | 2  | 3   | 517  |      |
| 486 | 132kv Sujawal          | 20301  | 11KV C.JAMALI             | 1214 | 395  |   | 35  | 17 |   | 1  | 41  | 1703 |      |
| 487 | 132kv Sujawal          | 20302  | 11KV CITY                 | 2824 | 1077 |   | 31  | 23 | 2 | 3  | 89  | 4049 |      |
| 488 | 132kv Sujawal          | 20303  | 11KV M.P.BATHORO          | 1843 | 509  |   | 6   | 31 |   | 1  | 32  | 2422 |      |
| 489 | 132kv Sujawal          | 20305  | 11KV PAK NEVY             |      |      |   |     |    | 1 |    |     | 1    |      |
| 490 | 132KV SULTAN ABAD      | 85801  | 11KV SULTAN ABAD          | 2    |      |   |     |    |   |    |     | 2    |      |
| 491 | 132kv Sultanabad       | 85803  | 11KV KHAWAJA GOTH         | 2069 | 193  |   | 92  | 2  |   |    | 9   | 2365 |      |
| 492 | 132kv Sultanabad       | 85802  | 11KV MISSION              | 2813 | 176  |   | 62  | 1  |   |    | 26  | 3078 |      |
| 493 | 132kv Sultanabad       | 85804  | 11KV S.L.A-1              | 373  | 41   |   | 1   | 2  |   |    | 5   | 422  |      |
| 494 | 132kv Sultanabad       | 85805  | 11KV SYED MASOOM SHAH     | 582  | 55   |   |     | 5  |   |    |     | 642  |      |
| 495 | 132KV T.M.Khan         | 21003  | 11KV F.S.MILL             | 6    | 3    |   | 1   |    |   |    |     | 10   |      |
| 496 | 132kv Talhar           | 38805  | 11KV CHANNAL              | 1214 | 49   |   | 1   | 2  |   |    | 12  | 1278 |      |
| 497 | 132kv Tando Adam       | 61213  | 11KV DURAL SHAH           | 6900 | 700  |   | 1   | 18 |   | 1  | 11  | 7631 |      |
| 498 | 132kv Tando Adam       | 61209  | 11KV EXPRESS / NOMAN C    | 1383 | 726  |   | 1   | 9  | 1 |    | 12  | 2132 |      |
| 499 | 132kv Tando Adam       | 61211  | 11KV INDUSTRIAL-2         |      | 29   |   |     | 25 |   |    | 2   | 56   |      |
| 500 | 132kv Tando Adam       | 61210  | 11KV NEW CITY             | 3637 | 849  |   | 13  | 5  |   |    | 23  | 4527 |      |
| 501 | 132kv Tando Adam       | 61212  | 11KV TDM-6                | 1312 | 94   |   | 98  | 6  |   |    | 1   | 1511 |      |
| 502 | 132kv Tando Adam       | 61214  | S.N.JONEJO                | 1157 | 28   |   | 7   |    |   |    |     | 1192 |      |
| 503 | 132kv Tando Adam       | 61206  | TA-1 (SCARP) / JOHARABA   | 4653 | 589  |   |     | 26 |   | 1  | 21  | 5290 |      |
| 504 | 132kv Tando Adam       | 61207  | TA-2 / HYD ROAD           | 3151 | 346  |   | 105 | 12 | 1 |    | 36  | 4    | 3655 |
| 505 | 132kv Tando Adam       | 61208  | TA-3 / JUMMAN SHAH        | 4885 | 688  |   | 16  | 7  |   | 4  | 27  | 1    | 5628 |
| 506 | 132kv Tando Adam       | 61204  | TW.1 (SP-24) TW-1/ BERAN  | 2687 | 128  |   | 97  | 16 |   | 2  | 72  |      | 3002 |
| 507 | 132kv Tando Adam       | 61203  | TW.1 (SP-25) TW-3/ MAJI   | 4584 | 2663 |   | 2   | 11 | 1 | 1  | 60  |      | 7322 |
| 508 | 132kv Tando Adam       | 61202  | TW.1 (SP-28) TW-2/ BHIT S | 1652 | 65   |   | 89  | 1  | 1 |    | 61  |      | 1869 |
| 509 | 132kv Tando Adam       | 61201  | TW.1 (SP-31) TW-4 / DALO  | 3459 | 452  |   | 45  | 4  | 2 |    | 67  |      | 4029 |
| 510 | 132kv Tando Adam       | 61205  | TW.1 (SP-32) TW-5/ TAY R  | 1608 | 144  |   | 185 | 10 |   |    | 21  | 1    | 1969 |
| 511 | 132kv Tando Allah Yar  | 20901  | 11KV BUKERA               | 2350 | 206  |   | 320 | 5  |   | 1  | 24  |      | 2906 |
| 512 | 132kv Tando Allah Yar  | 20913  | 11KV BULLAN SHAH          | 2228 | 319  |   | 97  | 1  |   |    | 10  |      | 2655 |
| 513 | 132kv Tando Allah Yar  | 20907  | 11KV CHAMBER              | 5329 | 783  |   | 103 | 8  |   | 2  | 47  |      | 6272 |
| 514 | 132kv Tando Allah Yar  | 20906  | 11KV CITY-1               | 6751 | 1261 |   | 186 | 12 |   |    | 81  |      | 8291 |
| 515 | 132kv Tando Allah Yar  | 20902  | 11KV CITY-4               | 3957 | 1219 |   | 57  | 12 |   | 13 | 90  |      | 5348 |
| 516 | 132kv Tando Allah Yar  | 20903  | 11KV CITY-II              | 618  | 115  |   | 223 | 8  |   | 3  | 42  |      | 1009 |
| 517 | 132kv Tando Allah Yar  | 20904  | 11KV CITY-III             | 2456 | 325  |   | 185 | 5  | 1 |    | 35  |      | 3007 |
| 518 | 132kv Tando Allah Yar  | 20914  | 11KV DHQ                  | 1    |      |   | 2   |    |   |    | 2   |      | 5    |
| 519 | 132kv Tando Allah Yar  | 20919  | 11KV GAJELLO SHARIF       | 4009 | 683  |   | 20  |    |   |    |     |      | 4712 |
| 520 | 132kv Tando Allah Yar  | 20912  | 11KV MEHRAN SUGAR MILL    |      |      |   |     | 1  |   | 1  |     |      | 2    |
| 521 | 132kv Tando Allah Yar  | 20905  | 11KV NASAR PUR            | 3628 | 359  |   | 236 | 9  |   |    | 36  |      | 4268 |
| 522 | 132kv Tando Allah Yar  | 20917  | 11KV NEW MARKET           | 4496 | 1559 |   | 35  |    |   |    |     |      | 6090 |
| 523 | 132kv Tando Allah Yar  | 20915  | 11KV PTV BOOSTER          | 2418 | 143  |   | 120 |    |   |    | 9   |      | 2690 |
| 524 | 132kv Tando Allah Yar  | 20908  | 11KV QUBA                 | 3445 | 630  |   | 357 | 11 |   | 1  | 32  |      | 4476 |
| 525 | 132kv Tando Allah Yar  | 20916  | 11KV RASHIDABAD           | 92   |      |   | 1   |    |   |    |     |      | 93   |
| 526 | 132kv Tando Allah Yar  | 20910  | 11KV SCARP 2 + 6          | 157  | 16   |   | 60  | 3  |   |    | 12  |      | 248  |
| 527 | 132kv Tando Allah Yar  | 20909  | 11KV SCARP1 + 3           | 2628 | 178  | 1 | 100 | 1  |   |    | 12  |      | 2920 |
| 528 | 132kv Tando Ghulam Ali | 39201  | 11KV C.ABDULLAH           | 331  | 24   |   | 86  | 2  |   |    | 10  |      | 453  |
| 529 | 132kv Tando Ghulam Ali | 39204  | 11KV PIR SAKHI            | 525  | 8    | 1 | 44  |    |   |    |     |      | 578  |
| 530 | 132kv Tando Ghulam Ali | 39202  | 11KV TANDO GHULAM ALI     | 1328 | 524  |   | 49  | 5  |   | 3  | 25  |      | 1934 |
| 531 | 132kv Tando Ghulam Ali | 39203  | 11KV THARI                | 845  | 60   |   | 103 | 2  |   |    | 10  |      | 1020 |
| 532 | 132KV Tando Jam        | 55310  | 11KV A.U.TANDO JAM        | 772  | 49   |   | 55  | 4  | 2 |    | 7   |      | 889  |
| 533 | 132kv Tando Jam        | 55302  | 11KV KHATYAN              | 2068 | 270  |   | 142 | 9  | 8 |    | 70  |      | 2567 |
| 534 | 132kv Tando Jam        | 55311  | 11KV MIR COLONY           | 2775 | 249  |   | 7   |    |   |    |     |      | 3031 |
| 535 | 132kv Tando Jam        | 55307  | 11KV NEW UNIVERSITY-11    | 561  | 30   |   | 63  | 2  | 2 |    | 24  |      | 682  |
| 536 | 132kv Tando Jam        | 55304  | 11KV OLD-UNIVERSITY-1     | 2795 | 240  |   | 39  | 2  | 7 | 1  | 26  |      | 3110 |
| 537 | 132kv Tando Jam        | 55303  | 11KV TANDO JAM CITY       | 4943 | 909  |   | 13  | 4  |   | 2  | 47  |      | 5918 |
| 538 | 132kv Tando Jam        | 55301  | 11KV TANDO QAISER         | 2534 | 631  |   | 202 | 10 | 1 |    | 103 |      | 3481 |
| 539 | 132kv Tando Jam        | 55308  | 11KV TW-3 + TW-4          | 1102 | 70   |   | 50  | 2  |   |    | 4   |      | 1228 |

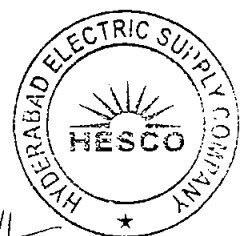




|     |                          |        |                              |      |      |    |     |    |   |    |     |   |       |
|-----|--------------------------|--------|------------------------------|------|------|----|-----|----|---|----|-----|---|-------|
| 540 | 132kv Tando Jan Muhammad | 90902  | 11KV CHUCK-90                | 2667 | 115  |    | 17  | 3  |   |    | 17  |   | 2819  |
| 541 | 132kv Tando Jan Muhammad | 90901  | 11KV CITY TANDO JAN MUHAMMAD | 2829 | 453  |    | 4   |    |   | 3  | 42  |   | 3331  |
| 542 | 132kv Tando Jan Muhammad | 90903  | 11KV JHUDO-II                | 4008 | 804  |    | 14  | 4  | 1 | 2  | 20  |   | 4853  |
| 543 | 132kv Tando Muhammad     | 21007  | 11KV ASADGAR                 | 2891 | 320  |    | 22  | 15 | 1 | 1  | 65  |   | 3315  |
| 544 | 132kv Tando Muhammad     | 21001  | 11KV CITY FEEDER             | 3210 | 654  |    | 47  | 21 | 3 | 3  | 30  | 1 | 3969  |
| 545 | 132kv Tando Muhammad     | 21010  | 11KV DHQ                     |      |      |    |     |    |   |    | 1   |   | 1     |
| 546 | 132kv Tando Muhammad     | 21002  | 11KV DIGMORI                 | 1487 | 201  |    | 259 | 2  |   |    | 46  | 1 | 1996  |
| 547 | 132kv Tando Muhammad     | 21011  | 11KV INDUSTRIAL              |      |      |    |     | 24 |   |    |     |   | 24    |
| 548 | 132kv Tando Muhammad     | 21006  | 11KV JAMALI                  | 1595 | 132  |    | 101 | 8  |   |    | 4   |   | 1840  |
| 549 | 132kv Tando Muhammad     | 21008  | 11KV LAKHAT                  | 1550 | 85   |    | 22  |    |   |    | 5   |   | 1666  |
| 550 | 132kv Tando Muhammad     | 21009  | 11KV NIVCD                   | 7    |      |    |     |    |   |    | 1   |   | 8     |
| 551 | 132kv Tando Muhammad     | 21004  | 11KV PANDHI WAH              | 4223 | 1194 |    | 41  | 5  |   | 1  | 75  | 5 | 5549  |
| 552 | 132kv Tando Muhammad     | 21005  | 11KV T.T.MILL                | 5555 | 1712 |    | 36  | 6  | 1 | 2  | 43  |   | 7355  |
| 553 | 132KV THANA GHOLA KHA    | 68803  | 11KV UNITED SILICATED MINING |      |      |    | 1   |    | 1 |    |     |   | 2     |
| 554 | 132kv Thana Boola Khan   | 68802  | 11KV AHMED KHAN              | 1055 | 20   |    | 112 | 4  |   |    | 18  |   | 1209  |
| 555 | 132kv Thana Boola Khan   | 68801  | 11KV CITY                    | 1840 | 189  |    | 50  | 8  |   | 1  | 49  | 1 | 2138  |
| 556 | 132kv Thana Boola Khan   | 68804  | 11KV PAK ARMY FEEDER         |      | 1    |    |     |    | 1 |    |     |   | 2     |
| 557 | 132kv Thana Boola Khan   | 68805  | 11KV PAK NAVY                |      |      |    |     |    | 1 |    |     |   | 1     |
| 558 | 132kv Thatta             | 21309  | 11KV ASHABI BABA             | 1655 | 510  |    | 12  | 12 |   | 1  | 40  |   | 2230  |
| 559 | 132kv Thatta             | 21301  | 11KV CHILLYA MILL            | 1237 | 310  |    | 28  | 19 | 1 |    | 32  |   | 1627  |
| 560 | 132KV Thatta             | 21302  | 11KV ISLAM PUR               | 2367 | 341  |    | 1   | 3  | 1 | 2  | 104 |   | 2819  |
| 561 | 132kv Thatta             | 21305  | 11KV JUNG SHAH               | 870  | 151  |    | 13  | 10 | 1 | 1  | 17  | 1 | 1064  |
| 562 | 132KV Thatta             | 21308  | 11KV MAAZA                   |      |      |    |     | 1  |   |    |     |   | 1     |
| 563 | 132kv Thatta             | 21303  | 11KV STEEL MILL              | 1258 | 104  |    | 4   | 23 | 3 | 1  | 8   | 1 | 1412  |
| 564 | 132kv Thatta             | 21304  | 11KV THATTA                  | 4599 | 1826 |    | 2   | 11 |   |    | 46  |   | 6284  |
| 565 | 132KV THATTA             | 21306  | 132KV THATTA C.F             |      | 1    |    |     |    |   |    |     |   | 1     |
| 566 | 220kv Hala Road          | 5708   | 11KV FIRDAUS COLONY          | 2830 | 495  |    |     | 25 |   |    | 3   |   | 3353  |
| 567 | 220kv Hala Road          | 5707   | 11KV HDA ALIABAD             | 1818 | 516  |    | 2   |    |   |    | 8   |   | 2344  |
| 568 | 220kv Hala Road          | 5701   | 11KV HIRA ABAD               | 3535 | 1833 | 31 |     | 5  |   |    | 27  | 1 | 5432  |
| 569 | 220kv Hala Road          | 5702   | 11KV LIAQAT COLONY           | 4142 | 681  |    | 3   | 18 |   | 7  | 25  |   | 4876  |
| 570 | 220kv Hala Road          | 5703   | 11KV MARKET TOWER            | 2414 | 1276 |    |     | 1  |   |    | 7   |   | 3698  |
| 571 | 220kv Hala Road          | 5705   | 11KV MIANI FOREST            | 3183 | 1152 | 5  | 8   | 28 | 2 | 1  | 9   | 3 | 4391  |
| 572 | 220kv Hala Road          | 5704   | 11KV P.HEALTH                | 2153 | 584  |    | 18  | 3  |   | 4  | 29  | 3 | 2794  |
| 573 | 220kv Hala Road          | 5709   | 11KV PARATABAD-1             | 3627 | 520  |    | 6   | 6  |   |    | 6   | 2 | 4167  |
| 574 | 220kv Hala Road          | 5706   | 11KV PARATABAD-3             | 1    | 1    |    |     |    |   |    |     |   | 2     |
| 575 | 220KV N.T.P.S HYD        | 86301  | 11KV MUMTAZ SOLID STEEL      |      |      |    |     | 1  |   |    |     |   | 1     |
| 576 | 220kv T.M. Khan Road     | 86303  | 11KV DETHA                   | 3160 | 532  |    | 85  | 20 |   |    | 11  |   | 3808  |
| 577 | 220kv T.M. Khan Road     | 86305  | 11KV COLONY                  | 421  | 128  |    |     | 95 | 2 | 1  | 4   |   | 651   |
| 578 | 220kv T.M. Khan Road     | 86304  | 11KV LINK-2(NTPS-220)        | 169  | 176  |    |     | 83 | 1 | 2  | 7   |   | 438   |
| 579 | 220kv T.M. Khan Road     | 86306  | 11KV NEW AIRPORT             | 2343 | 839  |    |     | 4  |   | 6  | 2   |   | 3194  |
| 580 | 66kv Chachro             | 56601  | 11KV CITY FEEDER             | 3219 | 286  |    | 7   | 1  |   | 3  | 32  |   | 3548  |
| 581 | 66kv Chachro             | 39805  | 11KV ODAHNI                  | 991  | 32   |    | 7   |    |   |    | 7   |   | 1037  |
| 582 | 66KV DAUR                | 56301  | 11KV CITY-1(DAUR CITY)       | 17   | 14   |    |     |    |   |    |     |   | 31    |
| 583 | 66kv Diplo               | 62901  | 11KV DIPLO                   | 3286 | 252  |    |     | 10 | 2 | 4  | 74  |   | 3628  |
| 584 | 66kv Head Jamrao         | 81601  | 11 KV JAMRAO                 | 4605 | 464  |    | 16  | 2  |   |    | 45  |   | 5132  |
| 585 | 66kv Islamtot            | 67201  | 11KV ISLAM KOT               | 6227 | 598  |    |     | 22 | 1 | 4  | 71  |   | 6923  |
| 586 | 66kv Islamtot            | 67202  | 11KV THAR COAL               |      |      |    |     | 1  | 2 |    | 2   |   | 5     |
| 587 | 66kv Kadhan              | 72102  | 11KV BADMI                   | 762  | 46   |    | 1   | 4  |   |    | 18  |   | 831   |
| 588 | 66kv Kadhan              | 72101  | 11KV CITY KADHAN             | 2124 | 267  |    | 4   | 5  | 1 | 4  | 59  |   | 2464  |
| 589 | 66KV KALOIE              | 92201  | 11KV KALOIE                  | 1317 | 93   |    | 4   | 2  |   | 1  | 21  | 1 | 1439  |
| 590 | 66kv Khipro              | 30903  | 11KV HATONGO                 | 3522 | 241  |    | 1   | 2  | 2 |    | 4   |   | 3772  |
| 591 | 66kv Khipro              | 30901  | 11KV KHIPRO                  | 7033 | 1524 |    | 5   | 16 | 1 | 1  | 89  |   | 8669  |
| 592 | 66kv Khipro              | 30902  | 11KV TANDO MITTA KHAN        | 3829 | 232  |    | 11  | 17 |   |    | 49  |   | 4138  |
| 593 | 66kv Kunri               | 101702 | 11KV CITY-II                 | 3206 | 70   |    | 34  | 1  |   |    | 29  |   | 3340  |
| 594 | 66kv Kunri               | 101701 | 11KV KUNRI CITY              | 4862 | 367  |    | 29  | 16 |   | 1  | 61  |   | 5336  |
| 595 | 66kv Kunri               | 101704 | 11KV KUNRI CITY-III          | 3714 | 1162 |    | 1   | 10 |   |    | 7   |   | 4894  |
| 596 | 66kv Kunri               | 101703 | 11KV TALPUR                  | 938  | 41   |    | 14  | 2  |   |    | 4   |   | 999   |
| 597 | 66KV Matli               | 32601  | 11KV CHANEL                  | 218  | 70   |    | 16  | 1  |   |    | 10  |   | 315   |
| 598 | 66kv Matli               | 32603  | 11KV NAZAR PUR               | 1927 | 136  |    | 119 | 1  | 5 |    | 25  |   | 2213  |
| 599 | 66kv Matli               | 32604  | 11KV PIR WAH                 | 1503 | 104  | 2  | 107 | 6  |   |    | 16  |   | 1738  |
| 600 | 66kv Mithi               | 32902  | 11KV CHELHAR                 | 2104 | 106  |    |     | 3  |   | 2  | 32  |   | 2247  |
| 601 | 66kv Mithi               | 32903  | 11KV CHHAHO                  | 3884 | 40   |    | 1   |    |   |    | 65  |   | 3990  |
| 602 | 66kv Mithi               | 32901  | 11KV MITHI                   | 8676 | 1299 |    |     | 20 | 1 | 20 | 274 |   | 10290 |
| 603 | 66KV Nabi Ser            | 33202  | 11KV MEMON KUNRI             | 565  | 5    |    | 4   |    |   | 1  | 15  |   | 590   |
| 604 | 66KV Nabi Ser            | 33201  | 11KV NABISAR ROAD            | 3170 | 228  |    | 23  | 5  | 1 | 5  | 57  |   | 3489  |
| 605 | 66KV Nabi Ser            | 33203  | 11KV TALHI                   | 2693 | 163  |    | 36  | 3  |   | 4  | 40  |   | 2939  |
| 606 | 66kv Nagar Parkar        | 84801  | 11KV CITY                    | 719  | 97   |    | 6   | 8  | 2 | 3  | 45  |   | 880   |
| 607 | 66kv Pangrio             | 56501  | 11KV PANGRIO CITY            | 3288 | 410  | 1  | 13  | 11 | 1 | 2  | 21  |   | 3747  |



|             |                   |        |                        |        |        |     |       |      |     |     |       |     |         |
|-------------|-------------------|--------|------------------------|--------|--------|-----|-------|------|-----|-----|-------|-----|---------|
| 608         | 66kv Pithoro      | 56402  | 11KV DHORO NARO-II     | 2728   | 392    |     | 10    | 7    | 1   | 3   | 31    |     | 3172    |
| 609         | 66kv Pithoro      | 56401  | 11KV PITHORO           | 3845   | 554    |     | 10    | 4    |     | 5   | 47    |     | 4465    |
| 610         | 66KV TANDO ADAM-1 | 39106  | 11KV CITY-1            | 40     | 21     |     |       | 1    |     |     |       |     | 62      |
| 611         | 66KV TANDO ADAM-1 | 39107  | 11KV CITY-2            | 24     | 9      |     |       | 1    |     |     |       |     | 34      |
| 612         | 66KV TANDO ADAM-1 | 39102  | 11KV INDUSTRIAL FEEDER | 45     | 15     |     | 1     | 3    |     |     |       |     | 64      |
| 613         | 66KV TANDO ADAM-1 | 39103  | 11KV JAM GOTH          | 141    | 27     |     | 6     | 3    |     |     |       |     | 177     |
| 614         | 66KV TANDO ADAM-1 | 39104  | 11KV TUBE WELL         | 8      | 1      |     |       |      |     |     |       |     | 9       |
| 615         | 66kvTando Bago    | 106001 | 11KV CITY TANDO BAGO   | 3328   | 697    |     | 1     | 15   |     | 1   | 51    | 1   | 4094    |
| 616         | 66kvTando Bago    | 106002 | 11KV PAHAR MURREE      | 610    | 33     |     |       | 1    |     |     | 6     |     | 650     |
| 617         | -                 | 0      | -                      | 2572   | 1202   | 210 | 355   | 1    |     | 1   | 1     | 2   | 4344    |
| 618         | -                 | 31507  | -                      |        |        |     |       |      |     |     | 4     |     | 4       |
| 619         | -                 | 33200  | -                      |        | 1      |     |       |      |     |     |       |     | 1       |
| 620         | -                 | 58507  | -                      |        |        |     |       |      |     |     | 1     |     | 1       |
| 621         | -                 | 63919  | -                      |        |        |     |       | 1    |     |     |       |     | 1       |
| 622         | -                 | 90904  | -                      |        |        |     |       |      |     |     | 1     |     | 1       |
| Grand Total |                   |        |                        | 978544 | 182753 | 339 | 15688 | 3821 | 346 | 686 | 13828 | 489 | 1196494 |

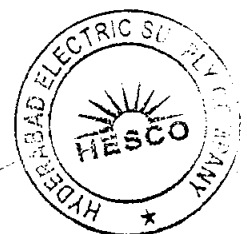


**HYDERABAD ELECTRIC SUPPLY COMPANY**

**FEEDER-WISE EXPECTED LOAD  
GROWTH (MW)**

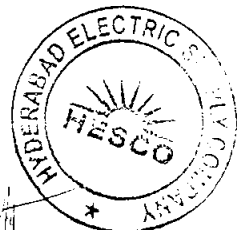


| Feeder Code | Name of Grid Station         | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|------------------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 005708      | 220kv Hala Road              | Firdous Colony       | 5.14              | 5.33              | 5.53              | 5.74            |
| 005703      | 220kv Hala Road              | Market Tower         | 5.14              | 5.33              | 5.53              | 5.74            |
| 005701      | 220kv Hala Road              | Hirabad              | 6.52              | 6.76              | 7.01              | 7.27            |
| 005707      | 220kv Hala Road              | HDA                  | 4.80              | 4.98              | 5.16              | 5.35            |
| 005702      | 220kv Hala Road              | Liaquat Colony       | 5.14              | 5.33              | 5.53              | 5.74            |
| 005709      | 220kv Hala Road              | Paretabad            | 6.69              | 6.93              | 7.19              | 7.46            |
| 005704      | 220kv Hala Road              | Public Health        | 6.34              | 6.58              | 6.82              | 7.08            |
| 005705      | 220kv Hala Road              | Miani Forest         | 5.66              | 5.87              | 6.09              | 6.31            |
| 86304       | 220kv T.M. Khan Road         | Link-2               | 5.14              | 5.33              | 5.53              | 5.74            |
| 86303       | 220kv T.M. Khan Road         | Detha                | 6.69              | 6.93              | 7.19              | 7.46            |
| 86305       | 220kv T.M. Khan Road         | Colony               | 5.83              | 6.05              | 6.27              | 6.50            |
| 86306       | 220kv T.M. Khan Road         | New Airport          | 5.66              | 5.87              | 6.09              | 6.31            |
| 062109      | 132kv Qasimabad              | Cannt.               | 6.52              | 6.76              | 7.01              | 7.27            |
| 062105      | 132kv Qasimabad              | Defence              | 6.34              | 6.58              | 6.82              | 7.08            |
| 062107      | 132kv Qasimabad              | Sachal               | 4.80              | 4.98              | 5.16              | 5.35            |
| 062101      | 132kv Qasimabad              | Douba                | 6.00              | 6.22              | 6.45              | 6.69            |
| 062110      | 132kv Qasimabad              | New Fort             | 4.63              | 4.80              | 4.98              | 5.16            |
| 062115      | 132kv Qasimabad              | Neron Kot            | 4.46              | 4.62              | 4.79              | 4.97            |
| 062128      | 132kv Qasimabad              | Magnum Mall          | 0.69              | 0.71              | 0.74              | 0.76            |
| 062104      | 132kv Qasimabad              | Qasimabad            | 4.12              | 4.27              | 4.43              | 4.59            |
| 062119      | 132kv Qasimabad              | Citizen Colony       | 5.49              | 5.69              | 5.90              | 6.12            |
| 062123      | 132kv Qasimabad              | G.M. Shah            | 4.80              | 4.98              | 5.16              | 5.35            |
| 062114      | 132kv Qasimabad              | Baldia               | 4.12              | 4.27              | 4.43              | 4.59            |
| 062125      | 132kv Qasimabad              | Nakash villas        | 3.43              | 3.56              | 3.69              | 3.82            |
| 062113      | 132kv Qasimabad              | Naseem Nagar         | 3.77              | 3.91              | 4.06              | 4.21            |
| 062129      | 132kv Qasimabad              | Al-Raheem Towel      | 0.00              | 0.00              | 0.00              | 0.00            |
| 062118      | 132kv Qasimabad              | Anwer Villas         | 3.94              | 4.09              | 4.24              | 4.40            |
| 062116      | 132kv Qasimabad              | M.E.S                | 3.09              | 3.20              | 3.32              | 3.44            |
| 062102      | 132kv Qasimabad              | G.O.R                | 3.77              | 3.91              | 4.06              | 4.21            |
| 062106      | 132kv Qasimabad              | Sarfaraz Baba        | 6.86              | 7.11              | 7.38              | 7.65            |
| 062124      | 132kv Qasimabad              | Hayat Baba           | 5.83              | 6.05              | 6.27              | 6.50            |
| 062120      | 132kv Qasimabad              | Sehrish Nagar        | 6.00              | 6.22              | 6.45              | 6.69            |
| 062117      | 132kv Qasimabad              | Shah Latif           | 4.80              | 4.98              | 5.16              | 5.35            |
| 062122      | 132kv Qasimabad              | H.D.A                | 5.49              | 5.69              | 5.90              | 6.12            |
| 062103      | 132kv Qasimabad              | Sadar                | 5.83              | 6.05              | 6.27              | 6.50            |
| 062121      | 132kv Qasimabad              | Mehran               | 0.00              | 0.00              | 0.00              | 0.00            |
| 062126      | 132kv Qasimabad              | Bori Bazaar          | 3.09              | 3.20              | 3.32              | 3.44            |
| 062127      | 132kv Qasimabad              | Naseem Shopping Ma   | 1.03              | 1.07              | 1.11              | 1.15            |
| 105702      | 132kv Rajputana Qasimabad-II | Agha Khan            | 6.69              | 6.93              | 7.19              | 7.46            |
| 105703      | 132kv Rajputana Qasimabad-II | Civil Hospital       | 2.47              | 2.56              | 2.66              | 2.75            |
| 105704      | 132kv Rajputana Qasimabad-II | Mubarak Colony       | 6.00              | 6.22              | 6.45              | 6.69            |
| 105708      | 132kv Rajputana Qasimabad-II | Qadir Avenue         | 1.65              | 1.71              | 1.77              | 1.84            |

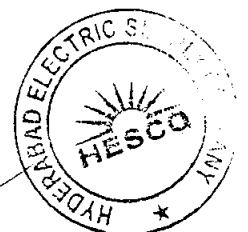


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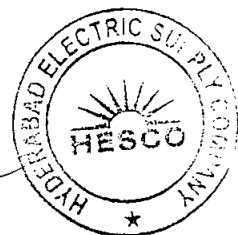
| Feeder Code | Name of Grid Station         | Name of 11KV Feeders  | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|------------------------------|-----------------------|-------------------|-------------------|-------------------|-----------------|
| 105709      | 132kv Rajputana Qasimabad-II | Palm Residency        | 0.26              | 0.27              | 0.28              | 0.29            |
| 105712      | 132kv Rajputana Qasimabad-II | Sadiq Levena          | 0.17              | 0.18              | 0.18              | 0.19            |
| 105711      | 132kv Rajputana Qasimabad-II | Motner Village        | 0.15              | 0.16              | 0.17              | 0.17            |
| 105701      | 132kv Rajputana Qasimabad-II | Meyani (Shah Bukhari) | 5.32              | 5.51              | 5.72              | 5.93            |
| 105705      | 132kv Rajputana Qasimabad-II | New Shahbaz           | 4.97              | 5.16              | 5.35              | 5.55            |
| 105706      | 132kv Rajputana Qasimabad-II | Bhitai Town           | 6.86              | 7.11              | 7.38              | 7.65            |
| 105707      | 132kv Rajputana Qasimabad-II | New H.D.A             | 5.74              | 5.96              | 6.18              | 6.41            |
| 105710      | 132kv Rajputana Qasimabad-II | Qamar Hospital        | 5.32              | 5.51              | 5.72              | 5.93            |
| 105713      | 132kv Rajputana Qasimabad-II | Diploi Colony         | 0.00              | 0.00              | 0.00              | 0.00            |
| 105714      | 132kv Rajputana Qasimabad-II | Rohan Faraz Villas    | 0.00              | 0.00              | 0.00              | 0.00            |
| 011910      | 132kv Latifabad              | Shah Bhitai           | 6.17              | 6.40              | 6.64              | 6.88            |
| 011906      | 132kv Latifabad              | Fort                  | 6.52              | 6.76              | 7.01              | 7.27            |
| 011902      | 132kv Latifabad              | Bund                  | 4.12              | 4.27              | 4.43              | 4.59            |
| 011901      | 132kv Latifabad              | Airport               | 5.66              | 5.87              | 6.09              | 6.31            |
| 011909      | 132kv Latifabad              | Stadium               | 3.09              | 3.20              | 3.32              | 3.44            |
| 011907      | 132kv Latifabad              | L-7                   | 6.34              | 6.58              | 6.82              | 7.08            |
| 011915      | 132kv Latifabad              | Cofcot                | 2.92              | 3.02              | 3.13              | 3.25            |
| 011916      | 132kv Latifabad              | Hali Nagar            | 3.43              | 3.56              | 3.69              | 3.82            |
| 011904      | 132kv Latifabad              | Fateh                 | 6.00              | 6.22              | 6.45              | 6.69            |
| 011914      | 132kv Latifabad              | L-3                   | 5.83              | 6.05              | 6.27              | 6.50            |
| 011905      | 132kv Latifabad              | Fazal Gulzar          | 6.17              | 6.40              | 6.64              | 6.88            |
| 011912      | 132kv Latifabad              | L-8                   | 6.69              | 6.93              | 7.19              | 7.46            |
| 011908      | 132kv Latifabad              | L-10                  | 4.80              | 4.98              | 5.16              | 5.35            |
| 011913      | 132kv Latifabad              | New F.Gulzar          | 5.14              | 5.33              | 5.53              | 5.74            |
| 011917      | 132kv Latifabad              | Dawood Mart           | 4.46              | 4.62              | 4.79              | 4.97            |
| 081105      | 132kv Kohsar                 | New L-5               | 5.14              | 5.33              | 5.53              | 5.74            |
| 081106      | 132kv Kohsar                 | Civil Avi: Authoriy   | 1.03              | 1.07              | 1.11              | 1.15            |
| 081103      | 132kv Kohsar                 | L-9                   | 6.34              | 6.58              | 6.82              | 7.08            |
| 081108      | 132kv Kohsar                 | L-11 (shift to T-1)   | 6.34              | 6.58              | 6.82              | 7.08            |
| 081110      | 132kv Kohsar                 | S.R.C                 | 0.69              | 0.71              | 0.74              | 0.76            |
| 081111      | 132kv Kohsar                 | Public School         | 6.69              | 6.93              | 7.19              | 7.46            |
| 081112      | 132kv Kohsar                 | New Stadium           | 5.14              | 5.33              | 5.53              | 5.74            |
| 081114      | 132kv Kohsar                 | Board Statium         | 1.54              | 1.60              | 1.66              | 1.72            |
| 081104      | 132kv Kohsar                 | New L-4               | 5.14              | 5.33              | 5.53              | 5.74            |
| 081102      | 132kv Kohsar                 | New L-10              | 5.83              | 6.05              | 6.27              | 6.50            |
| 081107      | 132kv Kohsar                 | Bismillah City        | 5.66              | 5.87              | 6.09              | 6.31            |
| 081101      | 132kv Kohsar                 | Kohsar (City)         | 5.14              | 5.33              | 5.53              | 5.74            |
| 081109      | 132kv Kohsar                 | Amani Shah            | 6.34              | 6.58              | 6.82              | 7.08            |
| 081113      | 132kv Kohsar                 | Muhammadi Hospital    | 4.63              | 4.80              | 4.98              | 5.16            |
| 081115      | 132kv Kohsar                 | New Comprehensive     | 6.00              | 6.22              | 6.45              | 6.69            |
| 006321      | 132kv NTPS                   | Kohe-Noor             | 6.69              | 6.93              | 7.19              | 7.46            |
| 006312      | 132kv NTPS                   | Poly-2                | 6.34              | 6.58              | 6.82              | 7.08            |



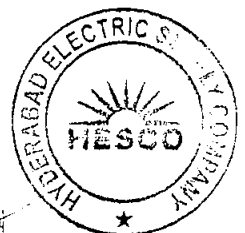
| Feeder Code | Name of Grid Station | Name of 11KV Feeders  | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|-----------------------|-------------------|-------------------|-------------------|-----------------|
| 006301      | 132kv NTPS           | Ghee-2                | 3.09              | 3.20              | 3.32              | 3.44            |
| 006309      | 132kv NTPS           | Husri                 | 2.57              | 2.67              | 2.77              | 2.87            |
| 006311      | 132kv NTPS           | Poly-1                | 6.52              | 6.76              | 7.01              | 7.27            |
| 006306      | 132kv NTPS           | Ghee-1                | 4.80              | 4.98              | 5.16              | 5.35            |
| 006302      | 132kv NTPS           | Gulzar                | 3.60              | 3.73              | 3.87              | 4.02            |
| 006307      | 132kv NTPS           | Kathar                | 6.52              | 6.76              | 7.01              | 7.27            |
| 006316      | 132kv NTPS           | L-9                   | 4.97              | 5.16              | 5.35              | 5.55            |
| 006319      | 132kv NTPS           | Ghee-3                | 2.23              | 2.31              | 2.40              | 2.49            |
| 006322      | 132kv NTPS           | Labour Flat M.M.Shah  | 0.00              | 0.00              | 0.00              | 0.00            |
| 006320      | 132kv NTPS           | Site                  | 5.83              | 6.05              | 6.27              | 6.50            |
| 102901      | 132kv Ghangramori    | Tando Yousuf          | 4.63              | 4.80              | 4.98              | 5.16            |
| 102902      | 132kv Ghangramori    | Indus                 | 2.74              | 2.85              | 2.95              | 3.06            |
| 102907      | 132kv Ghangramori    | Prateabad-4           | 6.86              | 7.11              | 7.38              | 7.65            |
| 102906      | 132kv Ghangramori    | Indus Dyeing          | 5.14              | 5.33              | 5.53              | 5.74            |
| 102908      | 132kv Ghangramori    | Boulevard             | 2.06              | 2.13              | 2.21              | 2.29            |
| 102903      | 132kv Ghangramori    | New Paretabad         | 6.69              | 6.93              | 7.19              | 7.46            |
| 102905      | 132kv Ghangramori    | N.Liaquat Colony      | 6.52              | 6.76              | 7.01              | 7.27            |
| 102904      | 132kv Ghangramori    | Tando Haider          | 4.63              | 4.80              | 4.98              | 5.16            |
| 102909      | 132kv Ghangramori    | New Quaidabad         | 6.86              | 7.11              | 7.38              | 7.65            |
| 015904      | 132kv Phulleli       | O.P.H-1               | 5.49              | 5.69              | 5.90              | 6.12            |
| 015910      | 132kv Phulleli       | Shahi Bazar           | 6.86              | 7.11              | 7.38              | 7.65            |
| 015907      | 132kv Phulleli       | Domenwah              | 5.49              | 5.69              | 5.90              | 6.12            |
| 015905      | 132kv Phulleli       | O.P.H-2               | 4.46              | 4.62              | 4.79              | 4.97            |
| 015901      | 132kv Phulleli       | City College          | 5.14              | 5.33              | 5.53              | 5.74            |
| 015911      | 132kv Phulleli       | Islamabad-2           | 5.49              | 5.69              | 5.90              | 6.12            |
| 015902      | 132kv Phulleli       | Fakir Ka Pir          | 5.32              | 5.51              | 5.72              | 5.93            |
| 015909      | 132kv Phulleli       | Pacca Qilla           | 5.14              | 5.33              | 5.53              | 5.74            |
| 015906      | 132kv Phulleli       | Paretabad-2           | 5.66              | 5.87              | 6.09              | 6.31            |
| 015903      | 132kv Phulleli       | Islamabad (Old)       | 3.43              | 3.56              | 3.69              | 3.82            |
| 015913      | 132kv Phulleli       | Noorani Basti         | 6.17              | 6.40              | 6.64              | 6.88            |
| 015912      | 132kv Phulleli       | New Memon             | 5.66              | 5.87              | 6.09              | 6.31            |
| 055310      | 132kv T.Jam          | S.A University        | 2.06              | 2.13              | 2.21              | 2.29            |
| 055303      | 132kv T.Jam          | City (T.Jam)          | 6.17              | 6.40              | 6.64              | 6.88            |
| 055301      | 132kv T.Jam          | Tando Qaisar          | 5.83              | 6.05              | 6.27              | 6.50            |
| 055304      | 132kv T.Jam          | Old University        | 4.63              | 4.80              | 4.98              | 5.16            |
| 055307      | 132kv T.Jam          | New University        | 2.23              | 2.31              | 2.40              | 2.49            |
| 055308      | 132kv T.Jam          | Scarp 4+3 (Tube Well) | 3.43              | 3.56              | 3.69              | 3.82            |
| 055302      | 132kv T.Jam          | Khatian               | 5.14              | 5.33              | 5.53              | 5.74            |
| 055311      | 132kv T.Jam          | Meer Colony           | 3.69              | 3.82              | 3.96              | 4.11            |
| 063904      | 132kv Kotri Site     | NG-1                  | 4.12              | 4.27              | 4.43              | 4.59            |
| 063902      | 132kv Kotri Site     | NG-2                  | 6.69              | 6.93              | 7.19              | 7.46            |
| 063906      | 132kv Kotri Site     | NG-5                  | 6.17              | 6.40              | 6.64              | 6.88            |



| Feeder Code | Name of Grid Station | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 063908      | 132kv Kotri Site     | NG-6                 | 6.17              | 6.40              | 6.64              | 6.88            |
| 063912      | 132kv Kotri Site     | Rafhan               | 3.09              | 3.20              | 3.32              | 3.44            |
| 063913      | 132kv Kotri Site     | Sapphire             | 4.46              | 4.62              | 4.79              | 4.97            |
| 063914      | 132kv Kotri Site     | Nageena              | 5.49              | 5.69              | 5.90              | 6.12            |
| 063916      | 132kv Kotri Site     | Quetta Textile Mill  | 0.00              | 0.00              | 0.00              | 0.00            |
| 063915      | 132kv Kotri Site     | Island Textile Mill  | 5.49              | 5.69              | 5.90              | 6.12            |
| 063917      | 132kv Kotri Site     | NG-8                 | 3.09              | 3.20              | 3.32              | 3.44            |
| 063903      | 132kv Kotri Site     | NG-3                 | 3.77              | 3.91              | 4.06              | 4.21            |
| 063905      | 132kv Kotri Site     | NG-4                 | 5.49              | 5.69              | 5.90              | 6.12            |
| 063909      | 132kv Kotri Site     | NG-7                 | 6.17              | 6.40              | 6.64              | 6.88            |
| 063918      | 132kv Kotri Site     | NG-9                 | 6.86              | 7.11              | 7.38              | 7.65            |
| 063901      | 132kv Kotri Site     | AGR-1                | 4.12              | 4.27              | 4.43              | 4.59            |
| 063910      | 132kv Kotri Site     | Hi Tech              | 1.71              | 1.78              | 1.84              | 1.91            |
| 063911      | 132kv Kotri Site     | Baba Salahuddin      | 5.14              | 5.33              | 5.53              | 5.74            |
| 063919      | 132kv Kotri Site     | Hi Tech Oil Mill     | 1.20              | 1.24              | 1.29              | 1.34            |
| 065604      | 132kv G.Shahbaz      | Muslim Town          | 5.49              | 5.69              | 5.90              | 6.12            |
| 065607      | 132kv G.Shahbaz      | Orient               | 0.26              | 0.27              | 0.28              | 0.29            |
| 065609      | 132kv G.Shahbaz      | Muhammadi            | 0.09              | 0.09              | 0.09              | 0.10            |
| 065606      | 132kv G.Shahbaz      | Bhatti Colony        | 4.80              | 4.98              | 5.16              | 5.35            |
| 065603      | 132kv G.Shahbaz      | Khuda Ki Basti       | 2.40              | 2.49              | 2.58              | 2.68            |
| 065602      | 132kv G.Shahbaz      | University           | 2.74              | 2.85              | 2.95              | 3.06            |
| 065608      | 132kv G.Shahbaz      | New Industrial       | 1.03              | 1.07              | 1.11              | 1.15            |
| 065605      | 132kv G.Shahbaz      | Mehran               | 5.66              | 5.87              | 6.09              | 6.31            |
| 007205      | 132kv Jamshoro       | Tube Well            | 6.77              | 7.02              | 7.28              | 7.55            |
| 007208      | 132kv Jamshoro       | OCF-1                | 1.03              | 1.07              | 1.11              | 1.15            |
| 007209      | 132kv Jamshoro       | OCF-2                | 2.23              | 2.31              | 2.40              | 2.49            |
| 007210      | 132kv Jamshoro       | Pak Army             | 1.80              | 1.87              | 1.94              | 2.01            |
| 007204      | 132kv Jamshoro       | Old Petaro           | 4.82              | 5.00              | 5.18              | 5.37            |
| 007201      | 132kv Jamshoro       | LMC                  | 2.57              | 2.67              | 2.77              | 2.87            |
| 007213      | 132kv Jamshoro       | New LMC              | 3.62              | 3.75              | 3.89              | 4.03            |
| 007203      | 132kv Jamshoro       | New Petaro           | 3.31              | 3.43              | 3.56              | 3.69            |
| 007211      | 132kv Jamshoro       | Allama I.I Kazi      | 7.56              | 7.84              | 8.13              | 8.43            |
| 007214      | 132kv Jamshoro       | China                | 2.31              | 2.40              | 2.49              | 2.58            |
| 007212      | 132kv Jamshoro       | Sandoze Acorama      | 3.17              | 3.29              | 3.41              | 3.54            |
| 073105      | 132kv Nooriabad      | NG-2                 | 3.43              | 3.56              | 3.69              | 3.82            |
| 073104      | 132kv Nooriabad      | NG-3                 | 3.60              | 3.73              | 3.87              | 4.02            |
| 073101      | 132kv Nooriabad      | NG-1                 | 2.83              | 2.93              | 3.04              | 3.16            |
| 073107      | 132kv Nooriabad      | Anoud Power          | 0.17              | 0.18              | 0.18              | 0.19            |
| 073108      | 132kv Nooriabad      | Zara Textile         | 5.14              | 5.33              | 5.53              | 5.74            |
| 073109      | 132kv Nooriabad      | Younis Textile Mill  | 5.14              | 5.33              | 5.53              | 5.74            |
| 073112      | 132kv Nooriabad      | Al-Raheem Tex: Mill  | 4.97              | 5.16              | 5.35              | 5.55            |
| 073110      | 132kv Nooriabad      | Faisal Textile       | 4.97              | 5.16              | 5.35              | 5.55            |

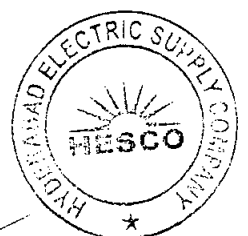


| Feeder Code | Name of Grid Station | Name of 11KV Feeders  | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|-----------------------|-------------------|-------------------|-------------------|-----------------|
| 073111      | 132kv Nooriabad      | Al-Muqet Textile Mill | 2.92              | 3.02              | 3.13              | 3.25            |
| 073113      | 132kv Nooriabad      | Pinnacle Fiber        | 2.14              | 2.22              | 2.30              | 2.39            |
| 073115      | 132kv Nooriabad      | National Food         | 0.60              | 0.62              | 0.65              | 0.67            |
| 073114      | 132kv Nooriabad      | Nadeem Taxtile        | 3.77              | 3.91              | 4.06              | 4.21            |
| 073116      | 132kv Nooriabad      | H.R Cotton            | 0.17              | 0.18              | 0.18              | 0.19            |
| 009202      | 132kv Kalu Kohar     | Sindh Glass           | 4.80              | 4.98              | 5.16              | 5.35            |
| 009203      | 132kv Kalu Kohar     | Huffaz                | 1.29              | 1.33              | 1.38              | 1.43            |
| 009210      | 132kv Kalu Kohar     | Feeder No.3           | 5.49              | 5.69              | 5.90              | 6.12            |
| 009215      | 132kv Kalu Kohar     | Premium-2             | 3.60              | 3.73              | 3.87              | 4.02            |
| 009216      | 132kv Kalu Kohar     | Al-Karim Towel        | 1.63              | 1.69              | 1.75              | 1.82            |
| 009201      | 132kv Kalu Kohar     | Seri                  | 5.14              | 5.33              | 5.53              | 5.74            |
| 009204      | 132kv Kalu Kohar     | Feeder No.1           | 2.92              | 3.02              | 3.13              | 3.25            |
| 009206      | 132kv Kalu Kohar     | Feeder No.2           | 4.97              | 5.16              | 5.35              | 5.55            |
| 009207      | 132kv Kalu Kohar     | Feeder No.4           | 4.46              | 4.62              | 4.79              | 4.97            |
| 009208      | 132kv Kalu Kohar     | Feeder No.5           | 1.03              | 1.07              | 1.11              | 1.15            |
| 009209      | 132kv Kalu Kohar     | Feeder No.6           | 0.69              | 0.71              | 0.74              | 0.76            |
| 009211      | 132kv Kalu Kohar     | Feeder No.8           | 6.00              | 6.22              | 6.45              | 6.69            |
| 009214      | 132kv Kalu Kohar     | PEC Express (Pak Ar   | 0.34              | 0.36              | 0.37              | 0.38            |
| 068801      | 132kv T.B.Khan       | City                  | 3.43              | 3.56              | 3.69              | 3.82            |
| 068802      | 132kv T.B.Khan       | Ahmed Khan            | 2.40              | 2.49              | 2.58              | 2.68            |
| 068804      | 132kv T.B.Khan       | Pak Army              | 0.34              | 0.36              | 0.37              | 0.38            |
| 068805      | 132kv T.B.Khan       | Pak Navy              | 0.60              | 0.62              | 0.65              | 0.67            |
| 010501      | 132kv Khanote        | Khanote City          | 3.09              | 3.20              | 3.32              | 3.44            |
| 010502      | 132kv Khanote        | Lakhra                | 1.11              | 1.16              | 1.20              | 1.24            |
| 010503      | 132kv Khanote        | Indus Coal            | 0.94              | 0.98              | 1.01              | 1.05            |
| 000301      | 132kv Shalmani       | Amri                  | 4.97              | 5.16              | 5.35              | 5.55            |
| 000305      | 132kv Shalmani       | Pak Army              | 0.69              | 0.71              | 0.74              | 0.76            |
| 000302      | 132kv Shalmani       | Sann                  | 5.49              | 5.69              | 5.90              | 6.12            |
| 000304      | 132kv Shalmani       | Irrigation            | 2.23              | 2.31              | 2.40              | 2.49            |
| 019002      | 132kv Sehwan         | Sehwan City           | 3.60              | 3.73              | 3.87              | 4.02            |
| 019013      | 132kv Sehwan         | City-4                | 2.23              | 2.31              | 2.40              | 2.49            |
| 019011      | 132kv Sehwan         | Hotel Devien          | 0.29              | 0.30              | 0.31              | 0.33            |
| 019012      | 132kv Sehwan         | Irrigation            | 0.60              | 0.62              | 0.65              | 0.67            |
| 019008      | 132kv Sehwan         | Lal S.Qalandar        | 4.29              | 4.45              | 4.61              | 4.78            |
| 019010      | 132kv Sehwan         | Dargah                | 0.17              | 0.18              | 0.18              | 0.19            |
| 019004      | 132kv Sehwan         | Jhangara              | 3.86              | 4.00              | 4.15              | 4.30            |
| 019016      | 132kv Sehwan         | Syed Abdullah Shah I  | 0.60              | 0.62              | 0.65              | 0.67            |
| 019006      | 132kv Sehwan         | Old Bhan              | 5.49              | 5.69              | 5.90              | 6.12            |
| 019009      | 132kv Sehwan         | City-3                | 4.63              | 4.80              | 4.98              | 5.16            |
| 019014      | 132kv Sehwan         | City-5                | 2.06              | 2.13              | 2.21              | 2.29            |
| 019015      | 132kv Sehwan         | City-6                | 1.29              | 1.33              | 1.38              | 1.43            |
| 019017      | 132kv Sehwan         | Danister              | 2.92              | 3.02              | 3.13              | 3.25            |



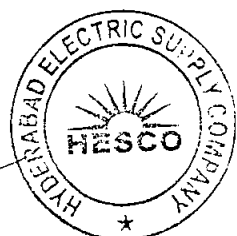


| Feeder Code | Name of Grid Station | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 008001      | 132kv Jherruk        | City                 | 1.20              | 1.24              | 1.29              | 1.34            |
| 008002      | 132kv Jherruk        | Chulh                | 0.86              | 0.89              | 0.92              | 0.96            |
| 008003      | 132kv Jherruk        | Sabir Poultry Farm   | 0.34              | 0.36              | 0.37              | 0.38            |
| 008101      | 132kv Jhampir        | City                 | 1.46              | 1.51              | 1.57              | 1.63            |
| 008102      | 132kv Jhampir        | Steel Mill           | 0.09              | 0.09              | 0.09              | 0.10            |
| 008103      | 132kv Jhampir        | Agriculture          | 1.46              | 1.51              | 1.57              | 1.63            |
| 008104      | 132kv Jhampir        | Zepi's               | 0.09              | 0.09              | 0.09              | 0.10            |
| 008105      | 132kv Jhampir        | TGF China            | 0.09              | 0.09              | 0.09              | 0.10            |
| 021302      | 132kv Thatta         | Islampur             | 6.69              | 6.93              | 7.19              | 7.46            |
| 021301      | 132kv Thatta         | Chilia Mill          | 3.60              | 3.73              | 3.87              | 4.02            |
| 021303      | 132kv Thatta         | Steel Mill           | 2.40              | 2.49              | 2.58              | 2.68            |
| 021305      | 132kv Thatta         | Jangshahi            | 1.37              | 1.42              | 1.48              | 1.53            |
| 021304      | 132kv Thatta         | Thatta (City)        | 6.86              | 7.11              | 7.38              | 7.65            |
| 021309      | 132kv Thatta         | Ashabi Baba          | 3.94              | 4.09              | 4.24              | 4.40            |
| 021308      | 132kv Thatta         | Maaza                | 0.34              | 0.36              | 0.37              | 0.38            |
| 021310      | 132kv Thatta         | Shah Industries      | 0.00              | 0.00              | 0.00              | 0.00            |
| 056002      | 132kv Pir Patho      | V.G.Ullah            | 3.09              | 3.20              | 3.32              | 3.44            |
| 056003      | 132kv Pir Patho      | Pirpatho (City)      | 3.26              | 3.38              | 3.50              | 3.63            |
| 056004      | 132kv Pir Patho      | P.A.F                | 0.86              | 0.89              | 0.92              | 0.96            |
| 056005      | 132kv Pir Patho      | Industrial           | 0.51              | 0.53              | 0.55              | 0.57            |
| 055801      | 132kv M.P.Sakro      | City (M.P.Sakro)     | 3.26              | 3.38              | 3.50              | 3.63            |
| 055802      | 132kv M.P.Sakro      | Garho                | 3.52              | 3.65              | 3.78              | 3.92            |
| 055804      | 132kv M.P.Sakro      | Latt Stop            | 0.94              | 0.98              | 1.01              | 1.05            |
| 055803      | 132kv M.P.Sakro      | Tapal                | 2.40              | 2.49              | 2.58              | 2.68            |
| 020303      | 132kv Sujawal        | Mirpur Bathoro       | 4.12              | 4.27              | 4.43              | 4.59            |
| 020305      | 132kv Sujawal        | Pak Navy             | 0.34              | 0.36              | 0.37              | 0.38            |
| 020304      | 132kv Sujawal        | B-Talpur             | 3.09              | 3.20              | 3.32              | 3.44            |
| 020302      | 132kv Sujawal        | City                 | 6.52              | 6.76              | 7.01              | 7.27            |
| 020301      | 132kv Sujawal        | Chohar Jamali        | 3.09              | 3.20              | 3.32              | 3.44            |
| 075801      | 132kv Ladiun         | City                 | 3.77              | 3.91              | 4.06              | 4.21            |
| 045301      | 132kv B.S.Karim      | Banu                 | 1.85              | 1.92              | 1.99              | 2.07            |
| 045302      | 132kv B.S.Karim      | Jhoke                | 2.06              | 2.13              | 2.21              | 2.29            |
| 045303      | 132kv B.S.Karim      | Daro                 | 3.43              | 3.56              | 3.69              | 3.82            |
| 045304      | 132kv B.S.Karim      | S.K Alvani           | 0.00              | 0.00              | 0.00              | 0.00            |
| 021007      | 132kv T.M.Khan       | Abadgar              | 5.14              | 5.33              | 5.53              | 5.74            |
| 021004      | 132kv T.M.Khan       | Pandhiwah            | 5.32              | 5.51              | 5.72              | 5.93            |
| 021002      | 132kv T.M.Khan       | Digmori              | 3.43              | 3.56              | 3.69              | 3.82            |
| 021003      | 132kv T.M.Khan       | F.S.Mill             | 0.00              | 0.00              | 0.00              | 0.00            |
| 021011      | 132kv T.M.Khan       | Industrial           | 3.94              | 4.09              | 4.24              | 4.40            |
| 021008      | 132kv T.M.Khan       | Lakhat               | 1.03              | 1.07              | 1.11              | 1.15            |
| 021005      | 132kv T.M.Khan       | T.T.Mill             | 5.66              | 5.87              | 6.09              | 6.31            |
| 021001      | 132kv T.M.Khan       | City New             | 3.77              | 3.91              | 4.06              | 4.21            |

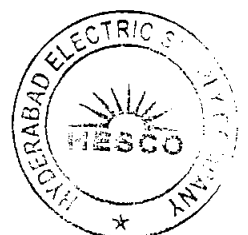


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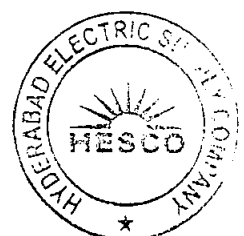
| Feeder Code | Name of Grid Station | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 021006      | 132kv T.M.Khan       | Jamali               | 2.23              | 2.31              | 2.40              | 2.49            |
| 21010       | 132kv T.M.Khan       | DHQ                  | 0.34              | 0.36              | 0.37              | 0.38            |
| 021009      | 132kv T.M.Khan       | NICVD                | 0.34              | 0.36              | 0.37              | 0.38            |
| 032603      | 66kv Matli           | Nazarpur             | 2.74              | 2.85              | 2.95              | 3.06            |
| 032604      | 66kv Matli           | Pirwah               | 3.17              | 3.29              | 3.41              | 3.54            |
| 116201      | 132kv Matli          | City-2               | 4.54              | 4.71              | 4.89              | 5.07            |
| 032602      | 132kv Matli          | City                 | 6.00              | 6.22              | 6.45              | 6.69            |
| 032605      | 132kv Matli          | Omni                 | 1.46              | 1.51              | 1.57              | 1.63            |
| 032606      | 132kv Matli          | Omni-1 (OFF)         | 0.00              | 0.00              | 0.00              | 0.00            |
| 032607      | 132kv Matli          | Omni-2 (OFF)         | 0.00              | 0.00              | 0.00              | 0.00            |
| 116205      | 132kv Matli          | New Channel          | 1.46              | 1.51              | 1.57              | 1.63            |
| 039202      | 132/66kv T.G.Ali     | T.G Ali              | 3.17              | 3.29              | 3.41              | 3.54            |
| 039201      | 132/66kv T.G.Ali     | Ch: Abdullah         | 2.06              | 2.13              | 2.21              | 2.29            |
| 039203      | 132/66kv T.G.Ali     | Thari                | 2.23              | 2.31              | 2.40              | 2.49            |
| 039204      | 132/66kv T.G.Ali     | Pir Sakhi            | 1.29              | 1.33              | 1.38              | 1.43            |
| 038801      | 132/66kv Talhar      | City                 | 1.10              | 1.14              | 1.18              | 1.22            |
| 038802      | 132/66kv Talhar      | B.S.Mills            | 2.74              | 2.85              | 2.95              | 3.06            |
| 038803      | 132/66kv Talhar      | Rajo Khanani         | 2.13              | 2.20              | 2.29              | 2.37            |
| 038804      | 132/66kv Talhar      | D.E.H.I              | 1.71              | 1.78              | 1.84              | 1.91            |
| 038805      | 132/66kv Talhar      | New Channel          | 0.62              | 0.64              | 0.66              | 0.69            |
| 038806      | 132/66kv Talhar      | Industrial           | 2.59              | 2.69              | 2.78              | 2.89            |
| 026601      | 132/66kv Badin       | City-I               | 5.57              | 5.78              | 5.99              | 6.21            |
| 026607      | 132/66kv Badin       | City-II              | 4.80              | 4.98              | 5.16              | 5.35            |
| 026603      | 132/66kv Badin       | P.A.F                | 2.23              | 2.31              | 2.40              | 2.49            |
| 026604      | 132/66kv Badin       | Golarchi             | 2.14              | 2.22              | 2.30              | 2.39            |
| 026605      | 132/66kv Badin       | Seerani              | 1.03              | 1.07              | 1.11              | 1.15            |
| 026606      | 132/66kv Badin       | Pero Lashari         | 1.54              | 1.60              | 1.66              | 1.72            |
| 026602      | 132/66kv Badin       | Khoski               | 4.12              | 4.27              | 4.43              | 4.59            |
| 026608      | 132/66kv Badin       | Badin Cantt.         | 0.77              | 0.80              | 0.83              | 0.86            |
| 026609      | 132/66kv Badin       | Shaheen Corporation  | 0.81              | 0.84              | 0.87              | 0.90            |
| 102802      | 132kv Golarchi       | Ahmed Rajo           | 1.63              | 1.69              | 1.75              | 1.82            |
| 102803      | 132kv Golarchi       | Khorwah              | 0.51              | 0.53              | 0.55              | 0.57            |
| 102804      | 132kv Golarchi       | Kario Ghanwar        | 3.43              | 3.56              | 3.69              | 3.82            |
| 102806      | 132kv Golarchi       | Md. Iqbal Industry   | 1.37              | 1.42              | 1.48              | 1.53            |
| 102807      | 132kv Golarchi       | Baqar Shah Jeelani   | 1.37              | 1.42              | 1.48              | 1.53            |
| 102808      | 132kv Golarchi       | Ghareeb Sons Industr | 0.77              | 0.80              | 0.83              | 0.86            |
| 102805      | 132kv Golarchi       | Kohistan Industry    | 1.89              | 1.96              | 2.03              | 2.10            |
| 102801      | 132kv Golarchi       | City                 | 4.29              | 4.45              | 4.61              | 4.78            |
| 072101      | 66kv Kadhan          | City                 | 2.23              | 2.31              | 2.40              | 2.49            |
| 072102      | 66kv Kadhan          | Badami               | 0.34              | 0.36              | 0.37              | 0.38            |
| 106001      | 66kvTando Bago       | City                 | 4.84              | 5.01              | 5.20              | 5.39            |
| 106002      | 66kvTando Bago       | Pahar Muree          | 0.51              | 0.53              | 0.55              | 0.57            |



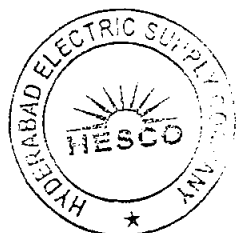
| Feeder Code | Name of Grid Station      | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|---------------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 06902       | 132kv Hyd Bypass          | Abdullah Town        | 4.63              | 4.80              | 4.98              | 5.16            |
| 06903       | 132kv Hyd Bypass          | Data Nagar           | 3.77              | 3.91              | 4.06              | 4.21            |
| 116907      | 132kv Hyd Bypass          | Sindhu               | 6.17              | 6.40              | 6.64              | 6.88            |
| 116906      | 132kv Hyd Bypass          | Phase-I              | 5.32              | 5.51              | 5.72              | 5.93            |
| 116905      | 132kv Hyd Bypass          | Al Abbas             | 6.17              | 6.40              | 6.64              | 6.88            |
| 116904      | 132kv Hyd Bypass          | Memon Society        | 2.74              | 2.85              | 2.95              | 3.06            |
| 116908      | 132kv Hyd Bypass          | Abdullah Mall        | 2.74              | 2.85              | 2.95              | 3.06            |
| 116909      | 132kv Hyd Bypass          | Sehrish Nagar (HBP)  | 6.52              | 6.76              | 7.01              | 7.27            |
| 126201      | 132kv Sakhi Wahab Hussain | Line Channel         | 1.54              | 1.60              | 1.66              | 1.72            |
| 32501       | 132kv Matiari             | Sekhat               | 5.14              | 5.33              | 5.53              | 5.74            |
| 32505       | 132kv Matiari             | T.Well-1             | 6.34              | 6.58              | 6.82              | 7.08            |
| 32502       | 132kv Matiari             | City                 | 5.66              | 5.87              | 6.09              | 6.31            |
| 32503       | 132kv Matiari             | Jandal Kot           | 3.60              | 3.73              | 3.87              | 4.02            |
| 32504       | 132kv Matiari             | R/Pakistan           | 0.69              | 0.71              | 0.74              | 0.76            |
| 32506       | 132kv Matiari             | T.Well-2             | 2.06              | 2.13              | 2.21              | 2.29            |
| 32507       | 132kv Matiari             | Industrial           | 2.06              | 2.13              | 2.21              | 2.29            |
| 32508       | 132kv Matiari             | Health Service       | 1.37              | 1.42              | 1.48              | 1.53            |
| 005613      | 132kv Hala                | City-2               | 2.57              | 2.67              | 2.77              | 2.87            |
| 005601      | 132kv Hala                | Bhitshah             | 4.46              | 4.62              | 4.79              | 4.97            |
| 005604      | 132kv Hala                | Saeedabad            | 3.77              | 3.91              | 4.06              | 4.21            |
| 005612      | 132kv Hala                | City-1               | 5.83              | 6.05              | 6.27              | 6.50            |
| 005602      | 132kv Hala                | S.Abdul Latif        | 4.46              | 4.62              | 4.79              | 4.97            |
| 005603      | 132kv Hala                | Old Hala             | 2.40              | 2.49              | 2.58              | 2.68            |
| 005611      | 132kv Hala                | T-Well-4             | 3.09              | 3.20              | 3.32              | 3.44            |
| 005615      | 132kv Hala                | Mansora              | 4.97              | 5.16              | 5.35              | 5.55            |
| 005610      | 132kv Hala                | T-Well-3             | 4.80              | 4.98              | 5.16              | 5.35            |
| 005616      | 132kv Hala                | Shah Habib           | 4.12              | 4.27              | 4.43              | 4.59            |
| 005618      | 132kv Hala                | Express              | 3.77              | 3.91              | 4.06              | 4.21            |
| 036810      | 132kv Shahdadpur          | City-2               | 6.86              | 7.11              | 7.38              | 7.65            |
| 036801      | 132kv Shahdadpur          | City-1               | 6.00              | 6.22              | 6.45              | 6.69            |
| 036809      | 132kv Shahdadpur          | Scarp-2+3            | 1.54              | 1.60              | 1.66              | 1.72            |
| 036803      | 132kv Shahdadpur          | R.B                  | 1.37              | 1.42              | 1.48              | 1.53            |
| 036807      | 132kv Shahdadpur          | Scarp-2              | 1.20              | 1.24              | 1.29              | 1.34            |
| 036808      | 132kv Shahdadpur          | Scarp-1              | 0.86              | 0.89              | 0.92              | 0.96            |
| 036802      | 132kv Shahdadpur          | Haji Appan           | 2.06              | 2.13              | 2.21              | 2.29            |
| 036804      | 132kv Shahdadpur          | Hingoro              | 1.46              | 1.51              | 1.57              | 1.63            |
| 036811      | 132kv Shahdadpur          | City-3               | 3.26              | 3.38              | 3.50              | 3.63            |
| 036812      | 132kv Shahdadpur          | Society              | 4.12              | 4.27              | 4.43              | 4.59            |
| 036814      | 132kv Shahdadpur          | Wassan               | 2.06              | 2.13              | 2.21              | 2.29            |
| 036813      | 132kv Shahdadpur          | Industrial           | 3.94              | 4.09              | 4.24              | 4.40            |
| 061202      | 132kv T.Adam              | Bhitshah Road        | 3.26              | 3.38              | 3.50              | 3.63            |
| 061204      | 132kv T.Adam              | Barani               | 5.83              | 6.05              | 6.27              | 6.50            |



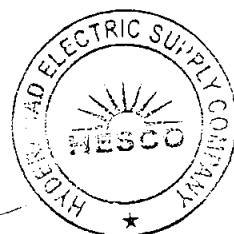
| Feeder Code | Name of Grid Station | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 061207      | 132kv T.Adam         | Hyd: Road            | 5.83              | 6.05              | 6.27              | 6.50            |
| 061201      | 132kv T.Adam         | Industrial-I         | 4.80              | 4.98              | 5.16              | 5.35            |
| 061209      | 132kv T.Adam         | Noman Colony         | 5.66              | 5.87              | 6.09              | 6.31            |
| 061205      | 132kv T.Adam         | T.A.Y Road (TDM-5)   | 6.00              | 6.22              | 6.45              | 6.69            |
| 061206      | 132kv T.Adam         | Joharabad            | 4.63              | 4.80              | 4.98              | 5.16            |
| 061212      | 132kv T.Adam         | TDM-6                | 4.12              | 4.27              | 4.43              | 4.59            |
| 061203      | 132kv T.Adam         | M.A. Jinah Road      | 5.32              | 5.51              | 5.72              | 5.93            |
| 061208      | 132kv T.Adam         | Juman Shah           | 5.49              | 5.69              | 5.90              | 6.12            |
| 061210      | 132kv T.Adam         | City                 | 4.29              | 4.45              | 4.61              | 4.78            |
| 061211      | 132kv T.Adam         | Industrial-II        | 3.26              | 3.38              | 3.50              | 3.63            |
| 061213      | 132kv T.Adam         | Dural Shah           | 6.69              | 6.93              | 7.19              | 7.45            |
| 061214      | 132kv T.Adam         | S.N Junejo           | 1.97              | 2.04              | 2.12              | 2.20            |
| 018205      | 132kv Saeedabad      | Sohrab               | 5.49              | 5.69              | 5.90              | 6.12            |
| 018201      | 132kv Saeedabad      | Sikander             | 5.66              | 5.87              | 6.09              | 6.31            |
| 018202      | 132kv Saeedabad      | City-1               | 6.17              | 6.40              | 6.64              | 6.88            |
| 018204      | 132kv Saeedabad      | Katchi               | 1.71              | 1.78              | 1.84              | 1.91            |
| 018206      | 132kv Saeedabad      | City-2               | 4.80              | 4.98              | 5.16              | 5.35            |
| 018502      | 132kv Sakrand        | S.S.C                | 0.77              | 0.80              | 0.83              | 0.86            |
| 018505      | 132kv Sakrand        | T.Well 3+4           | 4.29              | 4.45              | 4.61              | 4.78            |
| 018501      | 132kv Sakrand        | City-1               | 5.14              | 5.33              | 5.53              | 5.74            |
| 018513      | 132kv Sakrand        | Pir Zakri            | 0.09              | 0.09              | 0.09              | 0.10            |
| 018509      | 132kv Sakrand        | Meh: Pur-2           | 3.43              | 3.56              | 3.69              | 3.82            |
| 018510      | 132kv Sakrand        | Commando             | 0.09              | 0.09              | 0.09              | 0.10            |
| 018514      | 132kv Sakrand        | City-3               | 5.49              | 5.69              | 5.90              | 6.12            |
| 018507      | 132kv Sakrand        | City-2               | 3.09              | 3.20              | 3.32              | 3.44            |
| 018503      | 132kv Sakrand        | T.Well-2             | 3.09              | 3.20              | 3.32              | 3.44            |
| 018508      | 132kv Sakrand        | Meh: Pur-1           | 6.17              | 6.40              | 6.64              | 6.88            |
| 018504      | 132kv Sakrand        | T.Well 1+7           | 6.52              | 6.76              | 7.01              | 7.27            |
| 018506      | 132kv Sakrand        | T.Well 5+6           | 4.12              | 4.27              | 4.43              | 4.59            |
| 018511      | 132kv Sakrand        | Punhal K.C           | 1.11              | 1.16              | 1.20              | 1.24            |
| 018512      | 132kv Sakrand        | M.E.S                | 0.34              | 0.36              | 0.37              | 0.38            |
| 018515      | 132kv Sakrand        | Pai Forest           | 1.37              | 1.42              | 1.48              | 1.53            |
| 057801      | 132kv Kazi Ahmed     | City                 | 2.92              | 3.02              | 3.13              | 3.25            |
| 057804      | 132kv Kazi Ahmed     | T.Well 4+5           | 4.12              | 4.27              | 4.43              | 4.59            |
| 057803      | 132kv Kazi Ahmed     | T.Well 3+4           | 5.14              | 5.33              | 5.53              | 5.74            |
| 057808      | 132kv Kazi Ahmed     | Haque Madina         | 4.12              | 4.27              | 4.43              | 4.59            |
| 057807      | 132kv Kazi Ahmed     | N. Wali Mohd.        | 5.32              | 5.51              | 5.72              | 5.93            |
| 057810      | 132kv Kazi Ahmed     | City-II              | 2.23              | 2.31              | 2.40              | 2.49            |
| 057806      | 132kv Kazi Ahmed     | Fathual Zardari      | 4.46              | 4.62              | 4.79              | 4.97            |
| 057802      | 132kv Kazi Ahmed     | T.Well 1+2           | 4.80              | 4.98              | 5.16              | 5.35            |
| 057805      | 132kv Kazi Ahmed     | Pir Noor Shah        | 3.26              | 3.38              | 3.50              | 3.63            |
| 057809      | 132kv Kazi Ahmed     | Syed Imdad Ali       | 2.74              | 2.85              | 2.95              | 3.06            |



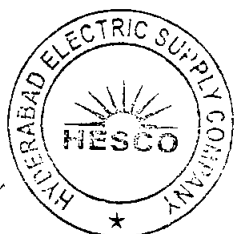
| Feeder Code | Name of Grid Station           | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|--------------------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 26406       | 132kv Doulatpur                | S.P. JAHANIA         | 5.14              | 5.33              | 5.53              | 5.74            |
| 26404       | 132kv Doulatpur                | SCARP                | 4.46              | 4.62              | 4.79              | 4.97            |
| 26403       | 132kv Doulatpur                | CITY                 | 5.14              | 5.33              | 5.53              | 5.74            |
| 26405       | 132kv Doulatpur                | HABERI               | 5.49              | 5.69              | 5.90              | 6.12            |
| 26407       | 132kv Doulatpur                | N. GECHERO           | 5.14              | 5.33              | 5.53              | 5.74            |
| 085902      | 132kv N'Shah Site (III)        | Chemi Visco          | 0.34              | 0.36              | 0.37              | 0.38            |
| 085901      | 132kv N'Shah Site (III)        | New University       | 3.09              | 3.20              | 3.32              | 3.44            |
| 085903      | 132kv N'Shah Site (III)        | Dalail Dero          | 0.00              | 0.00              | 0.00              | 0.00            |
| 085904      | 132kv N'Shah Site (III)        | Cancer Hospatil      | 1.03              | 1.07              | 1.11              | 1.15            |
| 085905      | 132kv N'Shah Site (III)        | New Khadar           | 1.89              | 1.96              | 2.03              | 2.10            |
| 085906      | 132kv N'Shah Site (III)        | Labor Fiats          | 0.00              | 0.00              | 0.00              | 0.00            |
| 085907      | 132kv N'Shah Site (III)        | Bakhtawar            | 2.06              | 2.13              | 2.21              | 2.29            |
| 085908      | 132kv N'Shah Site (III)        | Quest                | 2.40              | 2.49              | 2.58              | 2.68            |
| 085909      | 132kv N'Shah Site (III)        | PAF Base             | 0.69              | 0.71              | 0.74              | 0.76            |
| 085910      | 132kv N'Shah Site (III)        | SBA University       | 1.03              | 1.07              | 1.11              | 1.15            |
| 014402      | 132kv N'Shah-I                 | Gareebabad           | 6.17              | 6.40              | 6.64              | 6.88            |
| 014408      | 132kv N'Shah-I                 | Manuabad             | 6.34              | 6.58              | 6.82              | 7.08            |
| 014401      | 132kv N'Shah-I                 | Society              | 5.32              | 5.51              | 5.72              | 5.93            |
| 014403      | 132kv N'Shah-I                 | Dour                 | 4.12              | 4.27              | 4.43              | 4.59            |
| 014415      | 132kv N'Shah-I                 | Mehran Colony        | 4.29              | 4.45              | 4.61              | 4.78            |
| 14417       | 132kv N'Shah-I                 | Mohni Bazar          | 4.29              | 4.45              | 4.61              | 4.78            |
| 014410      | 132kv N'Shah-I                 | Bola Ja Kuba         | 1.71              | 1.78              | 1.84              | 1.91            |
| 014407      | 132kv N'Shah-I                 | Hospital PMC-I       | 3.43              | 3.56              | 3.69              | 3.82            |
| 014405      | 132kv N'Shah-I                 | Khairshah            | 2.23              | 2.31              | 2.40              | 2.49            |
| 014409      | 132kv N'Shah-I                 | Nawabshah            | 4.80              | 4.98              | 5.16              | 5.35            |
| 014411      | 132kv N'Shah-I                 | Zardari House        | 0.34              | 0.36              | 0.37              | 0.38            |
| 014412      | 132kv N'Shah-I                 | H.M. Khawaja         | 4.29              | 4.45              | 4.61              | 4.78            |
| 014413      | 132kv N'Shah-I                 | PMC-II               | 2.06              | 2.13              | 2.21              | 2.29            |
| 014414      | 132kv N'Shah-I                 | PMU                  | 0.69              | 0.71              | 0.74              | 0.76            |
| 014406      | 132kv N'Shah-I                 | University           | 1.03              | 1.07              | 1.11              | 1.15            |
| 014416      | 132kv N'Shah-I                 | M.C. Hospital        | 0.26              | 0.27              | 0.28              | 0.29            |
| 014418      | 132kv N'Shah-I                 | Essarpura            | 6.52              | 6.76              | 7.01              | 7.27            |
| 014419      | 132kv N'Shah-I                 | Allahwali Masjid     | 3.09              | 3.20              | 3.32              | 3.44            |
| 014420      | 132kv N'Shah-I                 | Rohri Canal Water Su | 1.71              | 1.78              | 1.84              | 1.91            |
| 056303      | 132kv Dour                     | DR-1                 | 3.77              | 3.91              | 4.06              | 4.21            |
| 056305      | 132kv Dour                     | DR-3                 | 3.09              | 3.20              | 3.32              | 3.44            |
| 056304      | 132kv Dour                     | DR-2 (City)          | 4.12              | 4.27              | 4.43              | 4.59            |
| 056306      | 132kv Dour                     | DR-4                 | 3.43              | 3.56              | 3.69              | 3.82            |
| 056307      | 132kv Dour                     | DR-5                 | 1.54              | 1.60              | 1.66              | 1.72            |
| 056308      | 132kv Dour                     | DR-6                 | 2.74              | 2.85              | 2.95              | 3.06            |
| 056311      | 132kv Dour                     | Razabad              | 2.23              | 2.31              | 2.40              | 2.49            |
| 033502      | 132kv N'Shah-II (Sanghar Road) | New Dour             | 4.12              | 4.27              | 4.43              | 4.59            |



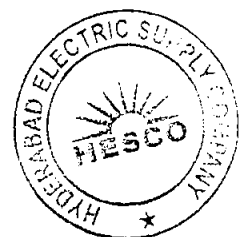
| Feeder Code | Name of Grid Station           | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|--------------------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 033505      | 132kv N'Shah-II (Sanghar Road) | City-3               | 3.09              | 3.20              | 3.32              | 3.44            |
| 033513      | 132kv N'Shah-II (Sanghar Road) | NS-Sugar Mill        | 5.49              | 5.69              | 5.90              | 6.12            |
| 033510      | 132kv N'Shah-II (Sanghar Road) | NS-2                 | 1.03              | 1.07              | 1.11              | 1.15            |
| 033512      | 132kv N'Shah-II (Sanghar Road) | NS-4                 | 3.43              | 3.56              | 3.69              | 3.82            |
| 033501      | 132kv N'Shah-II (Sanghar Road) | Industrial           | 6.52              | 6.76              | 7.01              | 7.27            |
| 033504      | 132kv N'Shah-II (Sanghar Road) | S.P.Chakar           | 2.74              | 2.85              | 2.95              | 3.06            |
| 033503      | 132kv N'Shah-II (Sanghar Road) | O.P.House            | 6.34              | 6.58              | 6.82              | 7.08            |
| 033511      | 132kv N'Shah-II (Sanghar Road) | NS-3                 | 1.20              | 1.24              | 1.29              | 1.34            |
| 033514      | 132kv N'Shah-II (Sanghar Road) | W/Supply             | 0.86              | 0.89              | 0.92              | 0.96            |
| 056205      | 132kv S.P.Chakar               | SC-2                 | 2.92              | 3.02              | 3.13              | 3.25            |
| 056206      | 132kv S.P.Chakar               | SC-3                 | 4.86              | 4.84              | 5.02              | 5.20            |
| 056208      | 132kv S.P.Chakar               | SC-5                 | 0.03              | 0.04              | 0.04              | 0.04            |
| 056204      | 132kv S.P.Chakar               | SC-1                 | 0.34              | 0.36              | 0.37              | 0.38            |
| 056207      | 132kv S.P.Chakar               | SC-4                 | 1.20              | 1.24              | 1.29              | 1.34            |
| 056202      | 132kv S.P.Chakar               | City (S.P.C)         | 4.46              | 4.62              | 4.79              | 4.97            |
| 056209      | 132kv S.P.Chakar               | SC-6                 | 2.06              | 2.13              | 2.21              | 2.29            |
| 056210      | 132kv S.P.Chakar               | SC-7                 | 1.03              | 1.07              | 1.11              | 1.15            |
| 056201      | 132kv S.P.Chakar               | Sarhari City         | 5.14              | 5.33              | 5.53              | 5.74            |
| 018801      | 132kv Sanghar                  | City-1               | 4.63              | 4.80              | 4.98              | 5.16            |
| 018818      | 132kv Sanghar                  | SR-5                 | 2.74              | 2.85              | 2.95              | 3.06            |
| 018817      | 132kv Sanghar                  | SR-4                 | 2.40              | 2.49              | 2.58              | 2.68            |
| 018814      | 132kv Sanghar                  | SR-1                 | 2.06              | 2.13              | 2.21              | 2.29            |
| 018815      | 132kv Sanghar                  | SR-2                 | 5.14              | 5.33              | 5.53              | 5.74            |
| 018820      | 132kv Sanghar                  | SR-3/7               | 3.43              | 3.56              | 3.69              | 3.82            |
| 018802      | 132kv Sanghar                  | Jhole                | 5.14              | 5.33              | 5.53              | 5.74            |
| 018816      | 132kv Sanghar                  | City-2 SR-3          | 6.86              | 7.11              | 7.38              | 7.65            |
| 018803      | 132kv Sanghar                  | Routani              | 3.26              | 3.38              | 3.50              | 3.63            |
| 018806      | 132kv Sanghar                  | Dil Shakh            | 4.80              | 4.98              | 5.16              | 5.35            |
| 018819      | 132kv Sanghar                  | SR-6                 | 4.12              | 4.27              | 4.43              | 4.59            |
| 033515      | 132kv Sanghar                  | S.Mill               | 0.00              | 0.00              | 0.00              | 0.00            |
| 081601      | 66kv Head Jamrao               | Industrial Panel     | 4.12              | 4.27              | 4.43              | 4.59            |
| 107801      | 132kv Chamber                  | Chamber City         | 5.32              | 5.51              | 5.72              | 5.93            |
| 107803      | 132kv Chamber                  | Sanjar Chand         | 2.06              | 2.13              | 2.21              | 2.29            |
| 107805      | 132kv Chamber                  | Kapri Mori           | 0.69              | 0.71              | 0.74              | 0.76            |
| 107804      | 132kv Chamber                  | Sugar Mill           | 0.00              | 0.00              | 0.00              | 0.00            |
| 107802      | 132kv Chamber                  | Ghulab Lagarl        | 2.40              | 2.49              | 2.58              | 2.68            |
| 20905       | 132kv T.A.Yar                  | Nasarpur             | 5.83              | 6.05              | 6.27              | 6.50            |
| 20913       | 132kv T.A.Yar                  | Bullan Shah          | 3.77              | 3.91              | 4.06              | 4.21            |
| 20903       | 132kv T.A.Yar                  | City-2               | 6.52              | 6.76              | 7.01              | 7.27            |
| 20911       | 132kv T.A.Yar                  | Scarp-3              | 0.00              | 0.00              | 0.00              | 0.00            |
| 20909       | 132kv T.A.Yar                  | Scarp-1              | 5.49              | 5.69              | 5.90              | 6.12            |
| 20906       | 132kv T.A.Yar                  | City-1               | 6.69              | 6.93              | 7.19              | 7.46            |



| Feeder Code | Name of Grid Station | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 020919      | 132kv T.A.Yar        | Gajello Sharif       | 4.80              | 4.98              | 5.16              | 5.35            |
| 20910       | 132kv T.A.Yar        | Scarp 2+6            | 1.03              | 1.07              | 1.11              | 1.15            |
| 20902       | 132kv I.A.Yar        | City-4               | 4.80              | 4.98              | 5.16              | 5.35            |
| 20904       | 132kv T.A.Yar        | City-3               | 4.29              | 4.45              | 4.61              | 4.78            |
| 20901       | 132kv T.A.Yar        | Bukera               | 6.34              | 6.58              | 6.82              | 7.08            |
| 20912       | 132kv T.A.Yar        | Sugar Mill           | 0.34              | 0.36              | 0.37              | 0.38            |
| 20915       | 132kv T.A.Yar        | PTV Booster          | 4.46              | 4.62              | 4.79              | 4.97            |
| 20908       | 132kv T.A.Yar        | Quba                 | 5.83              | 6.05              | 6.27              | 6.50            |
| 20907       | 132kv T.A.Yar        | Chamber              | 5.66              | 5.87              | 6.09              | 6.31            |
| 020917      | 132kv T.A.Yar        | Market               | 6.52              | 6.76              | 7.01              | 7.27            |
| 20914       | 132kv T.A.Yar        | DHQ                  | 0.29              | 0.30              | 0.31              | 0.33            |
| 020918      | 132kv T.A.Yar        | Watayo Faqir         | 0.00              | 0.00              | 0.00              | 0.00            |
| 020916      | 132kv T.A.Yar        | Rashidabad           | 0.45              | 0.46              | 0.48              | 0.50            |
| 020920      | 132kv T.A.Yar        | Muzaamil F.Mill      | 0.45              | 0.46              | 0.48              | 0.50            |
| 113802      | 132kv Shaikh Bhirkio | Faran Sugar Mill     | 0.48              | 0.50              | 0.52              | 0.54            |
| 113803      | 132kv Shaikh Bhirkio | Shaikh Bhirkio       | 2.88              | 2.99              | 3.10              | 3.21            |
| 113804      | 132kv Shaikh Bhirkio | Gabol Farm           | 3.77              | 3.91              | 4.06              | 4.21            |
| 113801      | 132kv Shaikh Bhirkio | Nawab                | 0.77              | 0.80              | 0.83              | 0.86            |
| 113805      | 132kv Shaikh Bhirkio | Talpur               | 0.72              | 0.75              | 0.77              | 0.80            |
| 113806      | 132kv Shaikh Bhirkio | Phulkara             | 0.65              | 0.68              | 0.70              | 0.73            |
| 85803       | 132kv Sultanabad     | Khuwaja              | 3.26              | 3.38              | 3.50              | 3.63            |
| 85802       | 132kv Sultanabad     | Masson               | 3.94              | 4.09              | 4.24              | 4.40            |
| 85804       | 132kv Sultanabad     | SLA-1                | 1.11              | 1.16              | 1.20              | 1.24            |
| 85805       | 132kv Sultanabad     | Syed Masoom Shah     | 1.03              | 1.07              | 1.11              | 1.15            |
| 13506       | 132kv M.P.Khas       | Jawari Shak          | 5.32              | 5.51              | 5.72              | 5.93            |
| 13507       | 132kv M.P.Khas       | Nawazabad            | 1.54              | 1.60              | 1.66              | 1.72            |
| 13530       | 132kv M.P.Khas       | Gharibabad           | 3.26              | 3.38              | 3.50              | 3.63            |
| 13515       | 132kv M.P.Khas       | M.P.K-6              | 6.00              | 6.22              | 6.45              | 6.69            |
| 13527       | 132kv M.P.Khas       | Bismillah Town       | 4.63              | 4.80              | 4.98              | 5.16            |
| 13503       | 132kv M.P.Khas       | Industrial           | 6.69              | 6.93              | 7.19              | 7.46            |
| 13501       | 132kv M.P.Khas       | City                 | 3.94              | 4.09              | 4.24              | 4.40            |
| 13531       | 132kv M.P.Khas       | S.Adeeb UI H Rizvi   | 2.92              | 3.02              | 3.13              | 3.25            |
| 13524       | 132kv M.P.Khas       | Noor Shah            | 3.53              | 3.66              | 3.80              | 3.94            |
| 13514       | 132kv M.P.Khas       | Mehmoodabad          | 5.66              | 5.87              | 6.09              | 6.31            |
| 13521       | 132kv M.P.Khas       | M.P.K 9+10           | 4.97              | 5.16              | 5.35              | 5.55            |
| 13525       | 132kv M.P.Khas       | Chand Moro           | 6.17              | 6.40              | 6.64              | 6.88            |
| 13526       | 132kv M.P.Khas       | Kishori Lal          | 5.14              | 5.33              | 5.53              | 5.74            |
| 13532       | 132kv M.P.Khas       | DHQ                  | 0.09              | 0.09              | 0.09              | 0.10            |
| 13508       | 132kv M.P.Khas       | Satelite Town        | 6.86              | 7.11              | 7.38              | 7.65            |
| 13505       | 132kv M.P.Khas       | Mirabad              | 4.97              | 5.16              | 5.35              | 5.55            |
| 13504       | 132kv M.P.Khas       | Linking              | 6.69              | 6.93              | 7.19              | 7.46            |
| 13502       | 132kv M.P.Khas       | Hirabad              | 3.09              | 3.20              | 3.32              | 3.44            |

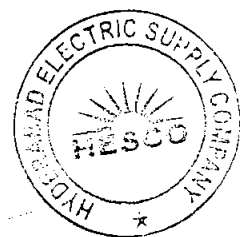


| Feeder Code | Name of Grid Station  | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|-----------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 13510       | 132kv M.P.Khas        | M.P.K 1+4            | 0.17              | 0.18              | 0.18              | 0.19            |
| 13512       | 132kv M.P.Khas        | MPK 2+3              | 1.63              | 1.69              | 1.75              | 1.82            |
| 13523       | 132kv M.P.Khas        | Umaid Bari           | 3.60              | 3.73              | 3.87              | 4.02            |
| 13529       | 132kv M.P.Khas        | Ismail Shah Baba     | 6.17              | 6.40              | 6.64              | 6.88            |
| 30201       | 132/66kv Kandhari     | Sidhri               | 2.83              | 2.93              | 3.04              | 3.16            |
| 30207       | 132/66kv Kandhari     | LBODK-2              | 1.20              | 1.24              | 1.29              | 1.34            |
| 30204       | 132/66kv Kandhari     | LBODK-3              | 2.66              | 2.76              | 2.86              | 2.96            |
| 30205       | 132/66kv Kandhari     | LBODK-4              | 2.57              | 2.67              | 2.77              | 2.87            |
| 30209       | 132/66kv Kandhari     | PAF Airport          | 0.26              | 0.27              | 0.28              | 0.29            |
| 30202       | 132/66kv Kandhari     | Kandhari             | 1.29              | 1.33              | 1.38              | 1.43            |
| 30208       | 132/66kv Kandhari     | Peru mal             | 3.09              | 3.20              | 3.32              | 3.44            |
| 30206       | 132/66kv Kandhari     | LBODK-1              | 1.20              | 1.24              | 1.29              | 1.34            |
| 30901       | 66kv Khipro           | City                 | 6.69              | 6.93              | 7.19              | 7.46            |
| 30902       | 66kv Khipro           | T.M.Khan             | 2.74              | 2.85              | 2.95              | 3.06            |
| 30903       | 66kv Khipro           | Hathungo             | 2.74              | 2.85              | 2.95              | 3.06            |
| 86101       | 132kv Mirwah Gorchani | Mir Wah              | 2.23              | 2.31              | 2.40              | 2.49            |
| 86102       | 132kv Mirwah Gorchani | Landhi               | 0.86              | 0.89              | 0.92              | 0.96            |
| 86104       | 132kv Mirwah Gorchani | S.Mill               | 0.00              | 0.00              | 0.00              | 0.00            |
| 013520      | 132kv Mirwah Gorchani | Scarp-3              | 2.40              | 2.49              | 2.58              | 2.68            |
| 013519      | 132kv Mirwah Gorchani | Scarp-2              | 1.03              | 1.07              | 1.11              | 1.15            |
| 086105      | 132kv Mirwah Gorchani | Belaro Shakh         | 0.00              | 0.00              | 0.00              | 0.00            |
| 86103       | 132kv Mirwah Gorchani | Jhilory              | 4.29              | 4.45              | 4.61              | 4.78            |
| 043604      | 132/66kv Samaro       | City (Samaro)        | 2.14              | 2.22              | 2.30              | 2.39            |
| 043603      | 132/66kv Samaro       | Kunri                | 0.69              | 0.71              | 0.74              | 0.76            |
| 043602      | 132/66kv Samaro       | S.Road               | 0.00              | 0.00              | 0.00              | 0.00            |
| 043609      | 132/66kv Samaro       | S-2                  | 2.92              | 3.02              | 3.13              | 3.25            |
| 043608      | 132/66kv Samaro       | Nawab                | 1.46              | 1.51              | 1.57              | 1.63            |
| 043605      | 132/66kv Samaro       | Pithoro              | 0.60              | 0.62              | 0.65              | 0.67            |
| 043610      | 132/66kv Samaro       | Cheema               | 1.03              | 1.07              | 1.11              | 1.15            |
| 056401      | 66kv Pithoro          | City                 | 4.12              | 4.27              | 4.43              | 4.59            |
| 056402      | 66kv Pithoro          | Dharo Naro-II        | 3.00              | 3.11              | 3.23              | 3.35            |
| 101701      | 66kv Kunri            | City-I               | 2.83              | 2.93              | 3.04              | 3.16            |
| 101702      | 66kv Kunri            | City-II              | 3.26              | 3.38              | 3.50              | 3.63            |
| 101704      | 66kv Kunri            | City-III             | 3.43              | 3.56              | 3.69              | 3.82            |
| 101703      | 66kv Kunri            | Talpur               | 0.51              | 0.53              | 0.55              | 0.57            |
| 33201       | 66kv Nabisar          | City                 | 1.89              | 1.96              | 2.03              | 2.10            |
| 33203       | 66kv Nabisar          | Talhi                | 1.80              | 1.87              | 1.94              | 2.01            |
| 33202       | 66kv Nabisar          | Memon Kunri          | 0.60              | 0.62              | 0.65              | 0.67            |
| 039802      | 132/66/11kv Umer Kot  | Dhoronaro            | 3.09              | 3.20              | 3.32              | 3.44            |
| 039801      | 132/66/11kv Umer Kot  | City                 | 6.17              | 6.40              | 6.64              | 6.88            |
| 039804      | 132/66/11kv Umer Kot  | Bhagal               | 1.71              | 1.78              | 1.84              | 1.91            |
| 039806      | 132/66/11kv Umer Kot  | G.M.Talpur           | 3.43              | 3.56              | 3.69              | 3.82            |





| Feeder Code | Name of Grid Station          | Name of 11KV Feeders | MW During 2021-22 | MW During 2022-23 | MW During 2023-24 | MW During 24-25 |
|-------------|-------------------------------|----------------------|-------------------|-------------------|-------------------|-----------------|
| 039808      | 132/66/11kv Umer Kot          | Cantt.               | 1.37              | 1.42              | 1.48              | 1.53            |
| 039803      | 132/66/11kv Umer Kot          | Chhore               | 4.46              | 4.62              | 4.79              | 4.97            |
| 039807      | 132/66/11kv Umer Kot          | M.Hussain Snait      | 2.74              | 2.85              | 2.95              | 3.06            |
| 039809      | 132/66/11kv Umer Kot          | City-2               | 5.83              | 6.05              | 6.27              | 6.50            |
| 39810       | 132/66/11kv Umer Kot          | City-3               | 5.32              | 5.51              | 5.72              | 5.93            |
| 56601       | 66kv Chachro                  | City                 | 1.71              | 1.78              | 1.84              | 1.91            |
| 39805       | 66kv Chachro                  | Oddani               | 0.69              | 0.71              | 0.74              | 0.76            |
| 51902       | 132kv Noukot                  | City                 | 4.29              | 4.45              | 4.61              | 4.78            |
| 51903       | 132kv Noukot                  | Khethory             | 0.86              | 0.89              | 0.92              | 0.96            |
| 51904       | 132kv Noukot                  | Jhuddo Express       | 3.77              | 3.91              | 4.06              | 4.21            |
| 51901       | 132kv Noukot                  | Judho                | 2.40              | 2.49              | 2.58              | 2.68            |
| 32901       | 66kv Mithi                    | City                 | 6.00              | 6.22              | 6.45              | 6.69            |
| 32903       | 66kv Mithi                    | Chhaho               | 1.20              | 1.24              | 1.29              | 1.34            |
| 32902       | 66kv Mithi                    | Chaelahar            | 0.86              | 0.89              | 0.92              | 0.96            |
| 62901       | 66kv Diplo                    | City                 | 1.46              | 1.51              | 1.57              | 1.63            |
| 67201       | 66kv Islamkot                 | City                 | 3.60              | 3.73              | 3.87              | 4.02            |
| 67202       | 66kv Islamkot                 | Thar col             | 0.34              | 0.36              | 0.37              | 0.38            |
| 84801       | 66kv Nagar Parkar             | City                 | 0.79              | 0.82              | 0.85              | 0.88            |
| 99201       | 66kv Kaloi                    | City                 | 1.44              | 1.49              | 1.55              | 1.61            |
| 56501       | 66kv Pangrio                  | City                 | 3.26              | 3.38              | 3.50              | 3.63            |
| 90901       | 132kv Tando Jan Muhammad      | City                 | 2.31              | 2.40              | 2.49              | 2.58            |
| 90902       | 132kv Tando Jan Muhammad      | Chuck - 190          | 2.31              | 2.40              | 2.49              | 2.58            |
| 90903       | 132kv Tando Jan Muhammad      | Jhudo                | 4.89              | 5.07              | 5.26              | 5.45            |
| 26702       | 132/66kv Digri                | Digri                | 4.29              | 4.45              | 4.61              | 4.78            |
| 26705       | 132/66kv Digri                | N.Kot                | 2.06              | 2.13              | 2.21              | 2.29            |
| 26703       | 132/66kv Digri                | Dumbhalo             | 4.46              | 4.62              | 4.79              | 4.97            |
| 26704       | 132/66kv Digri                | Kachalo              | 1.89              | 1.96              | 2.03              | 2.10            |
| 26706       | 132/66kv Digri                | Irshad Arain         | 4.29              | 4.45              | 4.61              | 4.78            |
| 26701       | 132/66kv Digri                | Deh - 170            | 1.71              | 1.78              | 1.84              | 1.91            |
| 116001      | 132kv Khair Muhammad Bhurgari | KGM City             | 3.43              | 3.56              | 3.69              | 3.82            |
| 116003      | 132kv Khair Muhammad Bhurgari | City-II              | 3.09              | 3.20              | 3.32              | 3.44            |
| 116004      | 132kv Khair Muhammad Bhurgari | Kachello-II          | 1.71              | 1.78              | 1.84              | 1.91            |
| 116002      | 132kv Khair Muhammad Bhurgari | K.M.Bhurgari         | 1.20              | 1.24              | 1.29              | 1.34            |

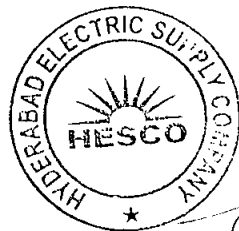


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Annexure - F  
(110)

Category-wise Consumer Sanctioned Load (kW)

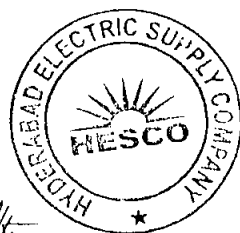
| Month | Domestic  | Commercial | Small Industry | M&L Industry | Agriculture | Bulk Supply | Public Light | General Services | Others | Total     |
|-------|-----------|------------|----------------|--------------|-------------|-------------|--------------|------------------|--------|-----------|
| 2016  | 1,112,471 | 281,216    | 100,738        | 715,127      | 233,021     | 47,759      | 23,932       | -                | 929    | 2,515,193 |
| 2017  | 1,169,601 | 298,801    | 104,887        | 748,341      | 236,851     | 47,290      | 24,017       | -                | 926    | 2,630,713 |
| 2018  | 1,159,792 | 302,403    | 101,457        | 761,231      | 182,255     | 57,495      | 24,017       | 145,890          | 896    | 2,735,436 |
| 2019  | 1,209,974 | 318,951    | 103,029        | 799,008      | 194,711     | 61,367      | 24,077       | 148,530          | 688    | 2,860,334 |
| 2020  | 1,256,987 | 329,991    | 99,627         | 845,488      | 210,203     | 77,492      | 24,053       | 163,915          | 649    | 3,008,403 |
| 2021  | 1,300,535 | 344,427    | 102,619        | 879,752      | 214,018     | 78,442      | 24,053       | 169,621          | 649    | 3,114,116 |
| 2022  | 1,341,283 | 357,311    | 104,749        | 941,372      | 216,286     | 80,722      | 24,055       | 175,055          | 763    | 3,241,596 |



Annexure - F  
(1<sup>st</sup> 1<sup>st</sup>)

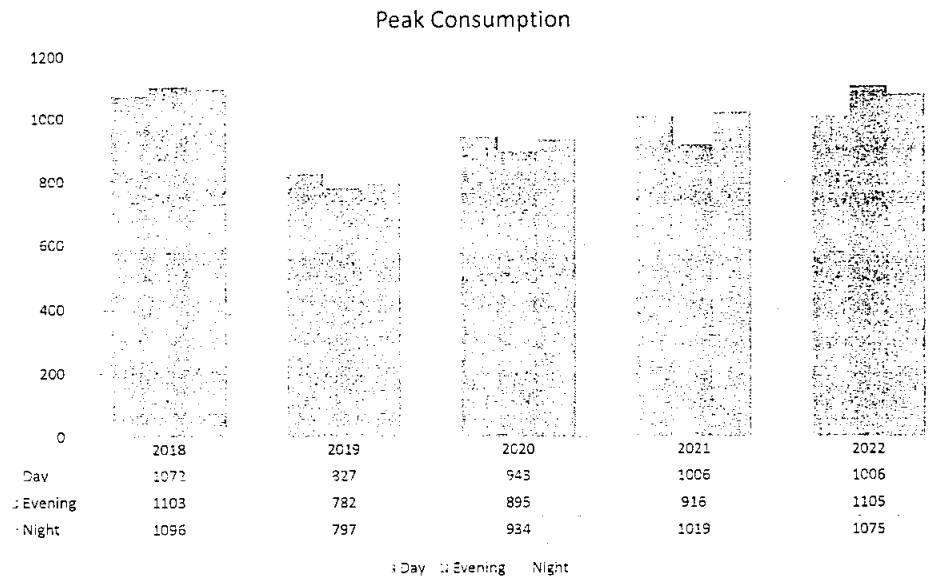
**Category wise Number of Consumers.**

| Year    | Domestic | Commercial | Small Industry | M&L Industry | Agriculture | Bulk | Public Light | Total   |
|---------|----------|------------|----------------|--------------|-------------|------|--------------|---------|
| 2022-23 | 1004109  | 175156     | 4833           | 10865        | 15834       | 348  | 577          | 1211721 |
| 2023-24 | 1030194  | 178533     | 4866           | 11072        | 15939       | 351  | 580          | 1241535 |
| 2024-25 | 1056956  | 181976     | 4900           | 11284        | 16045       | 353  | 584          | 1272098 |
| 2025-26 | 1084414  | 185484     | 4935           | 11499        | 16151       | 355  | 588          | 1303426 |
| 2026-27 | 1112585  | 189060     | 4969           | 11719        | 16259       | 357  | 592          | 1335541 |

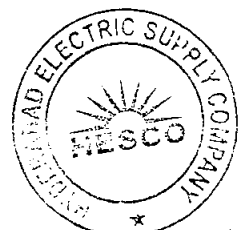
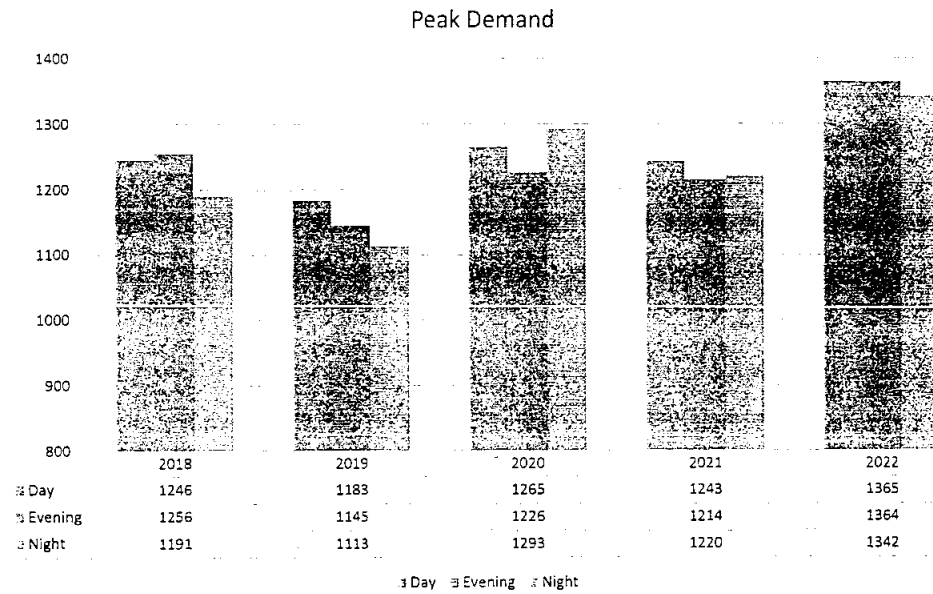


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## Historical Demand Pattern on Different Time periods



## Historical Demand Pattern on Different Time periods



7/5/22

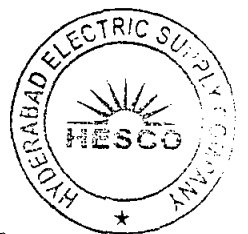
Annexure-F  
(v)

**HYDERABAD ELECTRIC SUPPLY COMPANY**

**POWER ACQUISITION PROGRAMME,  
2023-24 to 2027-28**



The CPPA-G has been requested vide letter bearing No. CEO/HESCO /DG(MIRAD)/1198-99 dated: 24.01.2023 **(Flag-A)** for provision of HESCO's share in legacy contract in terms of MkWh and MW. Upon receiving of this data/information, Power Acquisition Program (PAP) will be submitted to NEPRA as per National Electric Power Regulatory Authority (Electric Power Procurement) Regulations 2022.



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Ph # 022-9260197  
Fax # 022-9260361  
Email: dgmirad@hesco.gov.pk

Office of the Director General (MIRAD)  
2<sup>nd</sup> Floor, WAPDA Offices Complex  
Hussainabad, Hyderabad

No. CEO/HESCO/DG(MIRAD)/ 1198-99

Dated: 24.01.2023

*Chief Technical Officer,  
Central Power Purchasing Agency (Guarantee) Limited,  
Shaheen Plaza, Plot No.73-West,  
Fazal-e-Haq Road, Blue Area,  
Islamabad.*

Subject:- **PROVISION OF DATA.**

1. This is with reference to National Electric Power Regulatory Authority (Electric Power Procurement) Regulations, 2022 notified vide S.R.O.2136(I)/2022 dated 6<sup>th</sup> December, 2022 Sub-Section (3) of Section-7 i.e. **"Review and approval of Power Acquisition programme"**. The mentioned provision of the Regulations is reproduced as under;

*"The power acquisition programme shall be submitted by 30<sup>th</sup> September of every year and approved by the Authority within ninety days from its submission in accordance with these regulations and other applicable documents."*

*Provided that a **supplier of last resort** shall submit its **power acquisition programme to the Authority within three months from the notification of these regulations** and thereafter the power acquisition programme shall be submitted to the Authority along with any proposed changes, on an annual basis i.e. 30<sup>th</sup> September of every year".*

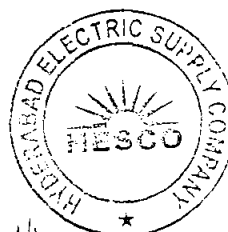
2. Accordingly, the last date for submission of **power acquisition programme to the Authority** is **5<sup>th</sup> March, 2023**, as the said Regulations was notified by NEPRA on 6<sup>th</sup> December, 2022.

3. In this regard, it is, therefore requested to provide the following data upto 27<sup>th</sup> January, 2023, in-order to prepare the **power acquisition programme**, as per regulatory framework.

| Year(s) | HESCO's Share in Legacy Contract (MkWh) | HESCO's Share in Legacy Contract (MW) |
|---------|-----------------------------------------|---------------------------------------|
| 2021-22 |                                         |                                       |
| 2022-23 |                                         |                                       |
| 2023-24 |                                         |                                       |
| 2024-25 |                                         |                                       |
| 2025-26 |                                         |                                       |
| 2026-27 |                                         |                                       |

C.C to:-

1. PSO to CEO HESCO, Hyderabad.
- Master File.

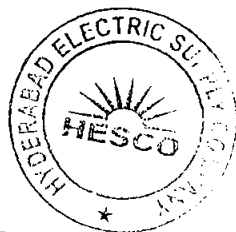


*[Signature]*  
Director General (MIRAD),  
HESCO, Hyderabad.

Annexure - F  
(V<sup>o</sup>)

**12 Months Projections on Expected Load (MW)**

| Year           | July | August | September | October | November | December | January | February | March | April | May  | June |
|----------------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|------|------|
|                | (MW) | (MW)   | (MW)      | (MW)    | (MW)     | (MW)     | (MW)    | (MW)     | (MW)  | (MW)  | (MW) | (MW) |
| <b>2021-22</b> | 1053 | 994    | 1101      | 957     | 719      | 517      | 515     | 545      | 795   | 1147  | 1176 | 1183 |
| <b>2022-23</b> | 1091 | 1030   | 1141      | 992     | 746      | 535      | 533     | 565      | 824   | 1189  | 1219 | 1225 |
| <b>2023-24</b> | 1129 | 1065   | 1180      | 1025    | 771      | 554      | 552     | 584      | 852   | 1230  | 1260 | 1267 |
| <b>2024-25</b> | 1188 | 1122   | 1242      | 1079    | 812      | 583      | 581     | 615      | 897   | 1295  | 1327 | 1334 |
| <b>2025-26</b> | 1249 | 1179   | 1305      | 1134    | 853      | 612      | 610     | 646      | 942   | 1361  | 1394 | 1401 |
| <b>2026-27</b> | 1331 | 1256   | 1391      | 1209    | 909      | 653      | 650     | 689      | 1004  | 1450  | 1486 | 1493 |
| <b>2027-28</b> | 1413 | 1334   | 1477      | 1284    | 965      | 693      | 691     | 731      | 1066  | 1540  | 1578 | 1586 |
| <b>2028-29</b> | 1522 | 1437   | 1591      | 1383    | 1040     | 747      | 744     | 788      | 1149  | 1659  | 1700 | 1709 |
| <b>2029-30</b> | 1633 | 1541   | 1706      | 1483    | 1115     | 801      | 798     | 845      | 1232  | 1779  | 1823 | 1833 |
| <b>2030-31</b> | 1763 | 1664   | 1843      | 1602    | 1205     | 865      | 862     | 913      | 1331  | 1921  | 1969 | 1979 |
| <b>2031-32</b> | 1893 | 1787   | 1979      | 1720    | 1293     | 929      | 925     | 980      | 1429  | 2063  | 2114 | 2125 |



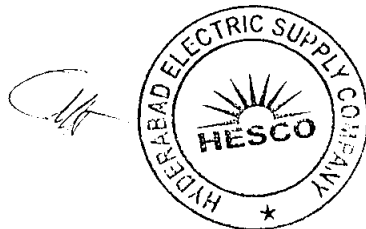
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Annexure - F  
(VI)

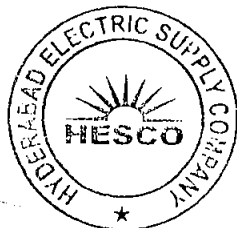
**12 Months Projections on Expected Sale of Units (GWh)**

| Year    | July | August | September | October | November | December | January | February | March | April | May  | June | Total |
|---------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|------|------|-------|
|         | GWh  | GWh    | GWh       | GWh     | GWh      | GWh      | GWh     | GWh      | GWh   | GWh   | GWh  | GWh  | GWh   |
| 2021-22 | 657  | 641    | 570       | 532     | 393      | 336      | 319     | 292      | 373   | 520   | 618  | 674  | 5926  |
| 2022-23 | 687  | 641    | 600       | 552     | 408      | 350      | 330     | 303      | 387   | 543   | 642  | 699  | 6142  |
| 2023-24 | 711  | 663    | 621       | 571     | 422      | 362      | 342     | 313      | 401   | 562   | 664  | 723  | 6353  |
| 2024-25 | 750  | 700    | 656       | 603     | 445      | 382      | 361     | 331      | 423   | 594   | 701  | 764  | 6708  |
| 2025-26 | 791  | 738    | 691       | 635     | 469      | 402      | 380     | 348      | 446   | 626   | 739  | 805  | 7070  |
| 2026-27 | 844  | 788    | 737       | 678     | 501      | 429      | 406     | 372      | 476   | 668   | 788  | 859  | 7545  |
| 2027-28 | 897  | 837    | 784       | 721     | 532      | 457      | 432     | 395      | 506   | 710   | 838  | 913  | 8023  |
| 2028-29 | 967  | 902    | 845       | 777     | 574      | 492      | 465     | 426      | 545   | 765   | 903  | 984  | 8646  |
| 2029-30 | 1037 | 968    | 906       | 833     | 615      | 528      | 499     | 457      | 585   | 820   | 969  | 1055 | 9271  |
| 2030-31 | 1120 | 1045   | 979       | 900     | 665      | 570      | 539     | 493      | 632   | 886   | 1046 | 1140 | 10016 |
| 2031-32 | 1203 | 1123   | 1051      | 966     | 714      | 612      | 579     | 530      | 678   | 952   | 1124 | 1224 | 10755 |





Annexure - F  
REGIONAL TRAINING COLLEGE HESCO JAMSHORO (V<sup>56</sup>)

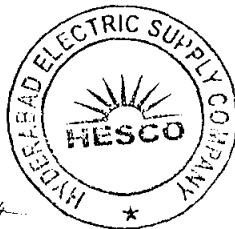


# INDEX

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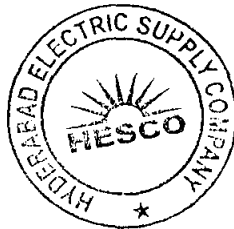
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## PREFACE

- ❖ By the grace of Almighty Allah, the undersigned is issuing the 21<sup>th</sup> Master Schedule for training courses for Promotion/Time Scale up-gradation of Employees from BPS-05 to BPS-16. This schedule has been prepared in the light of vide office order No. CEO/HESCO/ADMN&HR Dir/TMP/CP-1/RR&P/VOL-1/32120-39 Dated: 06.09.2016 for the adoption of "New S.O.P".
- ❖ The Safety Training programs for all Technical Staff in BPS-05 TO BPS-16 and also for Senior Officers from BPS-17 to BPS-20 has been designed for one day Training at RTC to impart Safety awareness and measures, therefore the Safety Training Calendar- 2023 has been prepared with the support, guidance and directions given by the Top Management, the Safety Training Calendar is included in the Master Schedule.
- ❖ The Master Schedule is prepared to conduct Promotion training courses for various categories of employees for promotion/Time Scale Up Gradation from BPS-05 to BPS-16 considering the training needs in the year 2023 by forecasting the upcoming stream of employees to be upgraded in different circles, and has been tailored to meet the requirement to nominate the candidates of the field formation well before the start of training. This booklet provides schedule of training courses for Promotion/Time Scale up-Gradation for the year 2023 will be conducted at Regional Training College (RTC) HESCO Jamshoro and Circle Training Centres (CTCs) at TandoJam, Laar and Nawabshah for the year 2023.
- ❖ The aim of the RTC and CTCs is to equip the Manpower with Skill, Knowledge and required Attitude about work to enhance professional competence and efficiency of the Technical, Commercial, Finance & Ministerial Staff to achieve optimum operational worthiness.
- ❖ The Core values of the training will be, discipline, responsibility, loyalty, commitment, consistency, honesty, efficiency, respect, professionalism & to create power safety awareness & safety culture, training programs provide a host of benefits. They enhance employee performance, boost employee productivity, reduce employee turnover and improve company culture.
- ❖ The RTC HESCO Jamshoro is equipped with Information Technology (IT) Lab. IT Courses are being introduced for different categories including lower Management Staff with collaboration & affiliation with Sindh Board of Technical Education Karachi (SBTE).
- ❖ Training courses listed in this booklet are those currently scheduled for the next calendar year. Any additions will be announced separately to the field formation.
- ❖ The promotion/Time Scale up-gradation trainings for ALMs & LM-IIs shall be continued at Circle Training Centres.



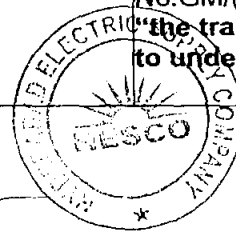
  
(ENGR: SAFDAR HUSSAIN MEMON)  
Principal/Sr. Instructor  
Regional Training College  
HESCO, Jamshoro

# INSTRUCTIONS

- \* It is required that the Admn & HR Director HESCO/Concerned S.E will forward consolidated lists of nominees to RTC/CTC HESCO at least 04 weeks in advance to the training schedule.
- \* The candidates nominated for the Promotion/Time Scale up-gradation Trainings should submit Application form with latest photograph of Nominee & copy of computerized National Identity Card and HESCO Card.
- \* All candidates nominated for training courses for Promotion/Time Scale up-gradation Trainings may be directed to bring their **Application Form** of Promotion / Time Scale up-gradation Trainings (**DPT Performa**) specimen shown in this booklet properly filled and duly signed by their Controlling Officer.
- \* The minimum pass percentage in training courses Examination is 50%. All those trainees who do not secure at least 50% marks at RTC & CTC, will be declared "FAIL", in training for Promotion/TSU. They will repeat training at their own expenses as per new **SOP PARA No. 2 (iii)**.
- \* The candidates nominated for training courses for Promotion/TSU should be directed to observe the following policy as per new **SOP PARA-2(a)**, failing which they will be treated as per **SUB-PARAS (e) & (f)**: -
  - **Sub-Para (e):** - Any participant joining the course late by more than two days would not be allowed to attend the course and would be returned to his/her parent formation.
  - **Sub-Para (f):** - Any participant missing the studies /activities by more than 10 percent in a course would be declared as "Fail".
- \* **Training Charges for Non-HESCO employees: -**

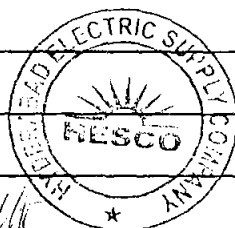
From BPS-5 to 16 Rs.13480/- Per week per Trainee. They should bring the cheque with name of Principal Regional Training College HESCO Jamshoro official Bank A/C **NO.673-7** (NBP Shahbaz Building Branch Hyderabad) on very first day of joining at RTC failing which they will not be entertained.
- \* **HESCO employees:** who reappear in Departmental Promotion Training / Time Scale Up-Gradation Training as per office order No. CEO / HESCO / Admn & HR / TMP / CP (Cell)-I / Gen / 7218-7285 dated 30.04.2019 as under.

| 1 <sup>st</sup> Attempt | 2 <sup>nd</sup> Attempt | 3 <sup>rd</sup> Attempt                                                                                                                                                                                                                                                                                                                            |
|-------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Free                    | Rs.3000/-<br>Per Week   | Same as per SOP prescribed by General Manager (HR) PEPCO Lahore in light of replacement policy of DEP from BPS-05 to 16 circulated vide GM (HR) PEPCO O/M No.GM/(HR)/HRD/A-398/138-62 dated 25.01.2016. Clause-5<br><b>"the trainee who falls in promotion / TSU training will have to undergo next training course at this his own expenses."</b> |



**TRAINING SCHEDULE FOR PROMOTION/ TIME SCALE UP GRADATION COURSES  
FOR THE PERIOD JANUARY TO DECEMBER 2023 AT RTC HESCO JAMSHORO**

| s.# | CATEGORY  | COURSE TITLE                                                                     | COURSE CODE  | INTAKE CAPACITY | DURATION (WEEKS) | 2023 |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|-----------|----------------------------------------------------------------------------------|--------------|-----------------|------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|     |           |                                                                                  |              |                 |                  | JAN  | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |    |
| 1   | Operation | LM-I to LS-II / ALFM (Opr: Const)                                                | T-400/S-100  | 20              | 8                |      |     |     |     |     |     |     |     |     |     | 6   | 29  |    |
| 2   |           | LS-II / ALFM to LS-I / LFM (Opr: Const)                                          | T-500/S-200  | 20              | 8                |      |     |     |     |     |     |     |     | 4   | 27  |     |     |    |
| 3   |           | ASSA to SSA (GS0)                                                                | GS-200/S-150 | 20              | 5                |      | 27  | 31  |     |     |     |     |     |     |     |     |     |    |
| 4   |           | SSA to SSO-II (GS0)                                                              | GS-300/S-150 | 20              | 7                |      |     |     |     | 8   | 23  |     |     |     |     |     |     |    |
| 5   |           | SSO-II to SSO-I (GS0)                                                            | GS-400/S-150 | 20              | 7                | 2    | 17  |     |     |     |     |     |     |     |     |     |     |    |
| 6   | GSO & GSC | ALM / Helper to LM-II / Fitter-II (GSO,GSC)                                      | GL-100/S-150 | 20              | 5                |      |     |     |     |     |     |     |     |     |     | 27  | 29  |    |
| 7   |           | LM-II to LM-I (GSO,GSC)                                                          | GL-200/S-150 | 20              | 5                |      |     |     |     |     |     |     |     | 16  | 17  |     |     |    |
| 8   |           | LM-I to LS-II / ALFM (GSO,GSC)                                                   | GL-300/S-150 | 20              | 7                |      |     |     |     |     |     |     | 21  | 6   |     |     |     |    |
| 9   |           | ASSA / Helper to Meter Mechanic / Fitter / Machine Attendant (GSO,GSC) (P&I,T&I) | MS-100/S-150 | 10              | 5                |      | 27  | 31  |     |     |     |     |     |     |     |     |     |    |
| 10  |           | Meter / Relay Mechanic / Machine Attendant to Lab Assistant (GSO,GSC) (P&I,T&I)  | MS-150/S-150 | 10              | 3                |      |     |     | 3   | 21  |     |     |     |     |     |     |     |    |
| 11  | M&T       | Fitter-II to Fitter-I (GSO,GSC) (P&I,T&I)                                        | MS-200/S-150 | 20              | 5                |      |     |     |     |     |     | 17  | 18  |     |     |     |     |    |
| 12  |           | Fitter to AFM (GSO,GSC) (P&I,T&I)                                                | MS-300/S-150 | 20              | 7                |      |     |     |     |     |     | 3   | 18  |     |     |     |     |    |
| 13  |           | Helper to Meter Mechanic (M&T) Meter Section                                     | MT-150       | 10              | 3                |      |     |     |     |     |     |     |     |     |     |     | 11  | 29 |
| 14  |           | Meter Mechanic to Test Assistant (M&T) Meter Sec                                 | MT-200       | 10              | 3                |      |     |     |     |     |     |     |     |     |     | 6   | 24  |    |
| 15  |           | Test Assistant to Test Inspector (M&T)                                           | MT-400       | 10              | 3                |      |     |     |     |     |     |     |     | 9   | 27  |     |     |    |
| 16  | Drawin    | Helper to Fitter (M&T) T.F Section                                               | MT-100       | 10              | 3                |      |     |     |     |     |     |     |     |     |     |     | 11  | 29 |
| 17  |           | Fitter to AFM (M&T) T.F Section                                                  | MT-250       | 5               | 3                |      |     |     |     |     |     |     |     |     |     | 6   | 24  |    |
| 18  |           | AFM to FM (M&T)                                                                  | MT-300       | 10              | 3                |      |     |     |     |     |     |     |     | 9   | 27  |     |     |    |
| 19  |           | Tracer to ADM                                                                    | ADM-50       | 10              | 3                |      |     | 6   | 24  |     |     |     |     |     |     |     |     |    |
| 20  |           | ADM to DM Grade-B                                                                | HDM-50       | 10              | 3                |      | 6   | 24  |     |     |     |     |     |     |     |     |     |    |



| s.# | CATEGORY      | COURSE TITLE                                                                               | COURSE CODE | INTAKE CAPACITY | DURATION (WEEKS) | 2023 |     |     |     |     |     |     |     |     |     |     |     |
|-----|---------------|--------------------------------------------------------------------------------------------|-------------|-----------------|------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |               |                                                                                            |             |                 |                  | JAN  | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| 22  | Commercial    | LDC to Commercial Assistant                                                                | C-370       | 20              | 3                |      |     |     |     |     |     |     |     |     |     | 6   | 24  |
| 23  |               | Commercial Assistant to Commercial Supdt:                                                  | C-470       | 20              | 3                |      |     |     |     |     |     |     | 18  | 6   |     |     |     |
| 24  | Meter Reading | Bill Distributor to Meter Reader                                                           | C-200       | 20              | 2                |      |     |     |     |     |     | 3   | 14  |     |     |     |     |
| 25  |               | Meter Reader to MS-II                                                                      | C-250       | 20              | 3                |      |     |     |     |     | 5   | 23  |     |     |     |     |     |
| 26  |               | MS-II to MS-I                                                                              | C-500       | 20              | 3                |      |     |     |     | 8   | 26  |     |     |     |     |     |     |
| 27  |               | MS-I to MRSS                                                                               | C-500/M-200 | 20              | 4                |      |     | 27  | 21  |     |     |     |     |     |     |     |     |
| 28  | Establishment | LDC to Steno-II                                                                            | ST-100      | 10              | 3                |      |     |     |     |     |     |     |     |     |     | 27  | 15  |
| 29  |               | Steno-II to Steno-I                                                                        | ST-200      | 10              | 2                |      |     |     |     |     |     |     |     |     |     | 18  | 29  |
| 30  |               | LDC to UDC                                                                                 | C-300       | 10              | 3                |      |     |     |     |     |     | 3   | 21  |     |     |     |     |
| 31  |               | UDC to Assistant                                                                           | C-400       | 10              | 3                |      |     |     |     |     | 5   | 23  |     |     |     |     |     |
| 32  | Acc/Audit     | Assistant to Office Superintendent                                                         | A-400       | 10              | 3                |      |     |     |     | 8   | 26  |     |     |     |     |     |     |
| 33  |               | Jr. Clerk to Accounts / Audit Assistant                                                    | A-100       | 10              | 3                |      |     | 27  | 14  |     |     |     |     |     |     |     |     |
| 34  |               | Accounts / Audit Assistant / Stock Verifier / to AB & AO / AAO/ Divisional Accountant Reg: | A-200       | 20              | 3                |      |     |     | 3   | 21  |     |     |     |     |     |     |     |
| 35  | Store         | Gate Clerk to Stock Clerk                                                                  | I-200       | 10              | 2                |      |     | 20  | 31  |     |     |     |     |     |     |     |     |
| 36  |               | Stock / Store Clerk to Jr. Store Keeper                                                    | I-250       | 10              | 3                |      | 27  | 17  |     |     |     |     |     |     |     |     |     |
| 37  |               | Jr. Store Keeper to Sr. Store Keeper                                                       | I-300       | 10              | 3                |      | 6   | 24  |     |     |     |     |     |     |     |     |     |
| 38  | Security      | Sr. Store Keeper to Store System Supervisor                                                | I-350       | 10              | 4                | 9    | 3   |     |     |     |     |     |     |     |     |     |     |
| 39  |               | Security Guard to Security Sergeant                                                        | SG-100      | 20              | 3                |      |     |     |     |     |     |     | 7   | 25  |     |     |     |
| 40  |               | Security Sergeant to Security Inspector                                                    | SG-200      | 10              | 3                |      |     |     |     |     |     |     | 7   | 25  |     |     |     |
| 41  |               | Data Coder / Data Entry Operator to D.C / D.E Supervisor                                   | IT-200      | 20              | 3                |      |     |     |     |     |     |     |     |     |     | 4   | 22  |
| 42  | IT            | Basic IT Training (MS Office)                                                              | IT-100      | 24              | 8                | 6    | 31  | 2   | 23  |     |     |     | 4   | 27  | 6   | 29  |     |

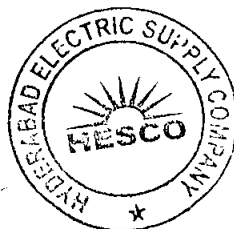
# CRICLE TRAINING CENTRE HESCO JAMSHORO / TANDOJAM / NAWABSHAH

## ANNUAL SCHEDULE FOR YEAR 2023

(PROMOTION / TIME SCALE UPGRADATION TRAININGS / SAFETY WORKSHOP)

| S.# | CATEGORY  | COURSE TITLE                  | COURSE CODE   | INTAKE CAPACITY | DURATION (WEEKS) | 2023 |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----------|-------------------------------|---------------|-----------------|------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |           |                               |               |                 |                  | JAN  | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| 1   | Operation | ALM to LM-II                  | T-200 / S-100 | 20              | 5                | 2    | 3   |     |     |     |     |     |     |     | 2   | 3   |     |
| 2   |           | LM-II to LM-I                 | T-300 / S-100 | 20              | 8                |      | 6   | 31  |     |     |     |     |     |     |     | 6   | 2   |
| 3   |           | ALM (Newly Induction)         | T-50 / S-100  | 15              | 16               |      |     |     | 3   |     |     | 21  |     |     |     |     |     |
| 4   | Safety    | Safety Workshop for ALM & LMs | SW-100        | 30              | 1 Day            | 11   | 8   | 8   | 5   | 3   | 7   | 5   | 9   | 6   | 4   | 1   | 6   |

| Holidays-2023                       |                |                 |    |                  |                 |
|-------------------------------------|----------------|-----------------|----|------------------|-----------------|
| 1                                   | Kashmir Day    | 05 Feb, 2023    | 6  | Ashura *         | 27-28 Jul, 2023 |
| 2                                   | Pakistan Day   | 23 Mar, 2023    | 7  | Independence Day | 14 Aug, 2023    |
| 3                                   | Labour Day     | 01 May, 2023    | 8  | Milad un nabi*   | 27 Sep, 2023    |
| 4                                   | Eid ul Fittar* | 23-25 Apr, 2023 | 9  | Iqbal Day        | 9 Nov, 2023     |
| 5                                   | Eid ul Azha*   | 28-30 Jun, 2023 | 10 | Quaid Day        | 25 Dec, 2023    |
| * subject to the appearance of moon |                |                 |    |                  |                 |

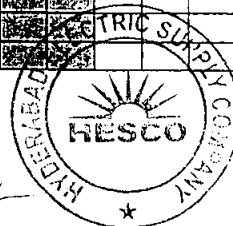




SAFETY TRAINING CALENDAR 2023  
FOR ALL TECHNICAL STAFF  
(OFFICIALS & OFFICERS)

# SAFETY TRAINING CALENDAR FOR TECHNICAL STAFF (OFFICIALS/OFFICERS) FOR THE YEAR 2023

| Rooms  |                                     | Training Category | Month  | CALENDAR DAYS |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------|-------------------------------------|-------------------|--------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        |                                     |                   |        | Sun           | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue |
| ROOM 1 | Assistant Lineman (ALM) BPS-07      |                   | Jan-23 |               | B1  | B2  |     |     |     |     |     | B3  | B4  |     |     |     |     | B5  | B6  |     |     |     |     |     |     | B7  | B8  |     |     |     |     | B9  | B10 |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     | B2  |     |     |     |     |     |     | B3  |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19 |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                     |                   | Feb-23 | Wed           | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri |
| ROOM 1 | Assistant Lineman (ALM) BPS-07      |                   |        |               |     |     |     |     | B11 | B12 |     |     |     |     |     | B13 | B14 |     |     |     |     |     |     | B15 | B16 |     |     |     |     |     | B17 | B18 |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     | B7  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19 |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                     |                   | Mar-23 | Wed           | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri |
| ROOM 1 | Assistant Lineman (ALM) BPS-07      |                   |        |               |     |     |     |     | B19 | B20 |     |     |     |     |     | B21 | B22 |     |     |     |     |     |     | B23 | B24 |     |     |     |     | B25 | B26 |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19 |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                     |                   | Apr-23 | Sat           | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |
| ROOM 1 | Assistant Lineman (ALM) BPS-07      |                   |        |               |     | B27 | B28 |     |     |     |     |     |     | B29 | B30 |     |     |     |     | B31 | B32 |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     | B14 |     |     |     |     |     |     |     | B15 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 1 | Line Superintendent (LS) BPS-15     |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19 |                   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

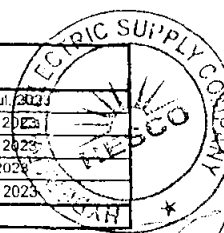


| Rooms  | Training Category                     | Month  | CALENDAR DAYS |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------|---------------------------------------|--------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|        |                                       | Sep-23 | Fri           | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |     |     |     |     |
| ROOM 1 | Assistant Lineman (ALM) BPS-07        |        |               |     |     |     | B33 | B34 |     |     |     |     | B35 | B36 |     |     |     |     |     |     | B37 | B38 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Line Supervisor-II (LS-II) BPS-09     |        |               |     |     |     |     |     |     | B39 |     |     |     |     |     | B40 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 3 | Line Superintendent-II (LS-II) BPS-14 |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 4 | Line Superintendent-I (LS-I) BPS-15   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 5 | Sub Divisional Officer (SDO) BPS-17   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                       | Oct-23 | Sun           | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| ROOM 1 | Assistant Lineman (ALM) BPS-07        |        |               | B41 | B42 |     |     |     |     |     |     | B43 | B44 |     |     |     |     |     | B45 | B46 |     |     |     |     |     | B47 | B48 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Line Supervisor-II (LS-II) BPS-09     |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 3 | Line Superintendent-II (LS-II) BPS-14 |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 4 | Line Superintendent-I (LS-I) BPS-15   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 5 | Sub Divisional Officer (SDO) BPS-17   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                       | Nov-23 | Wed           | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |     |     |
| ROOM 1 | Assistant Lineman (ALM) BPS-07        |        |               |     |     |     |     |     | B51 | B52 |     |     |     |     |     |     | B53 | B54 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Line Supervisor-II (LS-II) BPS-09     |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 3 | Line Superintendent-II (LS-II) BPS-14 |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 4 | Line Superintendent-I (LS-I) BPS-15   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 5 | Sub Divisional Officer (SDO) BPS-17   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|        |                                       | Dec-23 | Fri           | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |     |     |     |     |
| ROOM 1 | Assistant Lineman (ALM) BPS-07        |        |               |     |     | B59 | B60 |     |     |     |     |     |     | B61 | B62 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Line Supervisor-II (LS-II) BPS-09     |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 3 | Line Superintendent-II (LS-II) BPS-14 |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 4 | Line Superintendent-I (LS-I) BPS-15   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 5 | Sub Divisional Officer (SDO) BPS-17   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| ROOM 2 | Superintending Engineer (SE) BPS-19   |        |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

| Color Wise Coding |                                       |  |
|-------------------|---------------------------------------|--|
| 1                 | Assistant Lineman (ALM) BPS-07        |  |
| 2                 | Lineman-II (LM-II) BPS-09             |  |
| 3                 | Lineman-I (LM-I) BPS-11               |  |
| 4                 | Line Superintendent-II (LS-II) BPS-14 |  |
| 5                 | Line Superintendent-I (LS-I) BPS-15   |  |
| 6                 | Sub Divisional Officer (SDO) BPS-17   |  |
| 7                 | Executive Engineer (XEN) BPS-18       |  |
| 8                 | Superintending Engineer (SE) BPS-19   |  |
| 9                 | Chief Engineer (CE)/(GM) BPS-20       |  |

| Holidays-2023                       |                |                 |    |                  |                 |
|-------------------------------------|----------------|-----------------|----|------------------|-----------------|
| 1                                   | Kashmir Day    | 05 Feb, 2023    | 6  | Ashura *         | 27-28 Jul, 2023 |
| 2                                   | Pakistan Day   | 23 Mar, 2023    | 7  | Independence Day | 14 Aug, 2023    |
| 3                                   | Labour Day     | 01 May, 2023    | 8  | Milad un nabi *  | 27 Sep, 2023    |
| 4                                   | Eid ul Fitar * | 23-25 Apr, 2023 | 9  | Iqbal Day        | 9 Nov, 2023     |
| 5                                   | Eid ul Azha *  | 28-30 Jun, 2023 | 10 | Quaid Day        | 25 Dec, 2023    |
| * subject to the appearance of moon |                |                 |    |                  |                 |

\* subject to the appearance of moon



REGIONAL TRAINING COLLEGE  
HESCO JAMSHORO



# DEPARTMENTAL PROMOTION TRAINING (DPT) PROFORMA

Attach  
Photograph

1. Name of Candidate \_\_\_\_\_
2. Father's Name \_\_\_\_\_
3. CNIC No. \_\_\_\_\_
4. EPF No. \_\_\_\_\_
5. Qualification/ BPS \_\_\_\_\_
6. Date of Birth / Age \_\_\_\_\_
7. Full Designation \_\_\_\_\_
8. Complete Address \_\_\_\_\_
9. Date of Appointment \_\_\_\_\_
10. Date of Last Promotion. \_\_\_\_\_
11. Total Service in Cadre \_\_\_\_\_
12. Nominated Letter. # \_\_\_\_\_ Dated \_\_\_\_\_
13. Mobile / T&T.# (Res + Office) \_\_\_\_\_
14. Eligibility to Appear in Training \_\_\_\_\_
15. Which chance candidate is availing and about fee? \_\_\_\_\_

| No of Chance                            | 1st                                  | 2nd                         | 3rd                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|--------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Training fee paid by HESCO Employee     | Nil                                  | 3000/= Per week by Trainee  | Same as per SOP prescribed by General Manager (HR) PEPCO Lahore in light of replacement policy of DEP from BPS-05 to 16 circulated vide GM (HR) PEPCO O/M No.GM/(HR)/HRD/A-398/138-62 dated 25.01.2016. Clause-5 "the trainee who falls in promotion / TSU training will have to undergo next training course at this his own expenses. |
| Training fee paid by Non-HESCO Employee | 13480/= Per week by Concerned Office | 13480/= Per week by Trainee | 13480/= Per week by Trainee                                                                                                                                                                                                                                                                                                             |

Above Promotion /Time scale Up-Gradation Training Fees to be deposited in Principal Regional Training College HESCO Jamshoro official Bank A/C NO.673-7 (NBP Shahbaz Building Branch Hyderabad) in the name of Principal Regional Training College HESCO Jamshoro. Application without above fee will not be entertained.

## CERTIFICATE BY CANDIDATE

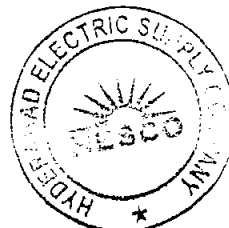
Certify that I have filled in all the columns in completely and no wrong or incomplete information has been given by me to the best of my knowledge. if anything, wrong or incomplete is found, I shall be liable to disciplinary action under WAPDA (E&D Rules)

Signature of Candidate

## CERTIFICATE BY HEAD OF OFFICE

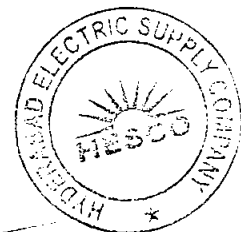
Certify that \_\_\_\_\_ S/O/W/O/D/O \_\_\_\_\_ Working at \_\_\_\_\_ is eligible to appear Promotion / Time scale Up-Gradation Training from \_\_\_\_\_ to \_\_\_\_\_ at \_\_\_\_\_ in accordance with the instruction contained in New SOP.

Executive Engineer  
or above  
Controlling Officer



vii) Training and development procedures and manuals

- i. Training of officials from BPS-05 to BPS-16 is conducted in Regional Training Center HESCO Jamshoro. (Schedule of training for the year-2023 is enclosed)
- ii. Training of officers from BPS-17 to BPS-18 (<sup>Engineer</sup>for Technical Side) is conducted in WAPDA Engineering Academy, Faisalabad. (Schedule of training for the year-2022-23 is enclosed)
- iii. Training of officers from BPS-17 to BPS-19 (all cadres) is conducted in WAPDA Administrative Staff College Islamabad. (Schedule of training for the year-2022-23 is enclosed)

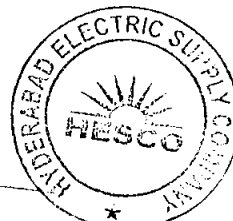


WAPDA ADMINISTRATIVE STAFF COLLEGE, ISLAMABAD  
Year 2022 - 2023 Training Schedule (tentative)

| Sl. No.       | Course Title                                                                                                                                                                                       | No. of Staff | Age Group | Gender | Rank    | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1             | Senior Management Course (SMC)                                                                                                                                                                     | 1            | 14        | 26     | 11      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 2             | Middle Management Course (MMC)                                                                                                                                                                     | 6            | 18        | 26     | 8       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 3             | Junior Management Course (JMC)                                                                                                                                                                     | 7            | 17        | 26     | 9       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 4             | Elementary Management Course (EMC)<br><small>Senior Supervisors, Supervisors, Technicians, Storekeepers, Supervisors, AGO (Senior Ward, Foreman, Supervisors and Asset Servicing Officers)</small> | 5            | 16        | 26     | 6       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 5             | Mandatory Training Course (MTC)<br><small>for Audit &amp; Accounts Officers</small>                                                                                                                | 4            | 14        | 26     | 4       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 6             | Senior Leadership Course NTDC                                                                                                                                                                      | 2            | 20        | 15     | 2       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 7             | B. Management Induction Course (MIC)<br><small>WAPDA / NTDC, Asst. Managers</small>                                                                                                                | 1            | 18        | 26     | 1       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 8             | NT Courses through T4 Loan                                                                                                                                                                         | 15           | 17-19     | 23     | 10 Days |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 9             | Two Weeks Project Management Training Workshop                                                                                                                                                     | 6            | 22-24     | 26     | 2       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Total Courses |                                                                                                                                                                                                    | 30           |           |        |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |

| HOLIDAYS                               |                   |
|----------------------------------------|-------------------|
| July to December - 2022                |                   |
| Eid-ul-Fitr                            | 09-01 Hdy *       |
| Independence Day                       | 14-Aug            |
| Ashura (10th Muharram & 10th Muharram) | 07-08 Aug *       |
| Eid-ul-Milad-un-Nabi                   | 07 Oct *          |
| Qaid-e-Azam Day                        | 25-Dec            |
| January to July - 2023                 |                   |
| Qaid-e-Azam Day                        | 05-Feb            |
| Prakash Day                            | 21-Mar            |
| Eid-ul-Fitr                            | 08-May            |
| Eid-ul-Azha                            | 21-24 April *     |
| Eid-ul-Azha                            | 24 June-01 July * |

\* Subject to the sighting of Moon



*[Signature]*  
Principal  
WAPDA Islamabad

# WAPDA ENGINEERING ACADEMY, FAISALABAD

TRAINING SCHEDULE - FISCAL YEAR 2022 - 23

TRANSMISSION & DISTRIBUTION DIRECTORATE

| No. | Courses                                                                         | Age   | Code  | Capacity | Duration (Weeks) | Frequency | TST Days | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | Remarks  |
|-----|---------------------------------------------------------------------------------|-------|-------|----------|------------------|-----------|----------|------|------|------|------|------|------|------|------|------|------|-----|------|----------|
| 1   | Refresher Course (Pre-Promotion) for Senior Engineers (Distribution/T&G)        | 18    | T-809 | 25       | 4                | 2         | 4        |      |      |      | 28   | 29   |      |      |      |      |      |     |      | 21/11/22 |
| 2   | Senior Specific Course (Pre-Promotion) for Junior Engineers (Distribution/T&G)  | 17    | T-125 | 30       | 6                | 2         | 5        |      | 10   | 11   |      |      |      |      |      |      |      |     |      | 21/11/22 |
| 3   | Technical Induction Course for Junior Engineers (Distribution/T&G)              | 17    | T-119 | 10       | 8                | 1         | 5        | 10   |      |      |      |      |      |      |      |      |      |     |      | 21/11/22 |
| 4   | Upper Technical Subordinate Skill Course (Pre-Promotion) from LS/SSO to N.Engs. | 14-16 |       | 35       | 4                | 3         | 4        |      |      |      |      | 28   | 29   |      |      |      |      |     |      | 21/11/22 |
| 5   | Practicals for Line Supervisors                                                 | 13-14 | T-500 | 20       | 1                |           | -        |      |      |      |      |      |      |      |      |      |      |     |      | 21/11/22 |
| 6   | Internship of Engineering University students                                   | -     | -     | 40       | 4                | 1         | -        | 04   | 05   |      |      |      |      |      |      |      |      |     |      | 21/11/22 |

All Per DISCOs Covered

All Fee is Charged

## CIVIL DIRECTORATE

| No. | Courses                                                     | Age   | Code  | Capacity | Duration (Weeks) | Frequency | TST Days | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | Remarks  |
|-----|-------------------------------------------------------------|-------|-------|----------|------------------|-----------|----------|------|------|------|------|------|------|------|------|------|------|-----|------|----------|
| 1   | Refresher Course (Pre-Promotion) for Senior Engineers       | 18    | W-135 | 25       | 4                | 2         | 4        | 10   | 11   |      |      | 09   | 10   |      |      |      |      |     |      | 19/10/22 |
| 2   | Senior Specific Course (Pre-Promotion) for Junior Engineers | 17    | W-140 | 20       | 6                | 1         | 5        |      | 10   | 11   |      |      |      |      |      |      |      |     |      | 19/10/22 |
| 3   | Technical Induction Course for Junior Engineers             | 17    | W-130 | 20       | 8                | 2         | 5        |      |      | 21   | 22   |      |      |      |      |      |      |     |      | 19/10/22 |
| 4   | Technical Refresher/Pre-promotion Course for Sub Engineers  | 11-14 | W-100 | 20       | 4                | 1         | 4        |      |      |      |      |      | 14   | 15   |      |      |      |     |      | 19/10/22 |
| 5   | Hydro-Power Projects for Senior Engineers                   | 18    | W-120 | 20       | 4                | 1         | 4        |      |      |      |      |      |      |      |      |      |      | 11  | 12   | 19/10/22 |
| 6   | Project Management Course for Junior Engineers              | 17    | W-105 | 20       | 3                | 1         | 3        |      |      |      |      |      |      |      |      |      | 24   | 25  | 12   | 19/10/22 |
| 7   | Internship of Engineering University students               | -     | -     | 20       | 2                | 1         | -        | 04   | 05   |      |      |      |      |      |      |      |      |     |      | 19/10/22 |

All Fee is Charged

Note: Capacity may be enhanced / de/decreased in case of Mandatory Courses

## COMMON COURSES

| No. | Courses                                                                                         | Age | Code  | Capacity | Duration (Weeks) | Frequency | TST Days | Jul.      | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Jun. | Remarks  |
|-----|-------------------------------------------------------------------------------------------------|-----|-------|----------|------------------|-----------|----------|-----------|------|------|------|------|------|------|------|------|------|-----|------|----------|
| 1   | Refresher Course (Pre-Promotion) for S.Es/R.Es/Directors WAPDA/PEPCO and Common Services        | 19  | T-809 | 25       | 3                | 1         | 6        |           |      |      |      |      |      | 18   | 19   |      |      |     |      | 14/01/23 |
| 2   | Junior Management Course (JMC)                                                                  | 17  |       | 25       | 4                | 2         | 7        | 21st June | 22   | 23   | 24   |      |      |      |      |      |      |     |      | 14/01/23 |
| 3   | Management Orientation Course (MOC) for U-Tech / Diploma Holders / Non-Diploma Junior Engineers | 17  |       | 20       | 4                | 1         | 4        |           |      |      |      |      |      |      | 21   | 22   |      |     |      | 14/01/23 |
| 4   | Elementary Management Course (EMC)                                                              | 16  |       | 25       | 4                | 3         | 4        |           |      |      |      | 31   |      |      |      | 27   | 28   | 29  | 30   | 14/01/23 |

Note: Course Fee effective from 01.01.2023 vide General Manager (Training) Lahore's letter No GMT/Gen-144/4415-74, dated 25.12.2022

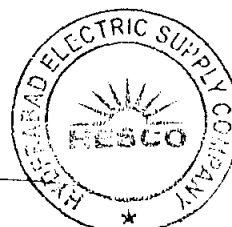
Computational Notes:

- All Mandatory Courses of all disciplines may be arranged/conducted as per special demands.
- Short Courses / Practical trainings (one week) as demanded by the DISCOs may also be accommodated.

EXPECTED HOLIDAYS, Fiscal Year 2021-2022

10th & 11th Muharram-ul-Haram  
Eid-ul-Fitr  
14th August  
09 October  
25th December  
5th Feb. 2023

10, 11 and 12 July 2022  
08 & 09 August  
14th August  
09 October  
25th December  
5th Feb. 2023



Chief Engineer (Training)  
WAPDA Engineering Academy  
Faisalabad

14.01.2023

Anneaux - F  
(VIII - 9)

**HYDERABAD ELECTRIC SUPPLY COMPANY**

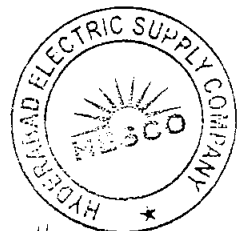
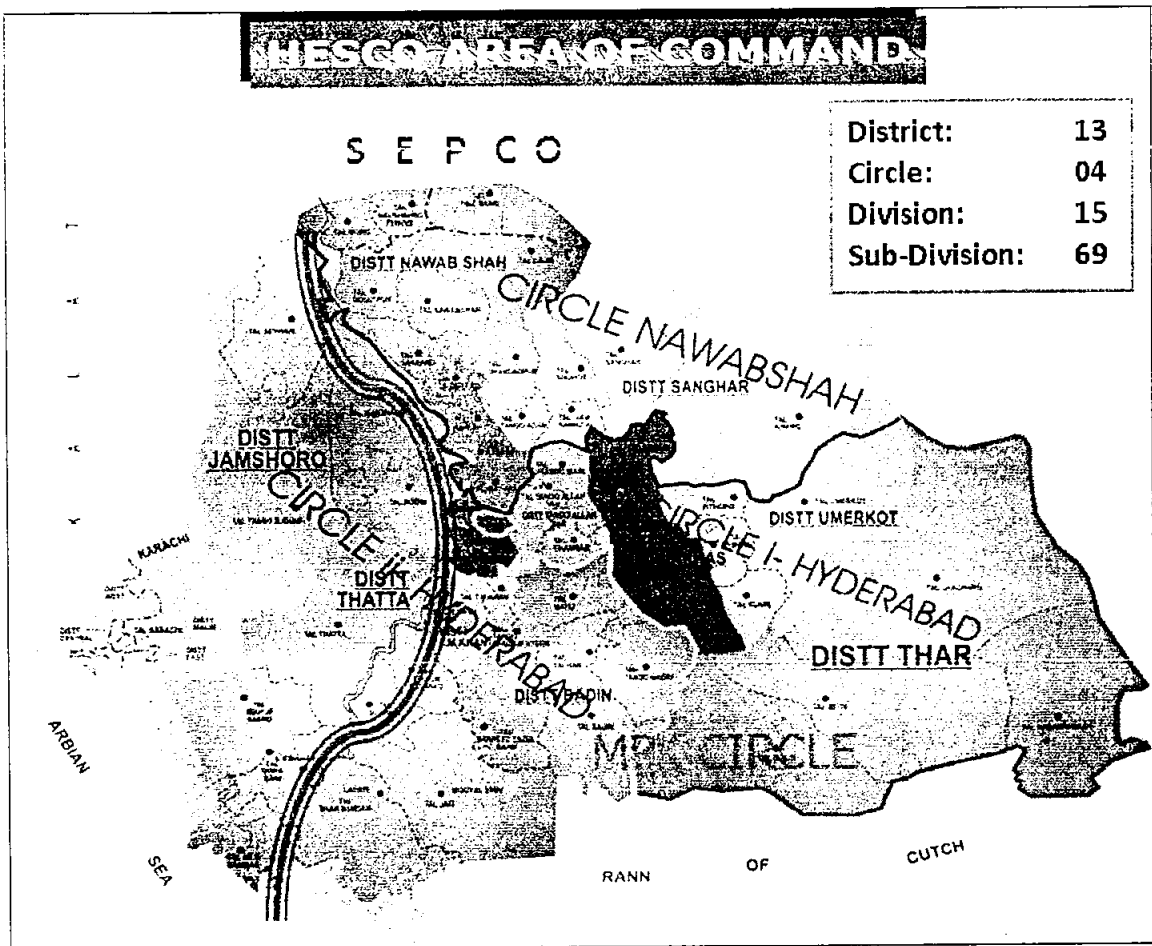
**SERVICE TERRITORY OF HESCO**



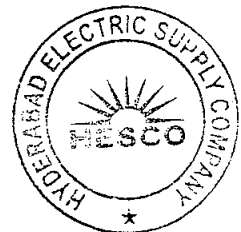
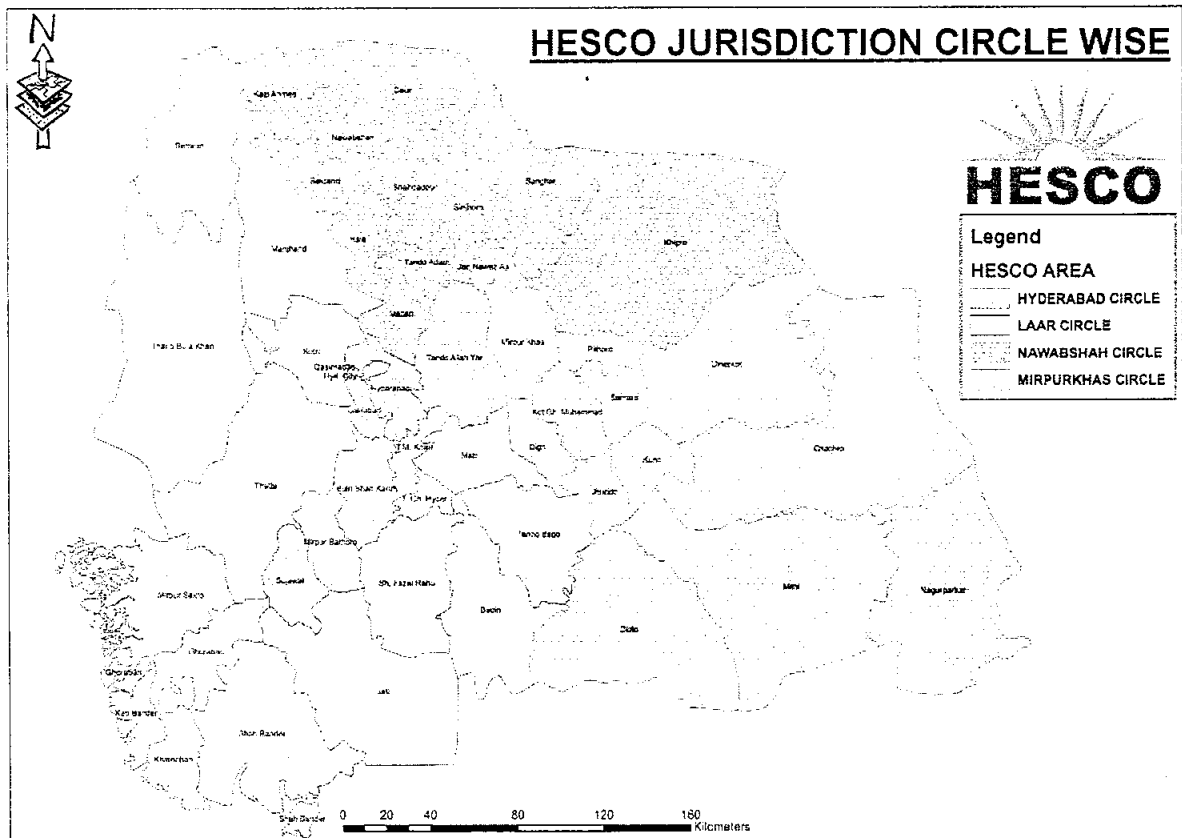


## LOCATION OF HESCO/LICENSEE

(District, Circle, Division and Sub-division wise)



**Detail Of Territory Of HESCO (Geographical Boundaries, Circles)**  
**where the Licensee is authorized to conduct Distribution Activities**  
**and Services.**



Annexure - P  
(viii-b)

## HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED (HESCO) METERING, BILLING AND COLLECTION PROCEDURES (SUMMARY)

Overall supervision of Metering Billing and Collection (MBC) services within HESCO'S Service Territory is handled by Customer Services Directorate head by Chief Engineer Customer Services Director (CSD). The elaborate head office set-up of Customer Services Directorate of HESCO is further supported by Manager Commercial at Company's Headquarter, Deputy Commercial Managers at each Circle office and Assistant Managers (Customer Services) at each Division level functionally working under Circle Deputy Commercial Managers. Through a well configured cascading chain of command and operations correct meter reading, prompt billing and effective collection is ensured.

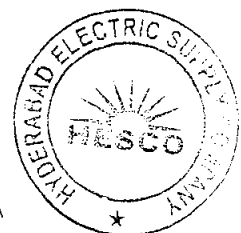
Through establishment of Customer Redressal Cell at head office level and complaint centers at Sub-Divisional level are the primary source to address and redress all kinds of customer complaints including billing related complaints. Online web-portal, complain dial in 118 Customer Complain Management System (CCMS) services have also been procured through Service Level Agreement with Power Information Technology Company (PITC). Additionally, Federal Complaint Cell (FCC), Prime Minister's Complaint Portal and NEPRA's Complaint portal also provide access to the complaints of customers for improvised services.

The infrastructure and hierarchy of Operations Directorate of HESCO also provides continued 24/7 support to the Customers Services personnel.

### **Billing Procedure:**

For the purpose of billing, consumers are divided in different batches (total 25 batches). Domestic, commercial and industrial connections having load less than 5 K Ware in Batch-1 to 20, Industrial connections are in batch no: 24 & 27 Provincial Government billing in Batch-28 and Federal Government in batch no: 29 Tube-wells in Batch-30,

In order to ensure correct, smooth and orderly meter reading, readings of the said batches are undertaken in systematic manner administered through Meter Reading and Billing Schedule" prepared and issued by Customer Services Directorate at the start of every month. The said Program is designed keeping in view the number of days in the current billing month, previous billing month, Gazetted holidays and ensuring that there is one-month accumulative energy consumption reading at each meter besides ensuring that sufficient time, for metering reading and submission of data, is mandated to personnel at field formations.



Billing schedule is circulated well in time to field formations (Superintending Engineers, Manager MIS, Deputy Managers (Commercial, Operation, Computer Centre), Revenue Officers and Assistant Manager (Operations))

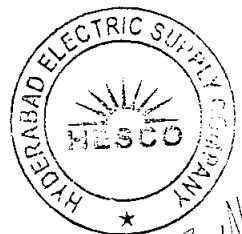
Pre-printed list (which include soft data for reading) is received from Computer Centers to Revenue Offices which is further sent to Assistant Managers (Operations) office. This data is uploaded into Meter Reading Mobile applications of meter readers and meter readers take readings along with SNAPs from the field. After reading, meter reader returns data files (Reading + SNAP) to meter reading section computer operator where all these files are collected and checked for any errors/shortcomings at Assistant Manager (Operations) office and further submitted to Revenue Officer which also collects other files under his Operational division and make a single data file. The data file received is sent (soft and hard data) to Computer Centre.

Computer Centers are responsible for collection of data files for whole circle and printing of monthly electricity bills (invoices) besides ensuring record keeping, integrity and security of collected data. The printed bills are collected from Computer Centers and distributed to each customer at his doorstep making sure that the consumers have at least (07) clear days for payment of bill, as per NEPRA Consumer Service Manual. In addition to the delivery of hard copy of bill, consumers have the facility of online printing of the bill.

**Recovery Procedure:**

For the purposes of payment of HESCO's electricity bills, multiple options are provided to the consumers. All branches of scheduled commercial banks and post offices of Pakistan Postal Service, within Service Territory, are designated to collect payment against energy bills Electronic payment (ATM, electronic online banking, NADRA) of electricity bills from anywhere in Pakistan is allowed. All collections are posted in the individual consumer accounts maintained at HESCO Computer Centers on daily basis. A consumer may also make payment against electricity bill even after last due date with late payment surcharge.

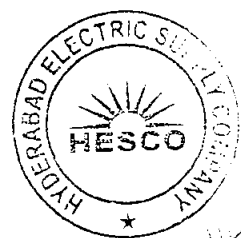
In line with Customers Service Manual, if a consumer defaults on payment of electricity bill for two consecutive months, the consumer is served with notice of disconnection allowing Seven (07) days for clearance of dues. The connection is not disconnected if any consumer fails to deposit the current month bill provided that there are no outstanding dues. In case of non-payment even after lapse of given time, the supply of electricity is disconnected until proof of payment is presented, In eligible cases, installments for payment are allowed to provide relief to the consumers.



In case of failure in payment electricity dues even after lapse of 3 months, Equipment Removal Order (ERO) notice is served to the consumers along with the electricity bill. In case of failure to make the payment, all metering installations are removed, status of the connection is changed to Permanent Disconnected and recovery process is initiated which may result in forfeiture of the Security Deposit. The electricity supply is restored of such consumer upon payment of all outstanding dues (in full or installments) and completion of other codal formalities regarding reconnection. For better, accurate and timely meter reading. HESCO, as part of its Strategic Roadmap and the Business Plan, has also embarked upon a phased plan for installation of AMI system on all agriculture connections while on industrial, commercial, domestic and bulk connections having load above 20KW.

#### **Installation of AMI System in HESCO**

For better, accurate, timely and technology supported meter reading, HESCO, as part of its Strategic Roadmap and the Business Plan, has also embarked upon a phased plan for installation of AMI system on all agriculture connections while on industrial, commercial, domestic and bulk connections having load above 20KW.

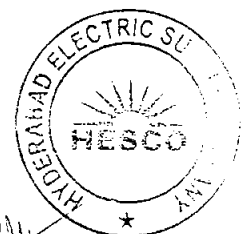


Annexure - F  
(Viii-c)

### General Safety Precautions

Prior to undertaking any electrical work, proper work protection shall be established as necessary in accordance with the Safety Code. All work activities shall comply with the applicable SOP, equipment manufacturer's instructions, safety rules and regulations. In addition to above a safety hazard identification exercise shall be undertaken.

- i) Maintenance, repair and construction work on electric circuits or apparatus shall not be done, until the authorized person in-charge of the working party, has received a properly filled permit-to-work from an authorized employee. The existing conditions should be determined so that the work can be performed in a safe manner and is clearly understood by each worker.
- ii) All circuits and equipment shall be considered energized at full voltage until de-energized and earthed. Caution notices, duly filled in, shall be placed on all switch-gear and control panels controlling the electrical circuits, tie points, and apparatus, upon which men are about to work. These notices shall be placed by the person in-charge of the circuits or apparatus. The presence of the authorized person in-charge of the working parties shall be essential, when the notices are filled in and signed. To prevent their being torn or dropping off the apparatus or lines guarded, caution notices shall always be placed in the wooden holders.
- iii) Workers shall not begin work on any equipment unless instructed to do so by the person in-charge. Where instructions are given on telephone or radio, each speaker shall be satisfied of the identity and authority of the other person.
- iv) On all jobs, a sufficient number of qualified workers should be present to do the work safely. The number of workers required shall be determined by the supervisor assigning the work.
- v) Whenever it become necessary to replace a worker or supervisor during a job, such replacement shall be made only after the replacing worker or supervisor has been fully informed of existing conditions.
- vi) On any job which, in the opinion of the person in-charge, requires an observer, the person in-charge or a person appointed by him shall act as observer. The observer shall not be engaged in any activity, which the person in-charge considers will interfere with his duty as an observer.
- vii) When performing work, if a worker finds a condition which is beyond his ability to handle safely, the worker shall call for assistance.
- viii) Emergency hazards, where life is in danger, such as fallen wires, may be removed by a worker, using approved tools and protective equipment.
- ix) Conductive articles of jewelry and clothing (such as watchbands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, metal headgear, or metal frame glasses) shall not be worn where they present an electrical contact hazard with exposed energized electrical conductors or circuit parts.
- x) Employee shall not perform housekeeping duties where there is a possibility of contact with energized electrical conductors or circuit parts, unless adequate safeguards (such as insulating equipment or barriers) are provided to prevent contact. Electrically conductive cleaning materials (including conductive solids such as steel wool, metalized cloth, and silicone carbide, as well as conductive liquid solutions) shall not be used unless precautions to prevent electrical contact are followed.
- xi) Conductive materials, tools, and equipment that are in contact with any part of an employee's body shall be handled in a manner that prevents accidental contact with energized electrical conductors or circuit parts. Such materials and equipment shall include, but are not limited



to, long conductive objects, such as ducts, pipes and tubes, conductive hose and rope, metal-lined rules and scales, steel tapes, pulling lines, metal scaffold parts, structural members, bull floats, and chains.

xii) Process of Achieving an Electrically Safe Work Condition.

- a) Determine all possible sources of electrical supply to the specific equipment. Check applicable up-to-date drawings, diagrams, and identification tags.
- b) After properly interrupting the load current, open the disconnecting device(s) for each source.
- c) Wherever possible, visually verify that all blades of the disconnecting devices are fully open or that draw out type circuit breakers are withdrawn to the fully disconnected position.
- d) Apply lock and/or tag.
- e) Use an adequately rated voltage detectors or voltmeters to test each phase conductor or circuit part to verify they are de-energized. Test each phase conductor or circuit part both phase-to-phase and phase-to-ground. Before and after each test, determine that the voltage detectors or voltmeters is operating satisfactorily.
- f) Where the possibility of induced voltages or stored electrical energy exists, ground the phase conductors or circuit parts before touching them.

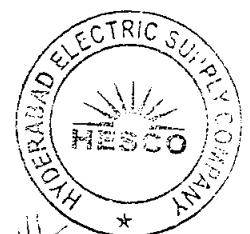
### Fire Safety Precaution

#### Requirements and Arrangement of Fire Protection

Fire prevention requirements of HESCO properties shall be governed by local HESCO firefighting provisions, specific instructions of the equipment manufacturers, government and municipal by-laws. All fire hazardous areas such as Battery Rooms, Oil Stores, and Welding Shops etc. shall be kept under strict vigilance to prevent the possible fire outbreak activities.

#### Requirements of Fire Protection

- i) All fire exits shall be properly marked and kept clear.
- ii) All fire protection and firefighting equipment such as fire extinguishers, sand buckets, fire doors and dampers, exit lighting etc., shall be maintained in proper operating condition. Sand/water buckets shall be kept filled. Recharge and return fire extinguishers and fire buckets to their position as soon as possible after use.
- iii) Never use a fire bucket, fire hose or fire sand for any purpose other than firefighting.
- iv) Good housekeeping shall be practiced in all buildings and vehicles to prevent the accumulation of flammable and/or combustible material.
- v) Flammable liquids shall be kept in approved cans and identified by proper labels.
- vi) Open flames and smoking are prohibited in all areas where flammable liquids or gases are stored or being used. Such areas shall be pasted with appropriate warning signs.
- vii) Avoid use of matches or open flames. Prevent electric sparks in areas where combustible gas may exist such as gas-filled electrical equipment, or in manholes, vaults, battery rooms, in proximity to batteries, transformer or oil circuit breaker tanks etc.
- viii) Never use defective electrical equipment, which can cause short circuits or arcing during use.
- ix) Never wear defective protective clothing.
- x) Never enter a smoke-filled compartment or building without breathing apparatus and an attendant standing by.
- xi) Never leave idle electrical equipment without disconnecting it or switching off at the main.
- xii) Never throw a lighted match or cigarette end away. Put it in proper receptacle. xiii) Never interfere with the wiring and fittings of the equipment.

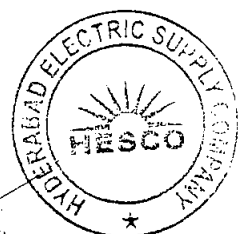


### Arrangements of Fire Protection

- i) All employees shall be familiar with the location and proper use of fire extinguishers in their work area.
- ii) To extinguish fire, following measures be adopted strictly:
  - a) For ordinary combustible material such as paper, rubber, textile, wood or rubbish, use approved Type "A" extinguisher.
  - b) For gasoline, oil, petrol, alcohol, grease or other liquids, use approved Type "B" extinguisher.
  - c) For burning gases, acetylene, propane, butane, methane etc. use only approved Type "C" extinguisher.
  - d) For combustible light metals such as lithium, sodium, magnesium, calcium etc. use approved type "D" extinguisher.
  - e) For electrical plant fires, use only approved Type "E" extinguisher.
- iii) Fire doors and dampers shall be identified and shall never be tied, blocked the open position, or otherwise made inoperative.
- iv) Access to fire extinguishers and other fire protective equipment shall not be obstructed.
- v) Each HESCO vehicle shall be equipped with an approved fire extinguisher. It shall be the duty of the driver of the vehicle to ensure that such extinguishers are in good condition and are refilled immediately after use.
- vi) At grid stations, offices and other buildings suitable fire and smoke protection systems should be installed.
- vii) Use of fire resistant or fire retarding materials shall be encouraged.
- viii) On main and costly equipment at grid stations such as power transformers, automatic fire detection and water sprinkling system should be installed.
- ix) In order to reduce the danger to life and assets, to the minimum, an emergency plan should be prepared and ensure its availability and updating of knowledge/training of the employees. It will be most appropriate, if emergency fire protection and rescue rehearsals/drills are exercised at regular intervals.
- x) Fire and smoke detectors should be checked/tested at regular intervals to ensure their correct functioning.
- xi) Indication bulbs of fire/smoke detection system must always be kept in order.

### Emergency Management System

- Establish, implement, and maintain an Emergency Management System to reduce losses caused by emergencies and to ensure that effective incident readiness and response plan are in place in order to limit and control the consequences of incident. This will be achieved by identifying, preventing, planning and training to respond to any event that could occur that requires the activation of emergency response. The Emergency Management System is applicable to incidents and emergencies that may take place within HESCO boundaries and operational area. The Emergency Management System should describe the mitigation, preparation, response and recovery of emergency scenarios, specific to HESCO operations, risks and uncontrolled significant aspects.
- Ensure that necessary emergency items are available at work site/Grid Stations.
- Provide, inspect and maintain in good working order adequate firefighting equipment. Designated employees/contractors shall be properly trained in the use of firefighting equipment.





## First Aid And Rescue Procedures

Procedures outlined in this section are intended only to give a general knowledge of safe and effective methods of applying first aid for certain types of injuries.

- i) Keep the injured person lying down in a comfortable position, head level with the body, until you know that the injury is serious.
- ii) Look for discharge of blood, stoppage of breathing, signs of poisoning, burns, fractures and dislocations. REMEMBER that serious bleeding, stoppage of breathing, and internal poisoning must be treated immediately in that order before anything else is done.
- iii) Send someone to call a physician or ambulance.
- iv) Never give water or liquid to an unconscious person.
- v) Keep onlookers away from the injured person.
- vi) Do not let the victim see the injury.
- vii) Make the victim comfortable and cheerful, if possible.
- viii) Keep the victim warm, but maintain normal body temperature
- ix) Keep calm and do not be hurried into moving the injured person unless absolutely necessary

## Sunstroke, Heatstroke and Heat Exhaustion

- i) Sunstroke and heatstroke have the common symptoms but the cause may be slightly different. Sunstroke results from excessive direct exposure to the sun rays, while exhaustion is caused either by direct exposure to the sun rays or by indoor heat.
- ii) Symptoms and treatment are entirely different for sunstroke or heatstroke, and heat exhaustion as indicated below: -

| Sunstroke and Heatstroke                                                                                                             | Heat Exhaustion                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Cause:</b><br>Exposure to heat, particularly sun rays.                                                                            | <b>Cause:</b><br>Exposure to heat, either sun rays or indoor.                                                       |
| <b>Symptoms:</b><br>Red face; hot, dry skin; no sweating; strong rapid pulse; very high temperature; headache; usually unconscious.  | <b>Symptoms:</b><br>Pale face; cool, moist skin; profuse sweating; weak pulse; temperature near normal, often faint |
| <b>Treatment:</b><br>Call a doctor; lay victim with head elevated; cool body with bath or cold applications; do not give stimulants. | <b>Treatment:</b><br>Keep victim's head low; give salt solution, 1 teaspoon full per glass of water, medical care   |

