



BAHRIA TOWN SERVICES

YOUR LIFESTYLE DESTINATION



Bahria Town Services
Bahria Town (Pvt) Ltd
Rawalpindi / Islamabad
No: 786/BTS/NEPRA Dist/6/23
Telephone: 5731004
16 Mar 2023

To: **Mr Iftikhar Ali Khan**
Addl. Director General
NEPRA, Islamabad

Subject: **Application of Bahria Town (Pvt) Ltd for Grant of Distribution Licence**

Ref: NEPRA letter No. NEPRA/R/LAD-100-1146 dated 23 Jan 2023.

1. As desired, following documents are submitted herewith for further necessary action at your end please:-

a. A Crossed cheque bearing machine number 44026968 dated 15 Mar 2023 amounting to Rs 41,999 (Rupees forty one thousand nine hundred ninety nine only) as short amount of fee.

b. Last annual return of BTPL for FY 2022.

2. We shall be thankful and appreciate your kind co-operation in early processing our application for issuance of the Distribution Licence please.


Engr Muhammad Saleem
Deputy Chief Executive



BAHRIA TOWN
— PRIVATE LIMITED —
YOUR LIFESTYLE DESTINATION

کسٹمر سپورٹ سنٹر
بجریہ ٹاؤن راولپنڈی

Customer Support Center
Bahria Complex, Phase 8
Bahria Town Rawalpindi.



CERTIFIED TRUE COPY OF THE EXTRACT OF RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF M/S BAHRIA TOWN (PRIVATE) LIMITED, HAVING ITS REGISTERED OFFICE AT CUSTOMER SUPPORT CENTER, BAHRIA COMPLEX PHASE VIII RAWALPINDI AS ON 28th SEPTEMBER 2022.

Resolved that Engr Muhammad Saleem, Chief Operating Officer/ Deputy Chief Executive having its registered office at Customer Support Center, Bahria Complex, Phase VIII, Bahria Town (Pvt) Ltd, Rawalpindi (hereinafter referred to as the "Company") for and on behalf of Company is hereby authorized to sign Application to NEPRA Authority for grant of Electric Power Distribution License for Bahria Town (Pvt) Ltd Rawalpindi and Islamabad Housing Schemes.

Hamid Riaz
Company Secretary

Company Secretary
Bahria Town (Pvt) Ltd.

GOVERNMENT OF PAKISTAN



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CERTIFICATE OF INCORPORATION

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

Company Registration No. L 09003 of 1996-97

I hereby certify that "BAHRIA TOWN (PRIVATE) LIMITED"

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

the company is limited Company Registration Islamabad shares.

Given under SECURITY hand at Lahore.

this _____ day of January

one thousand nine hundred and _____ ninety seven.

Fee Rs. =11,100/-



Handwritten signature and date: 1/27/97

(AKBAR SHAH)
JOINT REGISTRAR
OF COMPANIES

Handwritten reference: No - JRL/3890 dt 14/1/97

The Companies Ordinance, 1984
(Company Limited by Shares)

MEMORANDUM

AND

ARTICLES OF ASSOCIATION

OF

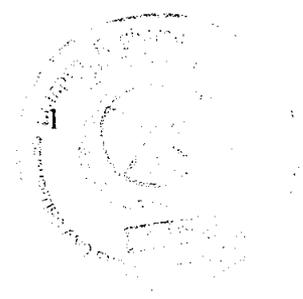
BAHRIA TOWN (PRIVATE) LIMITED

THE COMPANIES ORDINANCE, 1984
(COMPANY LIMITED BY SHARES)

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MEMORANDUM OF ASSOCIATION
OF
BAHRIA TOWN (PRIVATE) LIMITED

- i. The name of the Company "**Bahria Town (Private) Limited**".
- ii. The Registered Office of the Company will be situated in the Province of Punjab.
- iii. The objects for which the Company is established are to undertake all or any of the following business:
 1. (a) To acquire and take over the running business now carried on under the name of Bahria Town, 60, Imran Khan Avenue, Chaklala Scheme-III, Rawalpindi, with all its assets and liabilities and property of that business including Land Buildings, Machinery, contracts, privileges, rights, license, concessions and with a view thereto to enter into an agreement with the said Bahria Town and to carry the same into effect with or without modifications with immediate effect.
 - (b) To carry on the business and management of Housing Estate Development all kinds of construction and to manage, maintain, improve, develop, control and construct housing societies, plazas, hotels, restaurants, shops, markets, bridges spillways, highways, reservoirs, hospitals, clinics, dispensaries, maternity homes, nurseries, schools, colleges, training centers, residential blocks/bungalows, commercial complex/centers, buildings, business offices, workshops, mills, factories, warehouses, apartments, multistories flats, roads, footpaths, streets, sewerage and water treatment system, airport run-ways, electric and gas installation, dockyards, railway tracks/yards including hire and rent of buildings and construction and supply of material/equipments and to participate international tenders either singly as a company or in joint venture with foreign companies, individuals and firms subject to any permission required under the law.
 - (c) To carry out the distribution of electricity in the towns/colonies so developed/constructed and to obtain the necessary licenses/approvals from the relevant Authorities, Govt. Agencies, etc."



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2. To carry on the business of estimation, drawing up or specifications and contracts, quantity surveying, supervision and execution of construction works and installation and maintenance thereof.
3. To construct, erect or maintain sewers, roads, waterworks, brick-kilns, and erection on of any description whatsoever; and to provide all civic facilities to occupiers or tenants thereof as are commonly provided.
4. To carry on the business of contractors and suppliers of goods of all description to Government, Central and Provincial, C.D.A., Local Bodies, Municipalities, L.D.A., K.D.A., Sui Northern Gas, WAPDA and other autonomous bodies, persons, hotels, hospitals, firms or corporations and to supply goods of all kinds for the purpose subject to any permission required by law of Pakistan.
5. To carry on the business of sales representatives either on commission or on profit sharing basis of all kinds of goods and materials.
6. To carry on business of supervisors, administrators, executors, contractors, agents, (except managing agents) experts, collaborations, advisors and negotiators of civil engineering, hydraulic engineering, chemical engineering, mining, metallurgy, agriculture, forestations oil conservation and reclamation, industries, aeronautics, telephone, telegraphs and wireless communication, rail, roads, water and air transport, and all affairs relating thereto, petroleum-product, machinery for exploration of gas, mines, petrol and petroleum product.
7. To apply for, tender, offer and accept purchase or otherwise acquire any contracts and concessions for or in relation to the projection, execution, carrying out improvements, management, administration or control of works and conveniences and undertake, execute, carry out, dispose of or otherwise turn to account the same.
8. To buy, manufacture, mix, sell, refine, import, export and to carry on any business in minerals, methylated and rectified spirits dry or other colours, coal tar dyes, raw materials, pigments, dyes, paints, synthetic paints and thinners, coloured or other cements, varnishes, synthetic, resins, enamels, distempers, disinfectants oil, polishes, electroplating, abrasive and its chemicals, grease, vaseline, creams, glue, gelatine and other glue preparations and allied products.
9. To manufacture, produce, refine, process, formulates, buy, sell, import, export or otherwise deal in all types of heavy and light chemicals industrial chemicals, elements and compounds including laboratories, scientific chemicals or any nature used or capable of being used in the pharmaceutical industry, agricultural chemicals, fertilizers, petrochemicals, industrial chemicals or any mixtures, derivatives and compounds thereof.
10. To carry on the business of general order suppliers, including Government, Semi-Government agencies, Armed Forces, Army, Military or Defence and commission agents, indentors, traders and as general merchants, wholesalers, retailers, dealers, distributors, stockiest agent, sub-agent in any goods or products or within the scope of the object of the Company, subject to any permission required under the law.

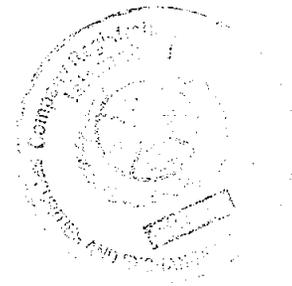


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11. To carry on the business of clearing and forwarding agents, custom agents, cargo agents, travel agents, tour operators, common carriers and contractors.
12. To establish warehouses and to carry on the business of warehouse-men, stores, custodians, and to provide facilities for storage of commodities, articles, things, preparation of all kinds and description whatsoever, storage rooms, bins, godowns, cold storage, clearing and forwarding, transportation and distribution of beverages, food products and merchandise of all kinds.
13. To receive goods on consignment, from any company, firm, association of persons, body, whether incorporated or not, individuals, Government, Semi-Government or any local authority and sell the same as agents or on principal to principal basis.
14. To apply for, tender, offer and accept purchase or otherwise acquire any contracts and concessions for or in relation to the projection, execution, carrying out improvements, management, administration or control of works and conveniences and undertake, execute, carry out, dispose of or otherwise turn to account the same.
15. To carry on in or out of Pakistan the business of manufacturers, importers, exporters, indentors, transporters, dealers in all articles and commodities akin to or connected with any of the business of the Company capable of being conveniently carried on or necessary for the promotion of the objects herein contained, as permissible under law.
16. To carry on agency business (except managing agency) and to acquire and hold selling agencies and to act as selling agents, commission agents, manufacturers' representatives and distributing agents of and for the distribution of all kinds of merchandise, goods, commodities, products, materials, substances, articles and things whether finished, semi-finished, raw, under process, refined, treated or otherwise pertaining to trade and commerce and for that purpose to remunerate them and to open and maintain depots and branches.
17. To purchase, hire, apply for or otherwise acquire and hold for any interest, any rights, privileges, lands, building, easements, trade marks, patents, patent right, licenses, secret processes, machinery, plants, stock-in-trade, and any movable and immovable property or assets of any kind necessary or convenient for the purposes of or in connection with the Company's business or any branch or department thereof and to use, exercise, develop, grant licenses in respect of or otherwise turn to account any property, rights, and information so acquired, subject to any permission required under the law.
18. To acquire by concession, grant, purchase, barter, license either absolutely or conditionally and either solely or jointly with others any lands, buildings, machinery, plants, equipments, privileges, rights, licenses, trade marks, patents, and other movable and immovable property of any description which the Company may deem necessary or which may seem to the Company capable of being turned to account, subject to any permission as required under the law.



19. To act as representatives, for any person, firm or company and to undertake and perform sub-contracts, and also act in the business of the Company through or by means of agents, sub-contractors and to do all or any of the things mentioned herein in any part of the world and either alone or in collaboration with others and by or through agents, sub-contractors, or otherwise.
20. To go in for, buy or otherwise acquire and use any patent design, copyright, license, concession, convenience, innovation, invention, trade marks, secret device, or process, rights, or privileges, plants, tools or machinery and the like in Pakistan or elsewhere, which may for the time being appear to be useful or valuable for adding to the efficiency or productivity of the Company's work or business, as permissible under the law.
21. To acquire and carry on all or any part of the business or property and to undertake any liabilities of any person, firm, association or Company's possession of property suitable for any of the purposes of the Company or carrying on any business which this Company is authorized to carry on and in consideration for the same, to pay cash or to issue shares of the Company.
22. To enter into arrangements with the government or authority (supreme, municipal, local or otherwise) or any corporation, company, or persons that may seem conducive to the Company's objects or any of them and to obtain from any such government, authority, corporation, company or person any charters, contracts, rights, privileges and commission which the Company may think desirable and to carry on exercise and comply with any such charters, contracts, decrees, rights, privileges and concessions.
23. To enter into partnership, to amalgamate, or merge movable with immovable and/or to buy on all interests, assets, liabilities, stocks or to make any arrangement for sharing profits, union of interests, cooperation, joint venture, reciprocal concession or otherwise with any person, firm or company carrying on or proposing to carry on any business which this Company is authorized to carry on or which is capable of being conducted so as directly or indirectly to benefit this Company and to have foreign collaborations and to pay royalties/technical fees to collaborators subject to the provisions of the Companies Ordinance, 1984.
24. To establish, promote or assist in establishing or promoting and subscribe to or become a member of any other company, association or club whose objects are similar or in part similar to the objects of this Company or the establishment or promotion of which may be beneficial to the Company, as permissible under law.
25. To open accounts with any Bank or Banks and to draw, make, accept, endorse, execute, issue, negotiate and discount cheques, promissory notes, bills of exchange, bills of lading, warrants, deposit notes, debentures, letter of credit and other negotiate instruments and securities.



26. To arrange local and foreign currency loans from schedule banks, industrial banks and financial institutions for the purpose of purchase, and import of machinery, construction of factory, building and for the purpose of working capital or for any other purpose.
27. To sell or otherwise dispose of the whole or any part of the undertaking of the Company, either together or in portions, for such consideration as the Company may think fit and in particular, for shares, debenture-stock or securities of any Company purchasing the same.
28. To borrow or raise money by means of loans or other legal arrangements from banks, or other financial institutions, or Directors in such manner as the Company may think fit and in particular by issue of debentures, debenture stock, perpetual or otherwise convertible into shares and to mortgage, or charge the whole or any part of the property, assets or revenue of the Company, present or future, by special assignment or to transfer or convey the same absolutely or in trust as may seem expedient and to purchase, redeem or pay off any such securities.
29. To pay all costs, charges, and expenses preliminary or incidental incurred in formation or about the promotion and establishment of the Company and to remunerate any person, firm or company for services rendered or to be rendered in or about the formation or promotion of the Company or the conduct of its business.
30. To give any servant or employee of the Company commission in the profits of the Company's business or any branch thereof and for the purpose to enter into any arrangement or scheme the Company may deem fit and to procure any servants or employees of the Company to be insured against risk of accident in the course of their employment by the Company.
31. To establish and support or aid in the establishment and support of funds, trusts and conveniences calculated to benefit persons who are or have been Directors of or who have been employed by or who are serving or have served the Company or any other Company which is a subsidiary or associate of the Company or the dependents or connection of such persons and to grant pensions, gratuities, allowances, reliefs and payments in any other manner calculated to benefit the persons described herein.
32. To capitalize such portion of the profits of the Company as are not distributed among shareholders of the Company in the form of dividend as the Company may think fit and for the purpose to issue bonus shares as fully paid up, in favour of the shareholders of the Company.
33. To establish, construct, manage, maintain and run any charitable institutions, hospitals, research institutes for the benefit of the public or employees of the Company, their families and dependents and to send any person, employees or Directors of the Company abroad to any foreign country or in Pakistan.



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34. To distribute any of the Company's property and assets among the members in specie or in any manner whatsoever.
 35. To adopt such means of making known the business and products of the Company as may seem expedient, and in particular by advertisement in press by circulars, by purchase and exhibitions of works of art or interest, by publication of books and periodicals and by granting prizes, rewards, donations and also giving advertisements as permissible under law.
 36. To carry out joint venture agreements with other companies or countries.
 37. To cause the Company to be registered or recognized in any foreign country.
 38. To do and perform all other acts and things as are incidental or conducive to the attainment of the above objects or any of them.
 39. To apply for and obtain necessary consents, permissions and licenses from any Government, State, Local and other Authorities for enabling the Company to carry on any of its objects into effect as and when required by law.
 40. It is declared that notwithstanding anything contained in the foregoing object clauses of this Memorandum of Association nothing contained therein shall be construed as empowering the Company to undertake or to indulge in business of banking company, banking, leasing, investment, pre-payment sales scheme, managing agency or insurance business directly or indirectly as restricted under the law or any unlawful operation.
 41. It is undertaken that the Company shall not, by advertisement, pamphlets, other means or through negotiation, offer for sale or take advance money for the further sale of plots, houses, flats etc., to the general public or individuals unless such plots, houses or flats etc., are owned and have been developed by the Company.
- iv. The liability of the members is limited.
- v. The Authorized Capital of the Company is Rs.1,200,000,000/- (Rupees One Billion Two hundred Million only) divided into 120,000,000 (One Hundred Twenty Million only) ordinary shares of Rs.10/- (Rupees Ten) each with powers to increase and reduce the Capital of the Company and to divide the shares in the Capital for the time being into several classes in accordance with the provisions of the Companies Ordinance, 1984.



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

Name & Surname (Present & Former) in Full (in Block Letters)	Father's/Husband's Name in Full	Nationality with any former Nationality	Occupation	Residential Address (in Full)	Number of shares taken by each subscriber	Signature
1. Commander NISAR AHMED (Retd) Nominee of BAHRIA FOUNDATION	Commander Gnuam Ahmed (Late) N/A	Pakistani N/A	Business Executive Foundation	D-6, Street 4, F-8, Islamabad 6 th Floor, Bahria Complex, M.T. Khan Road, Karachi	99	
2. Commodore MOHAMMAD ILYAS SI(M) S.B.(Retd)	Mr. Atta Mohammad (Late)	Pakistani	Business Executive	314, Street No.16, G-10/2, Islamabad	1	
3. MR. MALIK RIAZ HUSSAIN	Mr. Malik Ashiq Hussain	Pakistani	Business Executive	8, Gulnar Colony Cobb Line Peshawar Road, Rawalpindi Cantt.	50	
4. MR. MAHBOOB SHAUKAT	Ch. Abdul Qadir	Pakistani	Business Executive	107-A, Street No.41, F-10/4, Islamabad	50	
5. MRS. BINA RIAZ	Mr. Malik Riaz Hussain	Pakistani	House Wife	8, Gulnar Colony Cobb Line Peshawar Road, Rawalpindi Cantt.	800	
Total Number of Shares Taken					1,000 (One Thousand)	

Dated this 6th day of December 1995.

Witness to the above Signatures:
Full Name: Rana M. Usman Khan
Father's Full Name: Atta Mohammad Khan

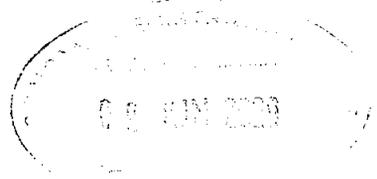
Nationality: Pakistani
Occupation: Chartered Accountant
Full Address: 127-Habitat House
Cricket House, Gulberg Road
Lahore

Signature: _____

DECLARED TO BE TRUE COPY

Azer Shah
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Additional Joint Registrar
Company Registration Office Islamabad



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THE COMPANIES ORDINANCE, 1984

(Company Limited By Shares)

ARTICLES OF ASSOCIATION
OF
BAHRIA TOWN (PRIVATE) LIMITED
PRELIMINARY

1. Subject as hereinafter provided, the Regulations contained in Table 'A' of the First Schedule to the Companies Ordinance, 1984, (hereinafter referred to as Table 'A') shall apply to the Company so far as those are applicable to Private Companies, with the exception of the Regulations which are modified, altered or added hereunder:

DEFINITIONS AND INTERPRETATION

2. In these presents unless there be something in the subject or context inconsistent therewith, words signifying the singular number only, shall include the plural and vice versa and words signifying males only shall extend to and include females and words signifying persons, shall apply mutates mutandis to bodies corporate.

"The Company" means "BAHRIA TOWN (PRIVATE) LIMITED."

"The Office" means the registered office of the Company for the time being.

"Section" means Section of the Ordinance.

"Ordinance" means the Companies Ordinance, 1984.

"Month and year" shall mean the English calendar month and English calendar year respectively.

"The Register" means the Register of members to be kept pursuant to Section 147 of the Companies Ordinance, 1984.

"In Writing or Written" includes printed, lithographed and typewritten or other modes of representing words in visible and legible form.

"Dividend" includes bonus shares.

"Capital" shall mean the Capital of the Company for the time being raised or authorized to be raised for the purpose of the Company.



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"Shares" shall mean the shares in the capital of the Company for the time being.

"These Presents" shall mean the Memorandum of Association of the Company and these Articles and all supplementary, substituted or amended Articles for the time being in force.

"The Seal" in relation to a Company means the Common Seal of the Company.

"The Directors" means the Director for the time being of the Company including alternate Directors, as the case may be.

"Board" means a meeting of Directors duly called and constituted or the Directors assembled at a Board, as the case may be.

PRIVATE COMPANY

3. The Company is a Private Company within the meaning of Clause 28 of Section 2(1) of the Companies Ordinance, 1984 and accordingly
 - a) No invitation shall be issued to the public "J" subscriber for any shares, debentures or debenture-stock of the Company.
 - b) The number of the members of the Company (exclusive of persons in the employment of the Company) shall be limited to fifty provided that for the purpose of this provision where two or more persons hold one or more shares in the Company jointly they shall for the purposes of this clause be treated as a single members, and
 - c) The right to transfer shares of the Company is restricted in the manner and to the extent hereinafter appearing.

BUSINESS

4. The Company is entitled to commence business from the date of its incorporation.
5. The business of the Company shall include all or any of the objects enumerated in the Memorandum of Association.
6. The business of the Company shall be carried out at such place or places in the whole of Pakistan or elsewhere as the Directors may deem proper or advisable from time to time.

CAPITAL

7. The Authorized Share Capital of the Company is Rs. 1,200,000,000/= (Rupees One Billion Two Hundred Million Only) divided into 120,000,000 (One Hundred Twenty Million Only) ordinary shares of Rs. 10/= (Rupees Ten Only) each with powers to increase, reduce, consolidate, sub-divide, re-organise or to divide the share capital of the Company into several classes in accordance with the provisions of the Ordinance.



SHARES

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8. Subject to the provisions of the Ordinance, the shares shall be under the control of the Board of Directors who may allot or otherwise dispose of the same to such persons, firms, corporation or corporations, on such terms and conditions and for such considerations and at any such times as may be thought fit.
9. The shares in the Capital of the Company may be allotted or issued in payment or part payment of any property, land, machinery or goods supplied or any services rendered to the Company or promotion or formation of the Company or conduct of its business and any share so allotted may be issued as fully paid shares.
10. Where at any time the Board decides to increase the issued capital of the Company by issuing any further shares, then subject to the provisions of Section 86 of the Companies Ordinance 1984, all new shares shall be offered to the members in proportion to the existing shares held by each member, and such offer shall be made by notice under registered post or circular specifying the number of shares to which the members is entitled, and limiting a time within which the offer, if not accepted, will be deemed to be declined; and after the expiration of such time, or on receipt of information from the member to whom such notice is given that he declines to accept the shares offered, the Board may dispose of the same in such manner as it may consider most beneficial to the Company.

CERTIFICATE

11. Every person whose name is entered, as a member in the Register of Members shall without payment, be entitled to a certificate under the Common Seal of the Company specifying the share; held by several persons. The Company shall not be bound to issue more than one certificate and delivery of a share certificate to any one of several joint holders shall be sufficient delivery to all.
12. If a share certificate is defaced, lost or destroyed, it may be renewed on payment of such fee, and on such terms, as to evidence and indemnity and payment of expenses incurred by the Company in investigating title as the Directors think fit.

TRANSFER OF SHARES

13. The instrument of transfer of any share in the Company shall be executed both by the transferor and transferee, and the transferor shall be deemed to remain holder of the share until the name of the transferee is entered in the Register of members in respect thereof.
14. Shares in the Company shall be transferred in the form prescribed by Table 'A' in the First Schedule or in any usual or common form, which the Directors shall approve.



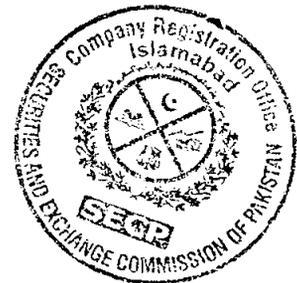
15. The Directors shall not refuse to transfer any fully paid shares unless the transfer deed is defective or invalid. The Directors may also suspend the registration of transfer during the ten days immediately preceding a General Meeting or prior to the determination of entitlement or rights of the shareholders by giving seven days previous notice in the manner provided in the Ordinance. The Directors may decline to recognize any instrument of transfer unless:-
- (a) A fee as may be determined by the Directors is paid to the Company in respect thereof.
 - (b) The duly stamped instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer.
16. If the Directors refuse to register a transfer of shares, they shall within one month after the date on which the transfer deed was lodged with the Company send to the transferee and the transferor notice of the refusal indicating the defect or invalidity to the transferee, who shall after removal of such defect or invalidity be entitled to re-lodge the transfer deed with the Company.

TRANSMISSION OF SHARES

17. The executors, administrators, heirs, or nominees, as the case may be, of a deceased sole holder of a share shall be the only person recognized by the Company as having any title to the share. In the case of a share registered in the names of two or more holders, the survivor or survivors shall be the only persons recognized by the Company as having any title to the share.
18. Any person becoming entitled to a share in consequence of the death or insolvency of a member shall, upon such evidence being produced from time to time be required by the Directors.
19. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company.

ALTERNATION OF CAPITAL

20. The Company may, from time to time, by Special Resolution, increase the share capital by such sum, to be divided into shares of such amount, as the resolution shall prescribe.
21. Subject to the provisions of the Ordinance, all new shares shall, before issue, be offered to such persons as at the date of the offer are entitled to receive notices from the Company of General Meetings in proportion, as nearly as the circumstances admit, to the amount of the existing shares to which they are entitled. The offer shall be made by



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notice specifying the number of shares offered, and limiting a time within which the offer, if not accepted, will be deemed to be declined, and after the expiration to that time, or on the receipt of an intimation from the person to whom the offer is made that he declines to accept the shares offered, the Directors may dispose of the same in such manner as they think most beneficial to the Company. The Directors may likewise so dispose of any new shares which (by reason of the ratio which the new shares bear to shares held by persons entitled to an offer of new shares) cannot, in the opinion of the Directors, be conveniently offered under this regulation.

22. The new shares shall be subject to the same provisions with reference to transfer, transmission and otherwise as the shares in the original share capital.
23. The Company may, by special resolution:-
 - (a) Consolidate and divide its share capital into shares of larger amount than its existing shares;
 - (b) Sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the Company's Memorandum of Association, subject, nevertheless, to the provisions to clause (d) of sub section (1) of section 92;
 - (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.
24. 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.

GENERAL MEETINGS

25. The first General Meeting to be called Annual General Meeting, shall be held, within 18 months from the date of its incorporation in accordance with provisions of section 158 and thereafter once at least in every year and within a period of six months following the close of its financial year and not more than fifteen months after the holding of its last preceding Annual General Meeting as may be determined by the Directors.
26. All General Meetings of Company other than the Annual General Meeting mentioned in section 158 shall be called Extraordinary General Meetings.
27. The Directors may, whenever they think fit, call an Extraordinary General Meeting. The Extraordinary General Meetings shall also be called on such requisition, or in default, may be called by such requisitionists, as is provided by Section 159. If at any time there are not within Pakistan sufficient directors capable of acting to form a quorum, any director of the Company may call an extraordinary General Meeting in the same manner as nearly as possible as that in which meetings may be called by the Director.



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PROCEEDINGS AT GENERAL MEETINGS

28. Subject to the provisions of Sub-Section (3) of Section 158 of the Companies Ordinance, 1984, at least 21 days' notice (exclusive of the day on which the notice is given) specifying the place, the date and the hour of meeting and in case of special business, the general nature of that business, shall be given to such persons as are, under the Companies Ordinance, 1984 or the regulations of the Company, entitled to receive such notices from the Company, but the accidental omission to give such notice to or the non receipt of such notice by any member shall not invalidate the proceedings at any General Meeting.
29. All business shall be deemed special that is transacted at an Extraordinary General Meeting, and also all that is transacted at an Annual General Meeting with the exception to sanctioning a dividend, the consideration of the accounts, balance sheets and the reports of the Directors and Auditors, the election of Directors and the appointment and fixing of the remuneration of the Auditors.
30. No business shall be transacted at any General Meeting unless a quorum of members is present at the time when the meeting proceeds to business, save as herein otherwise provided, two members present in person or by proxy representing not less than 25% of the total voting power either on their own account or as proxy shall form a quorum.
31. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if called upon by the requisition of members shall be dissolved, in any other case it will stand adjourned to the same day in the next week at the same time and place, and if adjourned meeting, quorum is not present within half an hour, the members present personally or by proxy being not less than two shall be a quorum.
32. The Chairman of the Company shall preside as Chairman at every General Meeting of the Company.
33. If there is no such Chairman or if at any meeting he is not present within fifteen minutes at the time appointed for holding the meeting or is unwilling to act a Chairman, the members present shall choose one of their members to be the Chairman.
34. The Chairman may, with the consent of any meeting at which a quorum is present and shall if so directed by the meeting adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting other than the business left unfinished of 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 any adjournment of the business to be transacted at an adjourned meeting.
35. At any General Meeting, a resolution put to the vote of the 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 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 books of the proceedings of



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the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favour of, or against that resolution.

36. If a poll is demanded as aforesaid, it shall be taken in the manner as is provided under Section 167 and 168 of Ordinance.
37. 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 be entitled to have and exercise a second or casting vote.
38. A poll demanded on the election of a Chairman or on a question of adjournment shall be taken at once.

VOTES OF MEMBERS

39. On a show of hands every member present in person shall have one vote except for election of directors in which case the provisions of Section 178 shall apply. On a poll every member shall have voting rights as laid down in Section 160.
40. In case of joint-holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint-holders; and for this purpose seniority shall be determined by the order in which the names stand in the register of members. In case of minor, the guardian shall be entitled to vote for him.
41. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll vote by proxy.
42. On a poll votes may be given either personally or by proxy provided that no body corporate shall vote by proxy as long as a resolution of its directors in accordance with the provisions of Section 162 of the Company Ordinance, 1984 is in force.
43. The instrument appointing a proxy shall be in writing under the hand of the appointer or by his attorney duly authorized in writing, if the appointer is a corporation either under the common seal, or under the hand of an officer or attorney so authorized. No person shall act as a proxy unless he is a member of the Company.
44. The instrument appointing a proxy and the power of attorney or other authority (if any) under which it is signed, or a notary ally certified copy of that power or authority, shall be deposited at the registered office of the Company not less than forty-eight hours before the time for holding the meeting at which the person named in the instrument proposes to vote and in default the instrument of proxy shall not be treated as valid.
45. An instrument appointing proxy may be in the following form, or in any other form near thereto as may be approved by the Company.



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BAHRIA TOWN (PRIVATE) LIMITED

I _____ of _____ in the district of _____ being a member of "BAHRIA TOWN (PRIVATE) LIMITED", hereby appoint Mr. _____ of _____ as my Proxy to vote for me and on my behalf at the Annual General Meeting or Extraordinary General Meeting of the Company to be held on the _____ day of _____ 200 _____ and at any adjournment thereof.

Dated

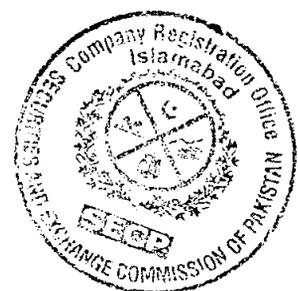
Signed

46. 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 transfer of the share in respect of which the proxy is given, provided that no intimation in writing of such death, insanity, revocation of transfer as aforesaid shall have been received by the Company at the Office before the commencement of the meeting or adjourned meeting at which the proxy is used.

DIRECTORS

47. The Directors of the Company shall, subject to Article 48 hereof, fix the number of elected Directors of the Company, not being less than four (2) and not later than 35 days before convening of the General Meeting at which Directors are to be elected and the number so fixed shall not be changed except with the prior approval of the General Meeting the Company.
48. The qualification of a Director shall be holding of shares in the Company of the nominal value of Rs.10 (Rupees Ten only) at least in his own name, relax able in the case of Directors representing interest holding shares of requisite value.
49. Unless otherwise determined by the Company in General Meeting in the manner provided under Article 47, the number of Directors shall not be less than four (4). The following are the first Directors of the Company who shall hold office till the First Annual General Meeting.
1. Commodore MOHAMMAD ILYAS SI(M), SBt (Retd)
 2. MR. MALIK RIAZ HUSSAIN
 3. MR. MAHBOOB SHAUKAT
 4. MRS. BINA RIAZ

- 50. The Directors of the Company shall, unless the number of persons who offer themselves to be elected is not more than the number of Directors fixed under Articles Clauses 47 and 49 be elected by the members of the Company in General Meeting in the following manner namely:-
 - (a) a member shall have such number of votes as is equal to the products of the number of voting shares or securities held by him and the number of Directors to be elected;
 - (b) a member may give all his votes to a single candidate or divide them between more than one of the candidates in such manner as he may choose; and
 - (c) the candidate who gets the highest number of votes shall be declared elected as Director and then the candidate who gets next highest number of votes shall be so declared and so on until the total number of Directors to be elected has been so elected.
- 51. All elected Directors shall retire from office at the General Meeting held after every three years. A Director retiring at a meeting shall retain office until the election of Directors in the meeting.
- 52. Subject to the provisions of Section 181 of the Companies Ordinance, the Company may by resolution in General Meeting remove a Director appointed under Article Clause 58 or elected in the manner provided for in Article Clause 45 hereof.
- 53. In addition to the Directors elected or deemed to have been elected by shareholders, the Company may have Directors nominated by the Company's creditors or other special interest holders by virtue of contractual arrangements.
- 54. Save as provided in Section 187, no person shall be appointed as a Director unless he is member of the Company.
- 55. The Directors of the Company elected under Article Clause 50 shall hold office for three years except the Directors appointed against casual vacancy who shall be subject to retirement in term of Article Clause 58 hereof.
- 56. A retiring Director shall be eligible for re-election.
- 57. Subject to the provisions of the Ordinance, the Company may from time to time in General Meeting increase or decreases the number of Directors.
- 58. Any casual vacancy occurring on the Board of Directors may be filled up 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.



59. A Director who is out of Pakistan or about to go out of Pakistan for a period of not less than three (3) months may, with the approval of the Directors, appoint any duly qualified person to be an Alternate Director during his absence abroad and such appointment shall have effect and such appointee while he holds office as an Alternate Director shall be entitled to notice of meetings of the Directors and to attend and vote there at accordingly, but he shall ipso facto vacate office as Director if and when the appointer returns to Pakistan, or vacate office as Director, or remove the appointee from office. Any appointment under this Article shall be effected by notice in writing under the hand of the Director making the same.

REMUNERATION

60. Each Director other than regularly paid Chief Executive and full time working Director shall receive out of the funds of the Company a sum, as may be fixed by the Directors, not exceeding Rs.500/- for each meeting attending by him plus other expenses incurred by him in connection with attending of Board's meeting.
61. Subject to the provisions of the Companies Ordinance, the remuneration of Directors including Chief Executive shall from time to time be determined by the Company's Board of Directors.
62. The Director may also sanction the payment of such additional sum, as they may think fit to any Director for the performance of extra services he may render to the Company subject to the approval of the shareholders at a General Meeting in accordance with the provisions of the Companies Ordinance, 1984.
63. The Director who resides out of station shall also be entitled to be paid such traveling and the Directors may fix other expenses as from time to time.

PROCEEDINGS OF DIRECTORS

64. Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meeting and proceedings as they think fit provided that they shall meet once every four (4) months.
65. The quorum necessary for the meeting of Board of Directors shall be not less than two Directors present in person.
66. The Directors may from time to time elect a Chairman, and determine the period for which he is to hold office and not exceeding three (3) years, but if no such Chairman is elected or if at any meeting the Chairman is not present within fifteen minutes after the time appointed for holding the meeting or is unwilling to act as Chairman, the Directors present shall choose any one of their members to be Chairman for that meeting.
67. No business shall be transacted at any meeting of the Board of Directors unless the quorum is present. If quorum is not present the meeting shall be dissolved and a new meeting convened. The meeting so convened shall have the authority to transact any



business whether or not the quorum is present. The notice served for the purpose of notice at least seven calendar days.

- 68. Questions arising at any Board meeting shall be decided by a majority of votes and, in case of an equality of votes, the Chairman shall have a second and casting vote. Decisions on the following matters shall require the approval of the Board of Directors.
 - (a) any transaction of the Company, or of its other projects, with a director or shareholder, or with companies or firms directly or indirectly controlled by a director or shareholder, or with an undertaking associated with the Company, a director or shareholder, his or her spouse(s), brother(s), sister(s) or the lineal ascendants or descendants of any of the aforesaid persons;
 - (b) borrowing in excess of Rs.1,000,000 (Rupees One Million) or foreign currency equivalent;
 - (c) appointment, removal and remuneration of the Chief Executive and Executive Director;
 - (d) purchase, lease, or disposition of fixed assets with a value in excess of Rs.500,000 (Rupees Five Hundred Thousands) or foreign currency equivalent;
 - (e) further issues of capital;
 - (f) approval of share transfers and dividends;
 - (g) appointment and removal of auditors;
 - (h) acquisition of interest in new ventures and commencement of new projects; and
 - (i) interruption and closing of operations.
- 69. Subject to the provisions of the Ordinance, a resolution in writing signed by all the Directors, without a meeting of Directors shall be effective for all purposes as a resolution passed at the meeting of Directors duly held, called and constituted.

DISQUALIFICATION OF DIRECTORS

- 70. No person shall become a Director of the Company, if he suffers from any of the disabilities or disqualifications mentioned in Section 187 and if, already a Director, shall cease to hold such office from the date he so becomes disqualified or disabled.
- 71. All acts done by any meeting of Directors or by a Committee of Directors or by any person acting as a Director shall, notwithstanding that it shall afterwards be discovered that there was some defect in the appointment of such Director, or person acting as foresaid, as 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.



POWERS AND DUTIES OF DIRECTORS

72. The business of the Company shall be managed by the Directors who may pay all expenses incurred in promoting and registering the Company and may exercise all such powers of the Company as are not by the Ordinance or any statutory modification thereof for the time being in force, or by these regulations required to be exercised by the Company in the General Meeting, subject nevertheless to the provisions of the Ordinance or to any of these regulations, and such regulations being not inconsistent with the aforesaid provisions, as may be prescribed by the Company in the General Meeting but no regulation made by the Company in General Meeting shall invalidate any prior act of the Directors which would have been valid if that regulation had not been made.
73. The Directors shall duly comply with the provisions of the Ordinance or any statutory modification thereof for the time being in force and in particular with the provisions in regard to the registration of the particulars of mortgage charges effecting the property of the Company or created by it, to the keeping of a register of the Directors, and to the sending to the Registrar of an annual list of members and a summary of particulars relating thereto and notice of any consolidation or increase or decrease of share capital or sub-division of shares and copies of special resolution and a copy of the register of Directors and notifications of any changes therein.
74. The Directors shall cause minutes to be made in books provided for the purpose :-
- (a) of all appointment of officers made by the Directors;
 - (b) of the names of the Directors present at each meeting of the Directors and of any committee of the Directors;
 - (c) of all resolutions and proceedings at all meetings of the Company and of the Directors and of any committee of Directors;
 - (d) and every Director present at any meeting of Directors or committee of Directors shall sign his name in a book kept for the purpose.

NOMINEE DIRECTOR

75. In addition to the elected Directors, the Financial Institutions shall be entitled, during the currency of their respective loan(s) to the Company, to appoint one person on the Board of Directors of the Company to be called Nominee Director and to recall and/or replace such a person from time to time. Such Nominee Director on the Board of Directors of the Company may not be holder of Share(s) in the Capital of the Company and other regulations and/or rules pertaining to the election, retirement, qualification and/or disqualification of the Director shall not apply to him.



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CHIEF EXECUTIVE

76. The Company shall appoint a person who is not ineligible to become a Director of the Company under Section 187, to be a Chief Executive. Mr. Malik Riaz Hussain is the first Chief Executive of the Company who shall hold office till the first Annual General Meeting.

MANAGEMENT

77. The whole business of the Company shall be carried on by the Chief Executive who shall have all powers, authorities and discretions as are given to or vested in by the Companies Ordinance, 1984 or may be entrusted by these presents.
78. The Chief Executive subject to Article 68, supervision and control of Board of Directors, without prejudice to or in any way restricting or limiting the general powers and authority here-to-fore conferred by these presents or the Companies Ordinance, 1984 shall have the power to do or concur in doing all or any of the following acts or things :-
- (a) To take on lease, purchase, erect or otherwise acquire for the Company any land, building, property, rights or privileges which the Company is authorized to acquire at such price and generally on such terms and conditions, as he thinks fit.
 - (b) To sell, let, exchange or otherwise dispose of absolutely or conditionally all or any part of the property, privileges and undertaking of the Company upon such terms and conditions and for such consideration as he may think fit.
 - (c) To buy, sell, import, export or procure the supply of all plants and machinery, material, stocks in trade and other movable and immovable property and things required for the purpose of the Company.
 - (d) To engage, fix and pay the remuneration of and dismiss or discharge any manager, engineer, agent, secretary, clerk, accountant, workman, expert, technical adviser, or other persons employed or to be employed in or in connection with the business of the Company.
 - (e) To appoint any person to be attorney of the Company for such purposes and with such powers, authority and discretion and for such period and subject to such conditions as he may from time to time think fit and to revoke such powers at his pleasure.
 - (f) To enter into, carry, rescind or vary all financial arrangements or agreement with any banks, persons or corporations for, or in connection with the Company's business and affairs and in connection with such arrangement to deposit, pledge, hypothecate any property of the Company or the documents representing or relating to the same.



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- (g) To take and give receipts and other discharges for money payable to the Company and for the claims and demands of the Company and to draw, accept and endorse, negotiable promissory notes, bills of exchange or other negotiable and transferable instruments.
- (h) To deal with the money of the Company not immediately required for the purpose thereof upon such terms and conditions as may be thought expedient.
- (i) To determine who shall be entitled to sign on Company's behalf, bills, cheques, notes, receipts, acceptances, endorsements, releases, contracts and documents.
- (j) To enter into such negotiations and contracts and rescind or vary as such contracts and execute and do all such acts, deeds and things in the name of the Company as he may consider expedient.
- (k) To open accounts with any bank or bankers or with any company, firm, individual and to pay into and withdraw money from such accounts from time to time.
- (l) To insure the movable and immovable property of the Company.
- (m) To pay to any person employed by the Company a commission on the profits of the Company.
- (n) To institute, combat, prosecute, defend, compound, settle, compromise, adjust, refer to arbitration, withdraw, abandon any legal proceedings by or against the Company or its officers or otherwise concerning the affairs of the Company.
- (o) To make advances for the business of the Company to such persons upon such security or without security as the may think fit, and generally to direct, manage, control the receipts, custody, employment, investment and expenditure of the moneys and funds of the Company and the keeping of accounts thereof.
- (p) To appear for and on behalf of the Company in any Court of Justice, Criminal, Civil or Revenue, before any Executive, Judicial Municipal, Provincial, Revenue, Police, Postal, Excise, Transport, Income Tax, or other offices in any action or proceedings or matters in which the Company may be interested and to promote, safeguard or defend its interests.
- (q) To sign and verify and plaint, written statement, petition, compromise, mukhtarnama, vakalatnama, authorizing legal practitioner to act on behalf of the Company in all Courts, Civil, Criminal or Revenue.



BORROWING POWERS

79. Subject to the provisions of the Ordinance, the Chief Executive/Board of Directors shall have the powers to raise or borrow any sums of money for and on behalf of the Company from individuals firms, companies, commercial banks, or financing institutions, or the Directors may themselves advance money to the Company upon such terms and conditions as they may approve from time to time.
80. The Board of Director may from time to time secure the payment of such money in such manner and upon such terms and conditions in all respects as they may think fit and in particular by the issue of debentures or bonds of the Company or by mortgage or charge of all or any part of the property or assets of the Company.

ACCOUNTS

81. The Directors shall cause to be kept proper books of account as required under Section 230 of the Companies Ordinance with respect to:-
- (a) all sums of money received and expended by the Company and the matter in respect of which the receipts and expenditure take place;
 - (b) all sales and purchases of goods and services by the Company;
 - (c) all assets of the Company;
 - (d) all liabilities of the Company;
 - (e) all other matters required by the Authority from time to time.
82. The books of account shall be kept at the Registered Office or at such other place as the Directors shall think fit and shall be open to inspection during business hours.

AUDIT

83. Once at least in every year the accounts of the Company shall be audited and corrections of the Balance Sheet shall be ascertained by one or more Auditors. The Auditors shall be appointed and their duties regulated in accordance with the provisions of Sections 252 to 255 of the Companies Ordinance, 1984.



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THE SEAL

84. The Company shall provide for the safe custody of the Seal and the Seal shall not be affixed to any instrument except by the authority of a resolution of the Board of Directors or by a Committee of Directors authorized in that behalf by the Directors and in the presence of at least two Directors and of the Secretary or such other person as the Directors may appoint for the purpose; and those two Directors and Secretary or other person as aforesaid shall sign every instrument to which the Seal of the Company is so affixed in their presence.

INDEMNITY

85. Every Officer or agent for the time being of the Company may be indemnified out of the assets of the Company against any proceedings, whether civil or criminal, arising out of his dealings, in relation to the affairs of the Company, except those brought by the Company against him, in which judgment is given in his favour or in which he is acquitted, or in connection with any application under Section 488 of the Ordinance, in which relief is granted to him by the Court.

SECRECY

86. No member shall be entitled to visit and inspect the works of the Company without the permission of the Chief Executive/Board of Directors or to require discovery of any information regarding any detail of the Company's business or any matter which is or may be in nature of trade secret, or secret process which may relate to the conduct of the Company's business and which in the opinion of chief Executive/Board of Directors, will be not in the interest of the members of the Company to communicate to the public.

ARBITRATION

87. Whenever any difference arises between the Company on the one hand and the members, their executors, administrators or assignee on the other hand, touching the true intent or construction or the incident or consequence of these presents or of the statutes or touching any thing thereafter done, executed, omitted or suffered in pursuance of these presents or otherwise relating to these presents or to any statute affecting the Company, every such difference shall be referred for the decision of the arbitrator or umpire under the Arbitration Act, 1940 as amended from time to time.
88. The cost incidental to any such reference and award shall be at discretion of the arbitrators or umpire respectively who may determine the amount thereof and direct the same to be shared between the attorney and client or otherwise and may award by whom and in what manner the same shall be borne and paid.



WINDING UP

89. 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 the Ordinance divide amongst the members in specie or kind the whole or any part of the assets of the Company whether they shall consist of property of same kind or not.
- (i) For the purpose aforesaid, the liquidator may set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members of different classes of members.
 - (ii) The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trust for the benefit of the contributories, as the liquidator, with the like sanction thinks fit, but so that no member shall be compelled to accept any shares or other securities whereon there is any liability.



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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 as set opposite to our respective names.

Name & Surname (Present & Former) in Full (in Block Letters)	Father's/Husband's Name in Full	Nationality with any former Nationality	Occupation	Residential Address (in Full)	Number of shares taken by each subscriber	Signature
1. Commander NISAR AHMED (Retd) Nominee of BAHRIA FOUNDATION	Commander Ghulam Ahmed (Late) N/A	Pakistani N/A	Business Executive Foundation	D-6, Street 4, F-8, Islamabad 6 th Floor, Bahria Complex, M.T. Khan Road, Karachi	99	
2. Commodore MOHAMMAD ILYAS SI(M) S.B.(Retd)	Mr. Atta Mohammad (Late)	Pakistani	Business Executive	314, Street No.16, G-10/2, Islamabad	1	
3. MR. MALIK RIAZ HUSSAIN	Mr. Malik Ashiq Hussain	Pakistani	Business Executive	8, Gulnar Colony Cobb Line Peshawar Road, Rawalpindi Cantt.	50	
4. MR. MAHBOOB SHAUKAT	Ch. Abdul Qadir	Pakistani	Business Executive	107-A, Street No.41, F-10/4, Islamabad	50	
5. MRS. BINA RIAZ	Mr. Malik Riaz Hussain	Pakistani	House Wife	8, Gulnar Colony Cobb Line Peshawar Road, Rawalpindi Cantt.	800	
				Total Number of Shares Taken	1,000 (One Thousand)	

Dated this 6th day of December 1995.

Witness to the above Signatures:
Full Name: Rana M. Usman Khan
Father's Full Name: Atta Mohammad Khan

Nationality: Pakistani
Occupation: Chartered Accountant
Full Address: 127-Habitat House
Cricket House, Gulberg Road
Lahore

Signature: _____

CERTIFIED TO BE TRUE COPY

Asst. Joint Registrar
Asst. Joint Registrar
Company Registration Office Islamabad





FORM A

THE COMPANIES ACT, 2017
 THE COMPANIES (GENERAL PROVISIONS AND FORMS) REGULATIONS, 2018
 [Section 130(1) and Regulation 4]

ANNUAL RETURN OF COMPANY HAVING SHARE CAPITAL

PUBLIC

PART-I

(Please complete in typescript or in bold block capitals)

1.1 CURN (Registration Number) **0037589**

1.2 Name of the Company **BAHRIA TOWN (PRIVATE) LIMITED**

1.3 Fee Payment Details

1.3.1 Challan No	M-2021-373074	1.3.2 Amount	Rs.1320/-
1.4 Form A made upto	27	11	2021
1.5 Date of AGM	27	11	2021

PART-II

Section-A

2.1 Registered office address: **Customer Support Center, Bahria Complex, Phase 8, Bahria Town, Rawalpindi**

2.2 Email Address: **hamidriaz_72@yahoo.com**

2.3 Office Tel. No.: **051-5705822**

2.4 Office Fax No.: **051-5705821**

2.4 Principal line of Business: **Land developers**

2.6 Mobile No. of Authorized Officer (Chief Executive/ Director/ Company Secretary/ Chief Financial Officer) **Hamid Riaz - 0300-5289740**

2.7 Authorized Share Capital

Classes and kinds of Shares	No. of Shares	Amount	Face Value
Ordinary Shares	120,000,000	1,200,000,000	10

2.8 Paid up Share Capital

Classes and kinds of Shares	No. of Shares	Amount	Issue Price
Ordinary Shares	22,000,000	220,000,000	10

2.9 Particulars of the holding/subsidiary company, if any

Name of company	Holding/Subsidiary	% of shares held
Nil	Nil	Nil

2.10 Chief Executive Officer

Name	Malik Riaz Hussain	NIC	6 1 1 0 1 7 0 2 6 1 3 4 9
Address	House No. 03, Street No. 89, Sector G-6/3, Islamabad		

2.11 Chief Financial Officer

Name	Aamir Rashid Awan	NIC	6 1 1 0 1 6 3 3 0 1 8 0 5
Address	House No. 1665, Street No. 76, Sector F, DHA Phase I, Rawalpindi.		

2.12 Secretary

Name	Hamid Riaz	NIC	3 7 4 0 5 8 3 7 3 4 7 7 3
Address	House No. 247, Street No. 27, Ali Block, Phase B, Bahria Town, Rawalpindi		

2.13 Legal Adviser

Name	Qaiser Qadeer Qureshi	NIC	3 7 4 0 5 0 4 4 4 1 7 3 7
Address	House No. 48-P-2, Lalazar Colony, Rawalpindi		

2.14 Particulars of Auditor(s)

Name:	Aamir Salman Rizwan, Chartered Accountants		
Address:	414, F Block, M.A., Johar Town Lahore.		



2.15 Particulars of Share Registrar (If applicable)

Name:	-
Address:	-
e-mail:	-

Section-B

2.16 List of Directors as on the date of annual return is made

S#	Name	Residential Address	Nationality	NIC No. (Passport No. if foreigner)	Date of Appointment or election
1.	Malik Riaz Hussain	House No. 03, Street No. 89, Sector G-6/3, Islamabad	Pakistani	61101-7026134-9	28-02-2019
2.	Hinna Malik	House No. 2, Street No. 1, Phase II, Bahria Town, Rawalpindi	Pakistani	37405-3212758-8	28-02-2019

Use separate sheet, if necessary

2.17 List of members & debenture holders on the date upto which this Form A is made

S#	Folio #	Name	Address	Nationality	No. of shares held/Debenture	NIC No. (Passport No. if foreigner)
Members						
1.		Malik Riaz Hussain	House No. 03, Street No. 89, Sector G-6/3, Islamabad	Pakistani	21,999,900	61101-7026134-9
2.		Hinna Malik	House No. 2, Street No. 1, Phase II, Bahria Town, Rawalpindi	Pakistani	100	37405-3212758-8
Debenture holders						
		Nil	Nil	Nil	Nil	Nil

Use separate sheet, if necessary

2.18 Transfer of shares (debentures) since last Form A was made

S#	Name of Transferor	Name of Transferee	Number of shares transferred	Date of registration of transfer
Members				
Debenture holders				

Use separate sheet, if necessary

PART-III

3.1 Declaration:

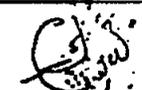
I do hereby solemnly, and sincerely declare that the information provided in the form is:

- (i) true and correct to the best of my knowledge, in consonance with the record as maintained by the Company and nothing has been concealed; and
- (ii) hereby reported after complying with and fulfilling all requirements under the relevant provisions of law, rules, regulations, directives, circulars and notifications whichever is applicable.

3.2 Name of Authorized Officer with designation/ Authorized Intermediary

Hamid Riaz	Company Secretary
------------	-------------------

3.3 Signatures



3.4 Registration No of Authorized Intermediary, if applicable

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3.5 Date

Day: 27 Month: 12 Year: 2021



CERTIFIED TO BE TRUE COPY
 of the original, however this office does not take any responsibility about the correctness of the contents of document.

Additional Joint Registrar
 Company Registrar, Office Islamabad

PUBLIC

FORM 29

THE COMPANIES ACT, 2017
THE COMPANIES (GENERAL PROVISIONS AND FORMS) REGULATIONS, 2018
 [Section 197 and Regulations 4 & 20]
PARTICULARS OF DIRECTORS AND OFFICERS, INCLUDING THE CHIEF EXECUTIVE, SECRETARY, CHIEF FINANCIAL OFFICER, AUDITORS AND LEGAL ADVISER OR OF ANY CHANGE THEREIN

PART-I

(Please complete in typescript or in bold black capitals)

1. CUIIN (Registration Number) **0037589**

1.1 Name of the Company **BAHRIA TOWN (PRIVATE) LIMITED**

1.2 Fee Payment Details
 1.2.1 Challan No. **M-3021-368900** 1.2.2 Amount **Rs. 1320/-**



PART-II

2. Particulars:

Present name in full	NIC No or passport No. in case of Foreign National	Father's/ Husband's name	Usual residential Address	Designation	Nationality**	Business occupation*** (if any)	Date of present appointment or change	Mode of appointment/ change / any other Remarks****	Nature of directorship (nominee/ independent / additional/etc)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
2.1) New appointment/election:									
Malik Riaz Hussain	61101-7026134-9	Malik Ashiq Hussain	House No. 01, Street No. 89, Sector Q-6/3, Islamabad	Chief Executive	Pakistani	Business	28-02-2019	-	-
Malik Riaz Hussain	61101-7026134-9	Malik Ashiq Hussain	House No. 01, Street No. 89, Sector Q-6/3, Islamabad	Director	Pakistani	Business	28-02-2019	-	-
Hina Malik	37485-3212758-8	D/o Misbah ul Hussain	House No. 2, Street No. 1, Phase II, Bahria Town, Rawalpindi	Director	Pakistani	Private Service	28-02-2019	-	-
Hamid Riaz	37485-8373477-3	Ghalib Jang	H.No. 247, Street No. 27, Ah Dioc, Phase 8, Bahria Town, Rawalpindi	Company Secretary	Pakistani	-	13-09-2021	-	-
Amir Rasheed Awan	61101-6520180-5	Abdul Rasheed Awan	H. No. 1665, Street No. 76, Sector F, DHA Phase I, Rawalpindi	Chief Financial Officer	Pakistani	-	27-11-2021	Appointed	-
Qaiser Qadeer Qureshi	37485-0444173-7	Aaswar Iqbal Qureshi	H.No. 48-F-2, Lalazar Colony, Rawalpindi	Legal adviser	Pakistani	B.A.L.L.B	31-10-2006	-	-



Aamir Salman Rizwan, Chartered Accountant			414, Block F, M.A. Johar Town Lahore	Auditor			27-11-2021	By Resolution	
--	--	--	---	---------	--	--	------------	---------------	--

2.2) Cessing of office/Retirement/Resignation:

--	--	--	--	--	--	--	--	--	--

2.3) Any other change in particulars relating to columns (a) to (c) above:

--	--	--	--	--	--	--	--	--	--

- * In the case of a firm, the full name, address and above mentioned particulars of each partner, and the date on which each became a partner.
- ** In case the nationality is not the nationality of origin, provide the nationality of origin as well.
- *** Also provide particulars of other directorships or offices held, if any.
- **** In case of resignation of a director, the resignation letter and in case of removal of a director, member's resolution be attached.

PART-III

3 Declarations

3.1 I do hereby solemnly, and sincerely declare that the information provided in the form is:
 (i) true and correct to the best of my knowledge, in consonance with the records as maintained by the Company and nothing has been concealed; and
 (ii) hereby reported after complying with and fulfilling all requirements under the relevant provisions of law, rules, regulations, directives, circulars and notifications whichever is applicable.

3.2 Name of Authorized Officer with designation/ Authorized Intermediary

Ihsanul Haq	Company Secretary
-------------	-------------------

3.3 Signatures



3.4 Registration No of Authorized Intermediary, if applicable

--

3.5 Date

Day	Month	Year
2 7	1 1	2 1



11129

CERTIFIED TO BE TRUE COPY
 Of the original, however in case of any discrepancy, the undersigned shall not take any responsibility about the correctness of the contents of documents.

(Signature)
 Additional Registrar
 Company Registration Office Islamabad

TECHNICAL PROPOSAL

Bahria town (Private) Ltd (BTPL), a largest private sector developer in Asia through its fully integrated Enterprise resource planning and management system have launched mega housing projects in Lahore, Rawalpindi/Islamabad, Karachi and many other areas.

Keeping in line with the international standards, BTPL has planned, designed and installed all power utilities/supplies underground.

Like all Bahria town projects, in Rawalpindi/Islamabad, all electrical/distribution systems have been designed and installed under bulk supply arrangements in accordance with requirements of distribution licence

A. METHODOLOGY

Following key features have been strictly adhered by PEC/PEPCO approved consultants while planning/design of distribution networks in all the areas of projects in Rawalpindi/Islamabad (Phases I to VIII, Green City, Serene City and Bahria Enclave).

1) Loading Criteria:

<u>PLOT SIZE</u>	<u>Load</u>
<u>Residential Areas</u>	
75' x 120' (2-Kanal)	17.74 KW
50' x 90' (1-Kanal)	10.61 KW
30' x 75' (10-Marla)	06.6 KW
30' x 60' (8-Marla)	06.0 KW
25' x 45' (5- Marla)	05.0 KW
<u>Commercial Areas</u>	10 Watt/ SFT

BTPL is following loading criteria as per NEPRA CSM 2021.

2) HT / LT Cable Sizes:

HT Cables (15 KV Class)

- i) 500mm² Single Core AL/XLPE for main Feeders. Capacity 570-Amps.

- ii) 120mm² 3- Core AL/XLPE
For (Ring- Loops). Capacity 215-Amps

LT Cables (01 KV Class)

- i) 120mm² 4-Core AL/PVC/PVC.
(Phases 01 to 06) In residential areas. Capacity 215-Amps.
- ii) 185mm² 4-Core AL/PVC/PVC.
(Phases 07 & 08) In residential areas. Capacity 275-Amps.
- iii) 300mm² 4- Core AL/PVC/PVC
In commercial areas. Capacity 365-Amps

All HT/LT cables under use in BTPL are NTDC specifications compliant and purchased from NTDC approved manufacturers.

BTPL lays cables in designated corridors with direct burial methodology generally practiced in DISCOS.

However ducts are provided at road crossings. Further to, ducts are also provided where multi-layer 11KV feeder cables are proposed / laid.

3) Distribution Transformers Capacities:

- i) **Residential Areas** 100 KVA, 200 KVA, 400 KVA and 630 KVA.
Pad mounted distribution Transformers
- ii) **Commercial Areas.** 100 KVA, 200 KVA, 400 KVA, 630 KVA and
1250 KVA.
Pad mounted distribution Transformers.

BTPL is purchasing distribution transformers from NTDC approved manufacturers. All capacities ie 100 KVA, 200 KVA, 400 KVA and 630 KVA are NTDC specifications compliant. Only 1250 KVA capacity used in commercial areas in accordance with load centers of higher requirements. 1250 KVA distribution transformers are IEC specifications compliant. K.Electric has however specified capacities up to 1500 KVA.

4) Length of HT Feeders:

In BTPL distribution network, so far around 90 numbers 11 KV feeders have been designed and being laid as per requirements at site.

Maximum length of 11 KV feeders is 08 KM approximately.

Average length of 11 KV feeders comes out as 04 KM.

5) Length of LT Circuits:

Average of length of LT circuits through distribution transformers is designed and laid within 800 ft.

In very few cases due to locations of plot / load, maximum LT circuit length is 1300 ft. Such cases are not more than 05% of the LT networks. Even in all such cases voltage drop and power loss permissible limits has been strictly adhered.

6) Power Loss / Voltage Drop Limits:

HT Feeders:

All HT feeders are designed with power loss under 03% and voltage drop under 05% (within permissible limits).

LT Circuits:

During the design of LT circuits, Power loss is always kept under 03% with voltage drop within 05% (within permissible limits).

Energy Meters:

All type of energy meters provided meet NTDC specifications and installed after due calibrations. Further to, periodical surveillance by commercial staff is carried out. Meters considered for replacement are changed without loss of time as per policy of management.

7) Grid Stations:

220/132 KV Grid Station Phase-VIII:

Initially this grid was installed for areas (Phase 07 to 08) to feed other 132 KV grid stations in the area. It was with 1 X 63 MVA auto transformer. Another 1 x 63 MVA auto transformer at the cost of BTPL is installed and ready for energization any time shortly.

132 KV Grid Stations Phase-IV RWP

This 132 KV Grid is installed with the approval and under supervision of IESCO and is with 1 x 31.5/40 MVA and 1 X 20/26 MVA transformation capacity and can suffice next 10 years load requirements of the areas. Further, there is enough room for augmentations / additions.

132 KV Grid Station Phase-VIII RWP/ISD

This 132 KV Grids is installed with the approval and under supervision of IESCO and is with 1 x 31.5/40 MVA and 1 X 20/26 MVA transformation capacity and can suffice next 08 years load requirements of the areas. Further, there is still room for augmentations / additions.

132 KV Business District Grid Station (Under Construction)

132 KV new grid station in Phase-VIII has been approved by IESCO, whose design is submitted and land allocated. It shall have initially 02 X 40 MVA power transformers to meet load requirements of the area for another 15 years. BTPL after approval from IESCO shall award the work to EPC Contractor subsequent to detailed design approvals from IESCO with its completion schedule by December-2023.

Distribution Networks:

All HT feeder cables with ring loops and LT circuits are precisely designed with rich loading criteria and material / equipment laid under the supervision of qualified / experienced engineers in designated corridors provided by the town planners before execution.

All equipment and material is procured from NTDC / DISCO approved manufacturers in accordance with NTDC approved specifications.

Material Inventory:

Sufficient quantity of stocks/spares for equipment are kept available procured through central purchase section of Bahria from NTDC/ DISCO'S from approved vendors.

B. INSTALLATION AND OPERATION.

Grid Stations:

1) For areas Phase-VII, VIII and others

Baharia Town RWP has installed at its own cost 220/132KV main grid station considering ultimate load assessed demand (Approximately 600MW). This grid station has a 63 MVA Auto-transformer capacity feeding one 132/11.5KV Phase-VIII grid station. Another grid station 132/11.5KV in Phase-VIII is under construction.

To meet future load requirements of the area 1x63MVA Auto-transformer at 220/132KV grid is installed, testing completed and is likely to be energized in near future.

BTPL has earmarked 05 locations for 132/11.5KV grid stations of the area to be constructed in future as per load growth.

2) For areas Phase I to VI

For this project one 132/11.5KV grid station is installed and working with Power transformers with in their loadings. This grid station is capable to suffice all the future needs of the area which has ultimate assessed load as 80MW.

3) Baharia Enclave

This project has ultimate assessed load as 120MW. To meet the load, BTPL at its own cost completed 132/11.5KV Grid with 2x20/26MVA Power transformers. This grid is currently energized on no-load as the habitation is in initial steps. This grid station is likely to suffice all future needs of Baharia Enclave for next 25 years.

Note: All the grids have been built at BTPL costs through M/s SIEMENS EPC construction and also being operated by BTPL own staff at BTPL own cost.

DISTRIBUTION NETWORKS

1) Phase I to VI.

03 layout drawings as regards, HT Main Feeders, HT Distribution network and LT Distribution network are attached as annex A, B & C. 80% of the designed area is electrified and being fed through 132/11 KV Phase IV Grid Station.

2) Phase VII, VIII and other areas.

03 layout drawings as regards, HT Main Feeders, HT Distribution network and LT Distribution network are attached as annex D, E & F. 35% of the designed area is electrified and fed through 132/11 KV Phase VIII Grid Station which is fed from 220/132 KV Phase VIII Grid station Bahria Town RWP.

Another 132/11 KV Grid station in Phase VIII is in construction phase with 2x 31.5/40MVA Power Transformers proposed which shall be fed from Bahria Town 220/132 KV Phase VIII Grid Station.

3) Bahria Enclave.

03 layout drawings as regards, HT Main Feeders, HT Distribution network and LT Distribution network are attached as annex X,Y,Z. 10% of the designed area is electrified. The initial load requirements of area are met through temporary connections from IESCO.

The distribution networks are state of art, most reliable and fully capable to meet all future BTPL requirements.

APPLICATION FOR DISTRIBUTION LICENCE

FINANCIAL PROPOSAL

Background

Bahria Town (Private) Ltd., since its incorporation had a vision to offer better living Conditions in developing Bahria Townships with standards matching abroad making BTPL projects an example for offers to follow.

This policy made BTPL the market leaders and are proudly leading the business. Management from the beginning also adopted a strategy to ensure financial soundness in generating and maintaining a healthy cash flow.

With policy to ensure unprecedented infrastructural system developments, BTPL preferred to lay state of art electrical distribution system on bulk supply arrangements under a distribution licence from NEPRA.

As such BTPL RWP, completely fulfilling the eligibility criteria obtained a distribution licence from the regulatory body NEPRA on November 2, 2001.

The distribution network during the period from November 2001 to December 2018 was most satisfactorily maintained, operated with all due extensions/augmentations carried out in accordance with load growths to the satisfaction of BTPL residents.

BTPL due to abrupt increase in bulk power purchase price during Jan 2019 without corresponding/proportionate increase in tariffs for general customers category created big monthly financial short fall to BTPL in collection of revenue from their residents at same old tariff than payments to IESCO at an increased bulk tariff.

This financial gap created a hard impact on financial balance of BTPL which was brought to notice of NEPRA vide BTPL letter No. 786/BTS/NEPRA Trf 19/3 dated 23 Jan 2019.

Upon NEPRA's directions, a tariff petition was submitted on 15th June 2019. BTPL during the period remained compliant to NEPRA'S instructions.

Since it was becoming difficult to pay monthly IESCO'S billings with heavy financial losses, BTPL kept on requesting NEPRA for interim relief in bulk tariff. During hearing held on 25 August 2020, BTPL clearly explained that BTPL is at loss of Rs 7.00 per unit in the business, due to increase in bulk supply tariff while on the other hand IESCO is enjoying huge marginal profits every month with 0% distribution loss on sale of units alongwith 0% maintenance and operation charges for the entire distribution networks.

Islamabad high court in the mean while directed NEPRA on 23 July 2020, to decide BTPL tariff petition expeditiously, but BTPL could not find any relief.

Having no remedy, and having no other viable options BTPL management decided to surrender the distribution licence and requested NEPRA to direct IESCO to take over the entire distribution networks (all Housing Projects) in the interest of the residents of BTPL housing schemes.

NEPRA vide their letter No. NEPRA/AD6 (Licencing)/LAD-29/26717-19 dated 20 October 2020 cancelled BTPL distribution and directed IESCO to take over the BTPL distribution networks and enter in to O&M arrangements with BTPL.

BTPL submitted IESCO in accordance with NEPRA instructions draft O&M agreement dated 01 Feb 2021 but no response was given by IESCO.

IESCO instead adopted a stubborn attitude not to act in accordance with NEPRA's instructions, but denied all BTPL efforts with one pretext or other defying NEPRA instructions issued from time to time.

As already explained BTPL since Jan 2019 is suffering a loss of Rs 7.00 per unit every month on sale of power, out of which Rs 04 per unit is passed on to residents W.e.f Dec 2020 to avoid default to IESCO monthly payments, that also results in complaints from BTPL residents.

Fresh application for distribution licence

BTPL in a bid to come out of the desperate situation, in the light of NEPRA recent procedure regulations, 2021 notified on 17th June 2021, has decided to submit fresh application for distribution licence, corridering/exercising options for obtaining supply arrangements elsewhere too.

Methodology

BTPL during the sale of plots in their housing projects has a built in component of infrastructural development based upon costs estimations while carrying out the master planning and design of the project schemes.

The development funds are available with the management for different infrastructures. Like wise based upon design and estimated costs, of distribution networks including grid stations, entire purchase through approved vendors is carried out in bulk to ensure economy.

Grid stations are installed by EPC contractors through open biddings. While all other distribution networks are laid down by Bahria's own qualified and experienced staff to obtain quality as well as economy.

The distribution licence provides autonomy to BTPL under PEPCO/NEPRA provisions to complete the infrastructure in time and as per needs of the area providing quality as well as economy.

Capital expenses incurred.

BTPL has incurred capital expenses given below on their housing schemes

(i) Phases I to VI, (ii) Phase VII to VIII, Green City, etc. and (iii) Bahria Enclave as following:-

<u>(a) Grid Stations</u>	<u>Expenses incurred till 2020 in (Million)</u>	<u>Projected expenses up to Dec. 2022</u>	<u>Total</u>
220/132 kv Phase-VIII, RWP. 132/11kv Phase-VIII, RWP. 132/11 kv Phase-VI 132/11 kv Bahria Enclave	1564 M	240 M	1804 M
<u>(b) Distribution Networks</u>	<u>Expenses incurred up to 2020 in (Million)</u>	<u>Projected expenses till 2022</u>	<u>Total</u>
BTPL Scheme Phase 1 to IV Phase VII, VIII Green City etc. Bahria Enclave	9015 M	243 M	9258 M

Infrastructure for distribution networks and grid stations installed is complete covering almost as 75% of the areas of all three Schemes and can suffice the load requirements easily for next 15 years load growths.

Operating and Maintenance expenses

BTPL is confidently operating and maintaining the 220/132 KV Grid Stations and distribution networks of all schemes with qualified and experienced staff fully

equipped with modern tools and plants and a proven mechanism in past providing quality services to their residents.

With the notifications issued recently by NEPRA during May 2022 to November 2022, we understand that NEPRA is adopting a policy to liberalise the business introducing Market Operators, System Operators ensuring nondiscriminatory open access to open market players in accordance with NEPRA act, other applicable codes. BTPL therefore supposedly shall have many options to select suitable to their all the schemes in Rawalpindi and Islamabad to look after their residents with nondiscriminatory tariff to their residents.

System Studies.



ISLAMABAD ELECTRIC SUPPLY COMPANY LIMITED

Tele Pbx: 051-9252937-39 (343)
Direct: 051-9252931
Fax: 051-9252931

Planning & Engineering
Directorate
Street 40, G-7/4, Islamabad

No. 32924-26 /CE(P&E)/T&G/HT-1310

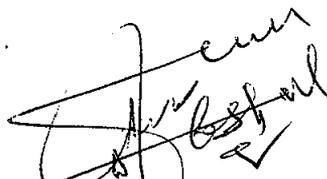
Dated: 01/01/2016

Engineer Muhammad Saleem,
GM Technical & Coordination,
Bahria Town, Islamabad.

**SUBJECT: LOAD FLOW STUDY IN RESPECT OF 132KV BAHRIA ENCLAVE
GRID STATION**

Enclosed find the subject study carried out by IESCO, for your information and further necessary action please.

DA: as above


**Deputy Manager (T&G)
P&E IESCO, Islamabad**

Copy to:

1. Chief Engineer (P&E) IESCO Islamabad for information please.
2. Deputy Manager (TSW) IESCO Islamabad w.r.t his letter No. 881-82 dated 28-12-2015
 - Master File.



Load Flow Study
For
132KV BHARIA ENCLAVE GRID STATION
(Initial Load 10 MW)

Technical Services Wing
IESCO Head Quarter Street #40
Sector G-7/4, Islamabad

December, 2015

- 1 Introduction
- 2 Methodology Of Analysis
- 3 Assumptions For Load Flow Studies
- 4 Study Criteria
- 5 Load Flow Studies
- 6 Short Circuit Study
- 7 Conclusions & Recommendations
- 8 Exhibits
- 9 Abbreviation

Annex

LOAD FLOW STUDY FOR CONSTRUCTION OF 132KV BHARIA ENCLAVE GRID STATION.

1. INTRODUCTION

A Memorandum of Understanding (MoU) was signed on 19th September, 2011 between IESCO & Bharia Town (BTL) for supply of power for its new project namely Bharia Enclave. The initial Load of Bharia Enclave is 10 MW and ultimate load is 60 MW. In order to cater the initial load demand of 10 MW Chief Engineer (P&E) has desired to carry out load flow study to find out technical feasibility, suitable interconnection and system constraints for supply of power for newly proposed Grid Station Bharia Enclave which is situated in Islamabad Capital Territory near Bara Kahu. It is worth mentioning that the interconnection for another BTL Project Bharia Golf City is not yet decided due to which the construction of 132 kV Golf City GSS is still pending. Hence, interconnection of 132 kV Golf City shall also be considered from Bharia Enclave during study. ??

1.1 Existing IESCO GSO Network Information

Following 220/132 KV Network system prevails in the vicinity of proposed Grid Station

1. 220KV GIS University Grid Station: since there is no spare 132KV Line Bay therefore a direct line cannot be proposed for subject Grid Station.
2. Under construction 132KV Bara Kahu Grid Station — *which one/status.*
3. Existing D/C University to Nilore Transmission Line.
4. Existing SDT University to Murree Transmission Line.

2. METHODOLOGY OF ANALYSIS

The methodology of system studies/analysis, is given as under;

- i. In the report, IESCO's network expansion plan including already planned/under-execution projects and integrated generation, transmission and distribution plan of power sector.
- ii. The complete system model of the National Grid has been simulated, i.e., system network of not only the IESCO but also of NTDC and the neighboring DISCOs have been simulated for the purpose of analysis.

- iii. The assumptions on which the system studies are based have been mentioned with necessary details.
- iv. Load flow study has been carried out and its results have been presented in the report.
- v. Load flow analysis has been carried out for the steady state normal system operating condition in order to;
 - ❖ Assess adequacy of the network to feed the proposed Grid Station.
 - ❖ Determine any additional transmission reinforcement and/or reactive compensation requirement for the scope of work of proposed Grid Station
 - ❖ Justification of proposed projects.
- vi. Conclusions and recommendations on the basis of technical analyses have been presented at the end of the report.

ASSUMPTIONS FOR LOAD FLOW STUDIES

The load flow studies are based on the following assumptions;

- i. The diversified values of the peak projected loads on substations, existing and new, have been modeled as per PMS load forecast (2013-14). The loads have been adjusted as per the ratio between IESCO Peak including load shedding and the algebraic sum of recorded individual peaks of the substations of IESCO.
- ii. All the existing as well as the proposed power plants, both in public and private sectors, has been assumed in operation in all the study scenarios as per their expected commissioning schedules.
- iii. Transmission expansion plans of NTDC
- iv. IESCO's planned/on-going transmission expansion/re-enforcement projects, including substations (extension, augmentation, conversion, new) and transmission lines proposed in IGTDP have also been assumed in the studies.

4. STUDY CRITERIA

The load flow studies have been carried out keeping in view the following criteria in the IESCO's network:

- ❖ Voltage Limits: $\pm 5\%$ under normal operating conditions.
- ❖ Loading of transmission lines and transformers have been kept within 90% of their capacities under normal operating conditions.

It is important to mention here that the load flow analysis for the future study scenarios has been carried out for normal operating conditions only. N-1 contingency analysis of the vicinity has been carried out, in order to provide the reliable and quality power supply.

5. LOAD FLOW STUDIES

Load flow studies have been carried out with already planned/on-going projects; including integrated generation, transmission and distribution plan (IGTDP) to study their impact on the system network. The following system scenarios of peak load (2856 MW) conditions of years 2016-17 & Peak Load (3202 MW) of the year 2018-19 have been simulated.

- 5.1 132KV Bara Kahu GSS Without Bharia Enclave & Golf City (2016-17)
- 5.2 132 KV Bara Kahu GSS Without Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2016-17)
- 5.3 132KV Bara Kahu GSS Without Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2016-17)
- 5.4 132KV Bara Kahu GSS With Bharia Enclave & Golf City (2016-17)
- 5.5 132 KV Bara Kahu GSS With Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2016-17)
- 5.6 132KV Bara Kahu GSS With Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2016-17)
- 5.7 132KV Bara Kahu GSS With Bharia Enclave & Golf City (2018-19)
- 5.8 132 KV Bara Kahu GSS With Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2018-19)
- 5.9 132KV Bara Kahu GSS With Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2018-19)
- 5.10 132KV Bara Kahu GSS With Bharia Enclave & Golf City in-Out arrangement form 132Kv University-Murree (2018-19)

The results of these load flow studies are described as under

5.1 132KV Bara Kahu GSS Without Bharia Enclave & Golf City (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 1. The result of this scenario are discussed as under:

- 5.1 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 21%
- 5.1 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 1%
- 5.1 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 35%
- 5.1 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 2%
- 5.1 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 50%

5.1 (f) System Losses = 44.6 MW

5.1 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.2 132 KV Bara Kahu GSS Without Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 1.1 The result of this scenario are discussed as under:

5.2 (a) Percentage Loading of 132KV University to Bara Kahu Circuit Out

5.2 (b) Percentage Loading of 132KV Tramari to Nilore Circuit Out

5.2 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 49%

5.2 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 13%

5.2 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 64%

5.2 (f) System Losses = 45.1 MW

5.2 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.3 132 132KV Bara Kahu GSS Without Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 1.2. The result of this scenario are discussed as under :

5.3 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 30%

5.3 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 4%

5.3 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit Out

5.3 (d) Percentage Loading of 132KV Gangal to Nilore Circuit Out

5.3 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 15%

5.3 (f) System Losses = 44.1 MW

5.3 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.4 132KV Bara Kahu GSS With Bharia Enclave & Golf City (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 2. The result of this scenario are discussed as under :

- 5.4 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 27%
- 5.4 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 1%
- 5.4 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 38%
- 5.4 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 4%
- 5.4 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 52%
- 5.4 (f) System Losses = 44.9 MW
- 5.4 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.5 132 KV Bara Kahu GSS With Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 2.1 The result of this scenario are discussed as under:

- 5.5 (a) Percentage Loading of 132KV University to Bara Kahu Circuit Out
- 5.5 (b) Percentage Loading of 132KV Tramari to Nilore Circuit Out
- 5.5 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 57%
- 5.5 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 19%
- 5.5 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 72%
- 5.5 (f) System Losses = 45.8 MW
- 5.5 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.6 132KV Bara Kahu GSS With Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2016-17)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 2.2. The result of this scenario are discussed as under:

- 5.6 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 37%
- 5.6 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 4%
- 5.6 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit Out
- 5.6 (d) Percentage Loading of 132KV Gangal to Nilore Circuit Out
- 5.6 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 15%
- 5.6 (f) System Losses = 45.0 MW
- 5.6 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.7 132KV Bara Kahu GSS With Bharia Enclave & Golf City (2018-19)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTD; diagram is attached as Exhibit # 3. The result of this scenario are discussed as under:

- 5.7 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 49%
- 5.7 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 5%
- 5.7 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 32%
- 5.7 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 22%
- 5.7 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 56%
- 5.7 (f) System Losses = 56.3 MW
- 5.7 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.8 132 KV Bara Kahu GSS ^{with} Without Bharia Enclave & Golf City (University to Bara Kahu & Tramari to Nilore circuits Out) (2018-19)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTD; diagram is attached as Exhibit # 3.1. The result of this scenario are discussed as under:

- 5.8 (a) Percentage Loading of 132KV University to Bara Kahu Circuit out
- 5.8 (b) Percentage Loading of 132KV Tramari to Nilore Circuit Out
- 5.8 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 73%
- 5.8 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 17%
- 5.8 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 98%
- 5.8 (f) System Losses = 59.1 MW
- 5.8 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.9 132 KV Bara Kahu GSS Without Bharia Enclave & Golf City (Gulberg to Nilore & Gangal to Nilore circuits Out) (2018-19)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 3.2. The result of this scenario are discussed as under:

- 5.9 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 52%
- 5.9 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 7%
- 5.9 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit Out
- 5.9 (d) Percentage Loading of 132KV Gangal to Nilore Circuit Out
- 5.9 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 25%
- 5.9 (f) System Losses = 56.3 MW
- 5.9 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

5.10 132 KV Bara Kahu GSS Without Bharia Enclave & Golf City (in-Out arrangement form 132Kv University-Murree) (2018-19)

Load flow studies have also been carried out for the above system scenario with the proposed sub-projects in IGTDP; diagram is attached as Exhibit # 3.3. The result of this scenario are discussed as under

- 5.10 (a) Percentage Loading of 132KV University to Bara Kahu Circuit 27% & 48%
- 5.10 (b) Percentage Loading of 132KV Tramari to Nilore Circuit 2%
- 5.10 (c) Percentages Loading of 132KV Gulberg to Nilore Circuit 29%
- 5.10 (d) Percentage Loading of 132KV Gangal to Nilore Circuit 24%
- 5.10 (e) Percentage Loading of 132KV Rewat to DHA Valley Circuit 53%
- 5.10 (f) System Losses = 56.2 MW
- 5.10 (g) **Voltage Profile**

The voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

6. Short Circuit Study

Short circuit studies have been carried out for the scenario of year 2018-19 of entire network to compute maximum 3-phase and 1-phase fault levels.

The maximum short circuit levels have been computed with the following assumptions under IEC 909 standard by setting;

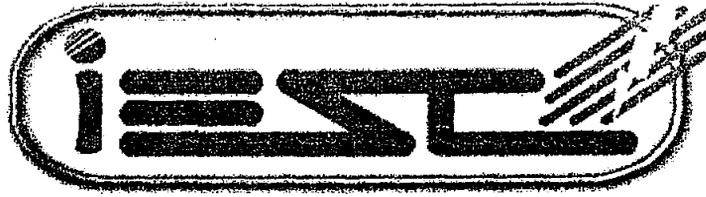
- Transformers tap ratio to unity.
- Line charging to zero.
- Shunt elements to zero in positive sequence
- Voltage at 1.1 PU

The results of the short circuit studies along with remarks for any action required has been tabulated below as well as shown in exhibit 4.0 to 4.3

Sr. No	Grid Station	Voltage Level (KV)	Without		With	
			3 ϕ Fault (KA)	Single ϕ Fault (KA)	3 ϕ Fault (KA)	Single ϕ Fault (KA)
1	Bharia Enclave	132	-----	-----	19.52	12.77
2	Golf City		-----	-----	7.369	4.516
3	University		28.24	18.923	28.24	18.923
4	Bara Kahu		23.85	15.251	23.85	15.251
5	Nilore		21.42	13.86	21.42	13.86
6	Tramari chowk		14.14	8.832	14.14	8.832
7	Gangal		12.04	7.685	12.04	7.685
8	Murree		4.760	2.854	4.760	2.854

7. CONCLUSIONS AND RECOMMENDATIONS

1. Load flow study has been carried out for the years 2016-17 & 2018-19 without & With Bharia Enclave and Bharia Golf City. The interconnection for Bharia Golf city has been considered from Bharia Enclave.
2. When 132 KV University to Bara Kahu and Tramari to Nilore Circuits become out of system in year 2018-19 as mention at article 5.8 of above then Rewat to DHA Valley circuit become 98% loaded which is above the study criteria as described at article-4 of the report..
3. The interconnection from under construction 132KV Bara Kahu Grid Station , in order to cater the load demand of Bharia Enclave and Bharia Golf City, is recommended subject to the fulfillment of the following by the sponsor:
 - i) In order to reduce the over loading of Rewat to DHA Valley as mentioned in para-2 above, construction of about 3-5KM 132KV D/C T/line from University to Murree as In-Out arrangement & its line bays are recommended. For the purpose Load flow study is also carried out and result is described in article 5.10 of report.
at which G/S
 - ii) 132KV SDT Transmission Line from Bara Kahu to Bharia Enclave as per PEPCO Policy for consumer Grid Station.
 - iii) Construction of Line Bay at Bara Kahu Grid Station for Bharia Enclave *Tramari*
 - iv) 132KV Metering arrangement for Bharia Enclave at Bara Kahu
 - v) Keeping in view the short circuit study at article-6 of report, 40KA switch gear equipment is recommended at 132KV switchyard.
 - vi) Provision of Right of Way for construction of 132kV Transmission line for proposed Bara Kahu GSS passing through Bharia Enclave premises



Load Flow Studies & Short Circuit Studies

For

132kV Bahria Town Phase-IV

25 to 31 MW

**Technical Services Wing
IESCO Head Quarter Street #40
Sector G-7/4, Islamabad**

February, 2018

CONTENTS

Introduction

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Assumptions for Load Flow Studies

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LOAD FLOW STUDY FOR BAHRIA TOWN Phase -IV GRID STATION FOR EXTENSION OF LOAD (25 TO 31 MW)

INTRODUCTION

Bahria Town (BT) Phase-IV Islamabad has applied for load extension to cater the growing load demand of Bahria Town Phase-IV. According to their load calculation, the ultimate load demand of phase-IV is about 80 MW. Initial sanctioned load was 25 MW and now management of Bahria Town has requested for extension of load about 6 MW. In order to cater the power demand of proposed load of BT housing society, Chief Engineer (P&E) IESCO has forwarded the case to TSW for Load Flow Study for technical viability. Load Flow Study has been carried out for years 2017-18 & 2018-19.

1.1 Existing Grid Station

Since Bahria Town phase-IV has existing own Grid Station with following installation of equipment:

Sr. No	Description	Remarks	
1	No. of Power Transformer	02 No.	
2.	Rating of Transformers	132/11 KV, 20/26 MVA	
3.	Capacitor Bank	4.8 MVAR installed on each PTF	
4.	Average Power Factor	0.9	
5.	Max Load Recorded (2017)	T1= 20 MW	
		T2= Standby (Not Energized)	
6.	Feeding Source	Rewat to Phase-IV	AASC Greely Conductor 16.75 KM
		AGL to Phase-IV	AASC Greely Conductor 6.0 KM

METHODOLOGY OF ANALYSIS

The methodology of system studies/analysis is given as under:

- In the report, IESCO's network expansion plan including already planned/under-execution projects, integrated generation, transmission and distribution plan of power sector have been taken into account.

- ii. The complete system model of the National Grid has been simulated, i.e., system network of not only the IESCO but also of NTDC and the neighboring DISCOs have been simulated for the purpose of analysis.
- iii. The assumptions on which the system studies are based have been mentioned with necessary details.
- iv. Load flow studies have been carried out and its results have been presented in the report.
- v. Load flow analysis has been carried out for the steady state normal system operating condition in order to;
 - ❖ Assess adequacy of the network to feed the proposed power demand of Bahria Town phase-IV Grid Station.
 - ❖ Determine any additional transmission reinforcement and/or reactive compensation requirement for the scope of work
 - ❖ Justification of proposed power demand.
- vi. Conclusions and recommendations on the basis of technical analysis have been presented at the end of the report.

3. ASSUMPTIONS FOR LOAD FLOW STUDIES

The load flow studies are based on the following assumptions:

- i. The diversified values of the peak projected loads on substations, existing and new, have been modeled as per preliminary PMS load forecast report published in 2017-18. The loads have been adjusted as per the ratio between IESCO Peak including load shedding and the algebraic sum of recorded individual peaks of the substations of IESCO.
- ii. All the existing as well as the proposed power plants, both in public and private sectors, has been assumed in operation in all the study scenarios as per their expected commissioning schedules.
- iii. Generation & Transmission Expansion plan of NTDC has also been taken into account.
- iv. IESCO's planned/on-going transmission expansion/re-enforcement projects, including substations (extension, augmentation, conversion, new), transmission lines proposed in 7th STG have also been assumed in the studies.

er loaded by 102% of its capacity at sanctioned load (25 MW). Further, the voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

With Load Extension of Bahria Twon Phase-IV Grid Station

ad flow studies have also been carried out for the above system scenario with the proposed sub-projects in 7th STG along with following scenarios for year 2017-18 Load about (2549 MW) and 6 MW extension of Bahria Town Phase-IV.

- | | | |
|-------|---|-------------|
| 1 (a) | without Load Extension | Exhibit 2.0 |
| 1 (b) | Rewat to Bahria Town Phase-IV Circuit off | Exhibit 2.1 |
| 1 (c) | AGL to Bahria Town Phase-IV Circuit off | Exhibit 2.2 |
| 1 (d) | AGL to Cantt RWP Circuit off | Exhibit 2.3 |
| 1 (e) | Cantt RWP to Chaklal Circuit off | Exhibit 2.4 |
| 1 (f) | Chaklal to Giga Circuit off | Exhibit 2.5 |
| 1 (g) | Giga to Rewat Circuit off | Exhibit 2.6 |

order to reduce the over loading of power transformer of Bahria town Phase-IV and after the further 6 MW load demand of Bahria Town Phase-IV, study has been carried out with an addition of 20/26 MVA power transformers. Further, It is evident from above study that all circuits of Rewat to Chaklial to Bahria Town remain under their rating capacity. Further, the voltage profile of the vicinity is in the permissible limit ($\pm 5\%$)

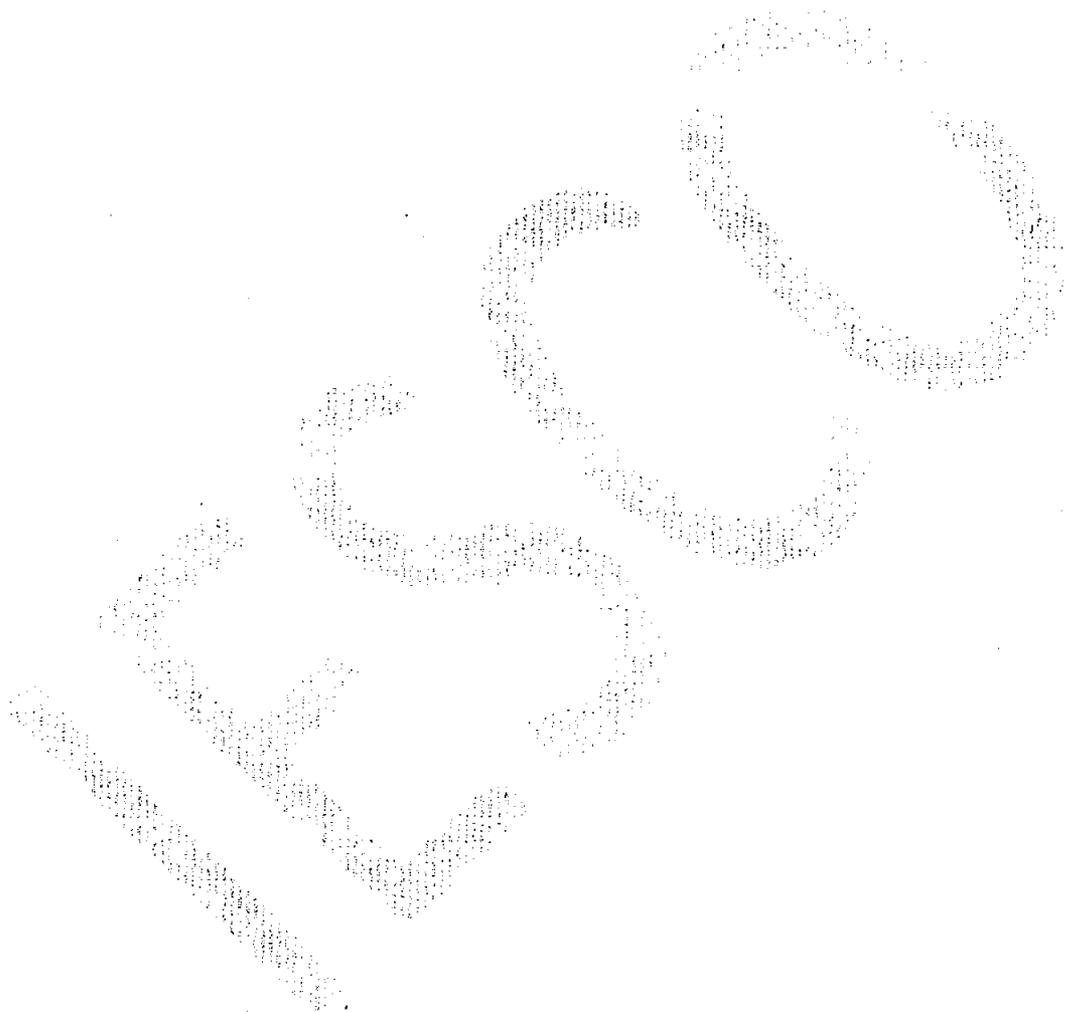
With Load Extension of Bahria Twon Phase-IV Grid Station for year 2018-19

oad flow studies have also been carried out for the above system scenario with the proposed sub-projects in 7th STG along with following scenarios for year 2018-19 Load about (2689 MW) and 6 MW extension of Bahria Town Phase-IV.

- | | | |
|---------|---|-------------|
| 5.1 (a) | without Load Extension | Exhibit 3.0 |
| 5.1 (b) | Rewat to Bahria Town Phase-IV Circuit off | Exhibit 3.1 |
| 5.1 (c) | AGL to Bahria Town Phase-IV Circuit off | Exhibit 3.2 |
| 5.1 (d) | AGL to Cantt RWP Circuit off | Exhibit 3.3 |
| 5.1 (e) | Cantt RWP to Chaklal Circuit off | Exhibit 3.4 |
| 5.1 (f) | Chaklal to Giga Circuit off | Exhibit 3.5 |
| 5.1 (g) | Giga to Rewat Circuit off | Exhibit 3.6 |

evident from above study that all circuits of Rewat to Chaklal to Bahria Town remain under their rating capacity. Further, the voltage profiles of the vicinity is in the permissible ($\pm 5\%$) except voltage profile of Cantt and Chaklala Grid Stations drops from its normal

permissible criteria, however remain in emergency criteria during AGL to Cantt circuit become outage.



6. Short Circuit Study

Short circuit studies of the entire network have been carried out to compute maximum 3-phase and 1-phase fault levels. The computed fault levels have been compared with the short circuit rating of the installed switchgear equipment at the substations to identify any under-rated switchgear in the existing substation.

The maximum short circuit levels have been computed with the following assumptions under IEC 909 standard setting;

- Transformers tap ratio to unity.
- Line charging to zero.
- Shunt elements to zero in positive sequence
- Voltage at 1.1 PU

The results of the short circuit studies have been tabulated below and also attached as Exhibit 4.0

Sr. No	Name of Grid Station	Voltage Level	3 ϕ Fault (KA)	Single ϕ Fault (KA)
1	132KV Rewat	132	38.8	34.4
2	Bahria Ph-IV		12.6	7.80
3	AGL		11.4	6.62
4	Cantt RWP		10.5	5.20
5	Chaklala		10.42	4.60
6	Giga		13.70	8.00
7	Bahria T-1	11	11.37	11.6
8	Bahria T-2		11.37	11.6
9	Cantt Rwp T-1		14.4	15.06
10	Cantt Rwp T-2		11.09	11.4
11	Cantt Rwp T-3		14.5	15.06

7. CONCLUSIONS AND RECOMMENDATIONS

1. Study is based on preliminary PMS forecasted report for year 2018 as mentioned in article-3. It is evident from load flow study that no major constraints have been observed in vicinity of Bahria Town Phase-IV and surrounding, therefore it is recommended that load demand of Bahria Town phase-IV can be allowed subject to following.
 - I) Addition of 20/26 MVA Power Transformer
 - II) Construction of PTF Bays
 - III) ✓ Metering CTs (200/100/1A) Accuracy class 0.2
 - IV) 132KV metering Panel equipped with 132KV meter accuracy class 0.2
 - V) 11KV 3.6 MVAR Capacitor Bank
 - VI) Allied accessories such as CP, RP, MV Panels etc
2. Study evident that voltage profile of vicinity is in its marginally permissible limits. However, voltage profile may be improved by construction of 500/220/132KV Grid Station in area of Chakwal. IESCO has to pursue the matter with NTDC regarding early completion of 500/132kV Grid Station as COD of 500/132kV Chakwal is 2018.
3. The Short Circuit Study shows that 40kA and 25kA Switchgears at 132kV Switchyard and 11 KV Incoming panel are sufficient respectively.
4. Rules and prevalent policies shall be followed strictly before sanction of load.

8. Exhibits:



9. Abbreviations

IESCO	Islamabad Electric Supply Company
NTDC	National Transmission Dispatch Company
STG	Secondary Transmission Grids
PTF	Power Transformer
MVA	Mega Volt Ampere
MVAR	Mega Volt Ampere Reactive
KV	Kilo Volt
GSS	Grid Sub Station
SSO	Sub Station Operator
GSO	Grid Station Operation
ACSR	Aluminum Conductor Steel Reinforce
KM	Kilo Meter
KA	Kilo Ampere
AASC	Aluminum Alloy Stranded Conductor



Islamabad Electric Supply Company Limited

www.iesco.com.pk

Tele Pbx: 051-9252937-39 (343)
Direct: 051-9252931
Fax: 051-9252931

Planning & Engineering Directorate
IESCO Head Office, Street 40,
G-7/4, Islamabad

No. 10449-81 / CEO/CE (P&E)/ HT-588,680,2013

Dated: 26/10/2021

Engr. Muhammad Saleem,
Deputy Chief Executive,
Bahria Town Seviles,
Safari Valley Office, Safarai Homes,
Sector-E Phase-VIII Bahria Town,
Rawalpindi.

SUBJECT: INTERCONNECTION/ LOAD FLOW STUDIES FOR EXTENSION OF LOAD AT 132 KV BAHRIA TOWN PHASE IV & VIII

Reference: 1) Chief Engineer (TSW) office letter No. 821/TSW/56 dated 20-10-2021
2) Chief Engineer (TSW) office letter No. 833/TSW/56 dated 25-10-2021

Interconnection studies of above cited cases have been conducted. The recommendations are being forwarded to your office for your consent please.

DA:

- 1) Conclusion/Recommendation of Interconnection Studies for Extension of Load at Bahria Town Phase IV
- 2) Conclusion/Recommendation of Interconnection Studies for Extension of Load at Bahria Town Phase VIII

Chief Engineer (P&E)
IESCO Islamabad

Copy to:

- 1) Chief Engineer (TSW) w.r.t above referred letters for information please.
 - 2) Deputy Manager (P&E), Planning & Engineering, IESCO for information please.
- Master File.

7. CONCLUSIONS AND RECOMMENDATIONS

- 7.1 Study is based on PMS forecasted report for year 2019-20 as mentioned in article-3 for years 2022-23 to 2026-27.
- 7.2 During Load Flow study of year 2022-23, voltage depression (more than permissible Limit) was observed on the busbar of 132kV Bus bar of Bahria Phase-VIII during switching off the 220kV Rewat to 220kV Bahria Phase-VIII. However, it would be mitigated by connecting the 132kV Adyala to Bahria Phase VIII.
- 7.3 Since 220kV Bahria Phase-VIII is part of national grid therefore sponsor will be advised to provide the consent for construction of 132kV Transmission Lines from 220kV Bahria Phase-VIII.
- 7.4 Study of 2024-25 and 2025-26 reveals that EHV /UHV system feeding IESCO network is overloaded. Due to overloading, voltage profile of Chakwal and surrounding as well as Islamabad and Rawalpindi area is under depression. Keeping in view the system constraint of NTDC, it is suggested that CE (P&E) IESCO should approach to NTDC for construction of EHV and UHV substation in territory of IESCO otherwise substantial load management will be observed during these years.
- 7.5 In foregoing of above, it is recommended that extension of load for Bahria Town phase-VIII may be sanctioned with following Scope of works.
- i) Augmentation of both transformer with 31.5/40 MVA PTF at Bahria Phase-VIII Grid Station in order to achieve the N-1 criteria.
 - ii) Both Incoming Panel will be replaced with ratio 2400:1200:5:5A and allied accessories
 - iii) Addition of 12 MVAR Capacitor Bank with augmented each PTF, preferable switch capacitors
 - iv) Fulfillment of article-7.3 of report.
 - v) Allied accessories as per requirement.
- 7.6 The Short Circuit Study shows that 40kA and 25kA Switchgears at 132kV Switchyard and 11 KV Incoming panel are sufficient respectively.
- 7.7 Rules and prevalent policies shall be followed strictly before sanction of load.

7. CONCLUSIONS AND RECOMMENDATIONS

- 7.1 Study is based on PMS forecasted report for year 2019-20 as mentioned in article-3 for years 2022-23 to 2026-27.
- 7.2 During Load Flow study of year 2024-25, 115 % of rated capacity overloading on Rewat to Giga and 102 % of rated capacity on AGL to Cantt circuits were observed.
- 7.3 Load Flow study have been carried from both nearest sources as mentioned at article-2 of report and no system constraint has been observed except voltage profile in the area of Chakwal and surrounding. Results of study are depicted at article-5 of report.
- 7.4 In foregoing of above, it is recommended that extension of load for Bahria Town phase-IV may be sanctioned with following Scope of works.
 - i) Augmentation of both transformer with 31.5/40 MVA PTF at Bahria Phase-IV Grid Station in order to achieve the N-1 criteria.
 - ii) Both Incoming Panel will be replaced with ratio 2400:1200:5:5A and allied accessories
 - iii) Addition of 12 MVAR Capacitor Bank with augmented each PTF, preferable switch capacitors
 - iv) It is suggested that reconductoring of 132kV Circuit Rewat to Giga may be carried out with HTLS or ACCC type conductor as the said circuit is already strung with ACSR Rail as discussed at article-5.
 - v) Allied accessories as per requirement.
- 7.5 The Short Circuit Study shows that 40kA and 25kA Switchgears at 132kV Switchyard and 11 KV Incoming panel are sufficient respectively.
- 7.6 Rules and prevalent policies shall be followed strictly before sanction of load.


Deputy Manager Design (T&G)
Technical Services Wing
IESCO Islamabad

FEASIBILITY REPORT

Bahria Town (Pvt.) Limited is Pakistan's leading private sector real estate developer engaged in developing and delivering highly successful world class housing communities all over Pakistan and in this context Bahria Town (RWP) has developed high standard living projects in suburban sites of Rawalpindi / Islamabad areas on either side of G.T. Road, and Eastern side of Islamabad

The schemes located along G.T. Road on both sides are approximately 56000 kanals, whereas the scheme located on Eastern part of Islamabad in the name of Bahria Enclave has approximately 18000 Kanals area.

Keeping in line with international standards, spacious network of roads and avenues have been developed. Play grounds, parks, sports facilities, clubs, hospitals, educational institutions, street lights, security and firefighting arrangements have been most adequately incorporated.

The project with its three components has separate grid stations to provide electricity and similarly infrastructures for other facilities.

The electrical distribution system is underground. The total estimated load requirements of the entire housing project are as below:-

	<u>Scheme</u>	<u>Power Demand</u>	<u>Arrangements</u>
1	Bahria Town RWP, Phase I to VI	Estimated Ultimate Load Demand 73.6MW	One 132/11 KV grid station installed with 1 x 31.5/40MVA+1x20/26MVA power transformers
2	Bahria Town RWP, Phase VII to VIII, Green City, Serene City, etc.	Estimated Ultimate Load Demand 700MW	One 220/132 KV grid station with 2x63MVA auto transformers and One 132/11KV grid station with 1x31.5/40MVA + 1x20/26MVA power transformers.
3	Bahria Enclave, Islamabad	Estimated Ultimate Load Demand 135MW	One 132KV/11KV grid station with 2x20/26MVA power transformers

To meet all the future load demands, Bahria Town, RWP, has planned / ear marked adequate spaces for future 132/11KV grid stations alongwith possible additions/augmentations in the existing grid stations. One grid station in Phase-VIII is under construction with 2x31/40MVA power transformers.

The key features of the Bahria Town (RWP) are as under:-

1) Town Planning:

BTPL through world class town planners have provided residential facilities for all walks of life. It has bungalows, town houses, apartments all developed and built on international standards which provide options for everyone to avail true modern living concept at competitive prices.

2) **Roads:**

Roads are wide, carpeted and have walk ways on both sides.

3) **Markets / Shopping Malls:**

Every area has its own market and shopping malls are in central locations which satisfy all residents needs.

4) **Hospitals:**

Within the community, state of art hospitals are operative with all modern facilities.

5) **Mosques:**

Apart from sector mosques the community contains bigger Jamia mosques at central places where five (5) times prayers are offered.

6) **Recreational Facilities:**

The community contains gold class cinemas, country clubs, parks, restaurants children play areas and also an eighteen hole, golf course in Garden City for the residents.

Security:

BTPL is providing a fool proof security of the area at all entry points alongwith mobile squads, check posts in order to provide peaceful environments for the residents.

7) **Provision of Electricity:**

BTPL like all their other housing projects has given top priority to quality of electricity to ensure interruption free and top quality electricity services to the residents of Bahria Towns RWP. Bahria therefore opted for its own distribution network by obtaining bulk supply connections from IESCO on C3 tariff which were obtained through Bahria owned grid stations 132/11KV constructed at Bahria's own cost.

The grids were constructed through M/s. Siemens as EPC Contractor

Bahria Pays IESCO every month on tariff C3 and has never defaulted. Further to, Bahria has laid down its own network meeting all IESCO/NTDC and international specifications through underground system and billing its residents (customers) without discrimination.

Bahria has its own stand by generators which match the grid station capacity and used to meet the emergencies, interruptions/shortfalls at grid stations.

In fact, the provision of quality electric supply is the hall mark of Bahria Town which is widely appreciated by the residents and is a major attraction for the public to reside in Bahria Town projects.

The basic features of distribution network are as following.

a) **11 KV Distribution Syste/Infrastructure:**

The HT and LT distribution network is underground and has been constructed by BTPL according to WAPDA specifications/international standards at Bahria's own costs. It comprises of following major equipments.

- HT Cables
- Ring Main Units Switches.
- 11/0.4KV Pad Mounted Transformers.
- LT Service Cables.
- Distribution Boxes.
- Metering System.

This quality infrastructure developed, supervised and maintained by competent and experienced staff has made the community feel living in entirely different community compared to all other adjoining areas.

b) **Operation and Maintenance:**

BTPL has its own department responsible for operation and maintenance of distribution systems. The trained staff with proper T&P, safety equipment and transport is available round the clock to attend consumer complaints, emergencies and system faults.

c) **Metering and Billing:**

BTPL is carrying out monthly meter readings of energy consumed at each consumer premises, on the basis of which, billing of energy consumed is made and collection of electricity bills is done accordingly. The disconnection of consumers on nonpayment of bills and reconnections upon payment of outstanding dues is also practiced and followed efficiently.

In fact, the environment and facilities for residents in Bahria Town RWP/Islamabad (Like all Bahria projects), are matchless to any other housing project in the country and Bahria Town's management with their vast business volume, strong financial strength have made affordable to all categories of buyers and subsequently residents due to their diversified residential facilities.

The housing projects therefore, remain sustainable for Bahria management because of their very large scale of successful business in this field with a track record that **Bahria Town (RWP) has never defaulted in payment of monthly huge bills to IESCO as a bulk supply customers.**

TYPE OF METERING SYSTEM

Bahria Town, for the sake of transparency has been using energy meters with same specifications as those of other utility companies (DISCOs). As such, Bahria Town RWP is procuring all energy meters from vendors which are prequalified by IESCO.

Bahria Town at present is using following type of energy meters which completely address Bahria / resident's requirements under NEPRA's applicable tariff.

- 1) Single Phase Static digital meters
- 2) Three Phase Static digital meters
- 3) CT operated/MDI meters

Bahria management through above energy meters is satisfactorily billing the residents / its customers without any problems / complaints due to Bahria's own dedicated billing section operating under a senior manager.

Importantly the metering is in line with the tariffs applicable to customers approved by NEPRA for distribution of electricity in Bahria Town like other distribution companies.

However, at 132KV grid stations, IESCO has installed MDI (CT operated) metering systems, which record energy (active and reactive) and maximum demands for billing to Bahria Town RWP.

**Information and
documents in support of
distribution expansion and
investment.**

Contract Agreement No.: Bahria-ZSS/2021/01

**132KV GRID STATIONS BAHRIA TOWN
PHASE-IV & PHASE-VIII RAWALPINDI**

CONTRACT AGREEMENT

FOR

**DESIGN, SUPPLY, INSTALLATION, ERECTION, TESTING AND
COMMISSIONING FOR AUGMENTATION WORK
AT 132 KV BAHRIA TOWN PHASE-IV & PHASE-VIII
GRID STATIONS RAWALPINDI**

between

BAHRIA TOWN (PVT.) LTD

and

**M/S ZSS Corporation,
Office No. 515, National
Tower, 28-Egerton Road,
Lahore - Pakistan**



This Contract Agreement is made at Islamabad as of 9th day of December in the year 2021 between the Contractor and Employer on the basis of equality and mutual benefits

Bahria Town (Pvt.) Ltd (hereinafter called **EMPLOYER** of the 1st Part)

and

M/S ZSS Corporation, Office No. 515, National Tower, 28-Egerton Road, Lahore (hereinafter called **CONTRACTOR** of 2nd Part).

The terms and conditions are fully agreed by both parties as below:

1. Scope of Supply:

- i. Annexure A for Augmentation Works at 132 kV G/S Bahria Town, Phase IV, RWLP.
- ii. Annexure B for Augmentation Works at 132 kV G/S Bahria Town, Phase VIII, RWLP.
- iii. Annexure C for Additional Work and Remaining Spare Part.

a) The contract value

a) for Phase IV G/S (Annexure A) is PKR 20,152,064/-
AND

b) for Phase VIII G/S (Annexure B) is PKR 22,074,664/-
AND

c) Annexure C: PKR 4,328,048/- + PKR 2,495,000/- = PKR 6,823,048/-
Total Contract Amount (a+b+c) = PKR 49,049,776/-

The above Contract Amount is finalized as follows:

- With reference to ZSS offers no. 2021/387 dated 06-09-2021 and no. 2021/395 dated 01-12-2021.
- The income tax is included in the above prices.
- PST is exclusive in the above prices.
- The above prices of this contract is firm and fixed.

2. Technical Specifications:

As per NTDC specifications / standards.

The non-mentioned technical specifications shall be subject to the relevant IEC standard. Technical Specification shall be revised accordingly if there is any amendment thereto.

3. Packing of Equipment:

The product shall be packed in proper package and suitable for transportation.

4. Final Destination / Sites: 132 kV G/S Bahria Town, Phase IV & Phase VIII, RWLP.

5. Completion Period:

3 Months after arriving of Power Transformers at 132 kV G/S Bahria Town, Phase IV & Phase VIII, RWLP Sites.

6. Terms of Payment

5.1

- 20% Payment of contract value as advance payment shall be paid within 15 days after signing this contract.



- 60% balance payment against Shipment / Dispatch of major items / materials i.e. Capacitor Bank, 11kV Switchgear Panels and Cables at Site from respective Vendors / Manufacturers.
- 10% Payment after completion / energization of Power Transformers.
- Remaining 10% will be paid after Defect Liability Period (i.e. after 6 Months).

7.

- a. 3 Phase power supply (electricity) for Dehydration, Testing & Commissioning of Power Transformers will be on Employer's side.
- b. The additional material / work revealed during execution required necessary but not mentioned in the BOQ will be borne & arranged by Employer.
- c. All types of insurance, department charges etc. if any will be paid by the Employer.
- d. Shut down will be arranged by Employer from IESCO and any delay in providing Shut Down will be counted towards completion time.

8. Bank Detail of the Contractor

The Employer shall pay to the only legitimate bank account, the details will be provided later on alongwith invoices.

9. Guarantees

The Contractor shall provide following Security Guarantee in the name of Bahria Town (Pvt.) Ltd.:-

- a) 20% Insurance Guarantee from AA rating Insurance Company against Advance Payment.

10. Supply and Acceptance of the Products

The Employer shall initiate the purchase of the products by signing this Contract Agreement with the Contractor. The Employer shall make payment in time, and then the Contractor shall take reasonable measures to deliver and execution the work.

11 Force Majeure:

Neither Party shall be deemed to be in breach of this Sales Contract or otherwise liable to the other as a result of any delay or failure in the performance of its obligations hereunder, if and to the extent that such delay or failure is caused by any circumstances not foreseeable, or not within the reasonable control of the party, without limitation, war, riot, fire, explosion, flood action by governmental authority or industrial action, embargo, earth quake, landslide and the time for performance of the relevant obligation(s) shall be extended accordingly.

12 Amendment:

Any amendment to this Contract Agreement shall be affective by duly stamped and signature of both parties.

13 Arbitration:

Notwithstanding anything contained in the Contract, in the event of any question or difference or dispute whatsoever arising between the Parties under or in connection with this Contract or any provision herein contained or its constructions, validity or termination hereof, or as to any matter connected therewith or arising there-from which cannot be amicably settled within thirty (30) days of written notice by a Party to the other identifying the same and seeking its amicable settlement, the same shall exclusively be referred to Arbitration under the Arbitration Act, 1940.

The language of Arbitration shall be English and the place of Arbitration shall be



Islamabad Pakistan.

The governing Law shall be the Law of Pakistan.

14 Effective Date:

The effective date of this contract shall be counted from all of the following conditions have been fulfilled;

- (a) This contract has been duly signed and stamped by both parties;
- (b) The Contractor has received the advance payment as stipulated in Article 6;

15 Validity Period

This Contract shall come into force from the Commencement Date until all the obligations under this contract have been fully performed by the Parties.

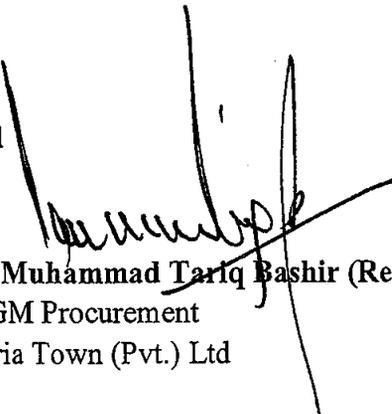
16 Miscellaneous

- a. Both parties have caused this contract to be duly executed from the commencement date, shall supersede all the previous correspondence, discussions, acknowledgements and agreements related as foregoing mentioned.
- b. M/s ZSS Corporation will be fully responsible to ensure proper execution of this contract

This contract is constituted in two originals; each party holds one original with equal legal validity.

The Employer:
Bahria Town (Pvt.) Ltd


Engr Muhammad Saleem
Snr GM Services (Dev & GR)
Bahria Town (Pvt.) Ltd


Brig Muhammad Tariq Bashir (Retd)
Snr GM Procurement
Bahria Town (Pvt.) Ltd

Maj Gen Javed Iqbal (Retd)
Executive Director
Bahria Town (Pvt.) Ltd

ZSS CORPORATION

Signature: 

Name: Zulfiqar Uddin

Designation: Managing Director

Date: December 09, 2021

Witness by: 



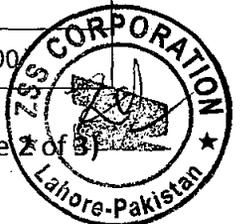
ANNEXURE-A

**DESIGN, SUPPLY, INATALLATION, ERECTION, TESTING AND COMMISIONING FOR AUGMENTATION WORK
AT 132 KV BAHRIA TOWN PHASE-IV GRID STATION RAWALPINDI**

Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
01	11 KV incoming switchgear panel, 2500A, 25KA with CT's ratio 2400: 1200/5A as per NTDC specifications	No.	01	4,131,960	4,131,960
02	12KV Surge Arrestors	Nos.	03	13,400	40,200
03	Modification / Extension of existing 11KV structure	Lot.	01	16,800	16,800
04	11KV Capacitor Bank, 4.8MVAR with steel structure, capacitor racks, busbar strip (40 x 4mm), earthing etc. Note: Total 9.6 MVAR to be installed (4.8 MVAR already existing)	No.	01	5,065,860	5,065,860
05	11KV Post Insulators with clamps	Nos.	03	46,688	140,064
06	Aluminum Conductor Hawthorne 600mm ² Conductor is Available in Grid Station store	Lot	1	31,500	31,500
07	1000 MCM single core 11kV Power Cable (Al conductor) Power Transformer to I/C Panel Note: Out of 05 cables per phase, 03 cables per phase are available hence 02 cables per phase are required.	Mtr.	630	4,045	2,548,350
08 (a)	1000 MCM single core 11kV Power Cable (Al conductor) from Capacitor Bank to 11kV Capacitor Panel 500 MCM cable will be replaced with 1000MCM cable.1000 MCM cable is available.	Job	01	220,000	220,000



Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
08 (b)	11kV Outdoor termination kits for 1000MCM single core power cable	Nos.	18	17,000	306,000
09	11kV Indoor termination kits for 1000MCM single core power cable	Nos.	18	20,000	360,000
10	Aluminum pipe, 100mm dia. 4 Mtr. Long	Lengths	03	44,530	133,590
11	Connector type, 90BH30	Nos.	03	8,000	24,000
12	Connector type, 90B100F	Nos.	03	8,000	24,000
13	Connector type, BSP100	Nos.	03	7,000	21,000
14	Connector type, TM100A	Nos.	15	9,500	142,500
15	Grounding Conductor, 95mm ²	Mtr	40	2,220	88,800
16	Cartridge Type-A	No.	20	1,452	29,040
17	Mold for above	No.	02	17,000	34,000
18	Control cable 04 x 2.5mm	Mtr	200	778	155,600
19	Control cable 08 x 2.5mm	Mtr	320	1,100	352,000
20	Control cable 16 x 2.5mm	Mtr	310	1,800	558,000
21	Control cable 04 x 6.0mm	Mtr	342	1,350	461,700
22	Foundation for 40MVA power transformer Note: The existing foundation strength will be tested. The transformer foundation will be reinforced / modified, if required.	Lot	01	450,000	450,000
23	Foundation for Capacitor Bank	Lot	01	71,500	71,500



Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
	1 New + 1 Existing (Grouting Required only)				
24	Erection, Testing and Commissioning of Equipment including Dehydration of Oil for 31.5/40 MVA, 132/11.5KV, three phase Power Transformer	Lot	01	1,600,600	1,600,600
25	Transportation, loading / unloading etc. of Equipment (Local) and P. Trafo. 40MVA from Karachi Port to Site	Lot	01	1,295,000	1,295,000
26	Dismantling of 10/13 MVA Power Transformer and its storage at designated place / store	Lot	01	750,000	750,000
27	Design & Engineering including Foundation drawings, Diagrams, Control & Interconnecting Schematics, Relay settings, As built drawings etc.	Lot	01	1,100,000	1,100,000
TOTAL AMOUNT (in PKR)					20,152,064 PKR



ANNEXURE-B

**DESIGN, SUPPLY, INATALLATION, ERECTION, TESTING AND COMMISIONING FOR AUGMENTATION WORK
AT 132 KV BAHRIA TOWN PHASE-VIII GRID STATION RAWALPINDI GRID STATION BAHRIA TOWN**

Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
01	11 KV incoming switchgear panel, 2500A, 25KA with CT's Ratio 2400:1200/5A as per NTDC specifications	No.	01	4,131,960	4,131,960
02	12KV Surge Arrestors	Nos.	03	13,400	40,200
03	Modification / extension of existing 11KV structure	Lot	01	16,800	16,800
04	11KV Capacitor Bank, 6.4 MVAR with steel structure, capacitor racks, busbar strip, Earthing lugs etc. Note: i) Total 9.6 MVAR to be installed (3.2 MVAR already existing) ii) Space is available in existing steel frame. Some of the new capacitor units can be accommodated there.	No.	01	5,065,860	5,065,860
05	11KV Post Insulators with clamps	Nos.	03	46,688	140,064
06	Aluminum Conductor Hawthorne 600mm ²	Mtr	30	1,050	31,500
07	1000 MCM single core 11kV XLPE Power Cable (Al conductor) Power Transformer to I/C Panel	Mtr.	1050	4,045	4,247,250
08 (a)	1000 MCM single core 11kV XLPE Power Cable (Al conductor) from Capacitor Bank to 11kV Capacitor Panel	Mtr.	120	4,045	485,400
08 (b)	11kV Outdoor termination kits for 1000MCM single core power cable	Nos.	18	17,000	306,000
09	11kV Indoor termination kits for 1000MCM single core power cable	Nos.	18	20,000	360,000
10	Aluminum pipe, 100mm dia. 4 Mtr. Long	Lengths	03	44,530	133,590



Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
11	Connector type, 90BH30	Nos.	03	8,000	24,000
12	Connector type, 90B100F	Nos.	03	8,000	24,000
13	Connector type, BSP100	Nos.	03	7,000	21,000
14	Connector type, TM100A	Nos.	15	9,500	142,500
15	Grounding Conductor, 95mm ²	Mtr	40	2,220	88,800
16	Cartridge Type-A	No.	20	1,452	29,040
17	Mold for above	No.	02	17,000	34,000
18	Control cable 04 x 2.5mm	Mtr	200	778	155,600
19	Control cable 08 x 2.5mm	Mtr	310	1,100	341,000
20	Control cable 16 x 2.5mm	Mtr	280	1,700	476,000
21	Control cable 04 x 6.0mm	Mtr	380	1,350	513,000
22	Foundation for 40MVA Power Transformer Note: The existing foundation strength will be tested. The transformer foundation will be reinforced / modified, if required.	Lot	01	450,000	450,000
23	Foundation for Capacitor Bank (1 New + 1 Existing (Grouting Required only))	Lot	01	71,500	71,500
24	Erection, Testing & Commissioning of Equipment including Dehydration of oil for 31.5/40 MVA, 132/11.5KV, three phase Power Transformer	Lot	01	1,600,600	1,600,600
25	Transportation, loading / unloading etc. of Equipment including P. Trafo.	Lot	01	1,295,000	1,295,000



Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
	40MVA from Karachi Port to Site				
26	Dismantling of 10/13 MVA Power Transformer and its storage at designated place / store	Lot	01	750,000	750,000
27	Design & Engineering including Foundation drawings, Diagrams, Control & Interconnecting Schematics, Relay settings, As Built drawings etc.	Lot	01	1,100,000	1,100,000
TOTAL AMOUNT (in USD+PKR)					22,074,664 PKR



ANNEXURE-C

ADDITIONAL WORK AND SPARE PART FOR 132 KV BAHRIA TOWN PHASE-IV & PHASE-VIII

GRID STATIONS RAWALPINDI

Sr. No.	Description	Unit	Qty	Unit Price (in PKR)	Total Price (in PKR)
1	Additional Work	Lot	01	4,328,048	4,328,048
2	<u>Spare Parts Remaining Item</u> Secondary Current Test Set (SVERKER 750)	No.	01	2,495,000	2,495,000
TOTAL AMOUNT (in PKR)					6,823,048 PKR





ISLAMABAD

Electric Supply Company Limited

www.iesco.com.pk

Head Office, Street No.40, Sector G-7/4, Islamabad

No. 9128-36/CEO/IESCO/CE(P&E)/HS-580

Date: 07/08/2019

Engr. Muhammad Saleem
Dy. Chief Executive
Bahria Town (Pvt) Ltd
Rawalpindi

**Subject: SANCTION FOR EXTENSION OF LOAD FROM 25 MW TO 31 MW
(i.e.06 MW EXTENSION) IN RESPECT OF BAHRIA TOWN PHASE-IV
RAWALPINDI HAVING REFERENCE NO.2714356000300 U.**

The competent Authority of IESCO has accorded the approval for extension of load from 25 MW to 31 MW (i.e.06 MW extension) in respect of Bahria Town (Phase-IV) Grid station Rawalpindi with the following terms & conditions:-

Terms and conditions

1. Extension of load from 25 MW to 31 (06 MW extension) under Tariff C-3 (TOD) has been approved by BOD in its 169th meeting held on 22.01.2018 in respect of Bahria Town Phase-IV Islamabad in the light of NEPRA Commercial Procedure circulated by Chief Engineer (CSD) IESCO dated 08.06.2018.
2. Admn approval and technical sanction of BOQ/Cost estimate for installation of 2nd metering CTs / metering arrangement at 132 KV Grid station Bahria Town Phase-IV for amounting to Rs.36,93,222/- in the light of revised book of financial power of IESCO (2018) Section-II Clause-2.4.1.
3. Issuance of Demand notice by Chief Engineer (P&E) for the following:-
 - a. Capital cost Rs.36,93,222/- for installation of the 2nd metering CTs / metering arrangement on 132 KV side to ensure proper billing.
 - b. Security amount Rs.1,64,40,000/- for extended load of 06 MW @ 2740/KW under Tariff C-3.
4. The work for installation of 2nd metering CTS / metering equipment on 132 KV side shall be carried out by PD (GSC) IESCO Islamabad. 10/13 MVA power transformer and allied accessories such as CP, RP, MV panels etc. are already exist at site as intimated by Bahria Town vide letter No.786/BTS/132KV/GS-Phase-IV-I Ltd dated 30.04.2018. If any additional work is required in this regard the same shall be carried out by the Sponsor himself at his own cost.
5. The one point metering shall be carried out through installation of meter on each transformer as recommended by the Committee constituted vide letter No. 7120-25 dated 13.06.2019.
6. Any cost if required additionally due to right of way problem or escalation in cost of material during construction work or any other unforeseen reason will have to be deposited by the applicant". The actual material and its installation charges for the network to be installed should be charged at the prevailing store issue rates at the time of execution of the job. Difference / variation if occurred (less/excess) shall be adjusted accordingly after completion of the entire work. The work shall be taken in hand after taking an undertaking from the consumer in this regard.
7. The complete right of way facilities as well as clearance / permission from concerned administrative office for the electrical network to be constructed will be sole responsibility of the sponsor / applicant.
8. The Contractor Wiring test report for the total load i.e.31 MW from the office of Electric Inspector Govt. of Punjab alongwith NOC for energization of load on 132 KV shall be provided by the consumer / sponsor after payment of the demand notice for Capital cost & Security amount as per Clause-3 (a&b) above.

SANCTION FOR EXTENSION OF LOAD FROM 25 MW TO 31 MW (i.e.06 MW EXTENSION) IN RESPECT OF BAHRIA TOWN PHASE-IV RAWALPINDI HAVING REFERENCE NO.2714356000300 U.

9. The Sponsor will pay the testing & commissioning charges to IESCO as per prevailing rates.
10. Technical Committee will be constituted for energization of Transformer as well as extended load after receipt of payments of Capital cost, Security amount and completion of work report by the executing agency of the IESCO & verification of contractor wiring test report by the CE (P&E) IESCO Islamabad.
11. All requirements dictated by Commercial Procedure, Standard design instructions, electricity rules, tariff applicable should be strictly met with according to the latest instructions and MOU already signed between IESCO and Management of Bahria Town.
12. All other Departmental formalities should be observed before energization of extended load.

XEN (E) IESCO Operation Division Cantt: Rwp will monitor the implementation of all the above noted terms and conditions in true letter and spirit.

DA/Cost Estimate:


Chief Engineer (P&E)
IESCO Islamabad

Copy to:

1. CE (Development) IESCO Islamabad.
 2. CE (T&G) IESCO Islamabad.
 3. PD (GSC) IESCO Islamabad.
 4. SE (E) IESCO Rawalpindi.
 5. XEN (E) IESCO Cantt: Division Rawalpindi.
 6. XEN (P&I) IESCO Islamabad.
 7. XEN (T&G) IESCO Islamabad.
 8. XEN (SS&TL) IESCO Islamabad.
- Master File
- } for information.

**ISLAMABAD****Electric Supply Company Limited**

Head Office, Street No.40, Sector G-7/4, Islamabad

www.iesco.com.pk

No. 4134-41 /CEO/IESCO/CE(P&E)/HS-58Date: 07/08/2019

Engr. Muhammad Saleem
Dy. Chief Executive
Bahria Town (Pvt) Ltd
Rawalpindi

Subject: TENTATIVE DEMAND NOTICE FOR EXTENSION OF LOAD FROM 25 MW TO 31 MW (i.e.06 MW EXTENSION) IN RESPECT OF BAHRIA TOWN PHASE-IV RAWALPINDI HAVING REFERENCE NO.2714356000300 U.

The Competent Authority has accorded the approval for extension of load from 25 MW to 31 MW (i.e.06 MW extension) in respect of Bahria Town (Phase-IV) Grid station Rawalpindi

You are therefore required to deposit the Capital cost with Finance Director IESCO Head Office Islamabad and Security amount to CSO (P) IESCO Cantt: Rwp through separate Bank draft / pay orders in the name of Chief Executive Officer IESCO Islamabad as per detail mentioned below within 30 days positively under intimation to this office as well as to other concerned offices:-

Name of Work	Capital cost Estd. amount	Security amount (Rs.)	Ultimate System load	Regd No.
Admn approval & technical sanction of BOQ / Cost estimate for extension of load from 25 MW to 31 MW (i.e.06 MW extension) in respect of Bahria Town Phase-IV Islamabad.	Rs.36,93,222/-	1,64,40,000/-	25 MW to 31 MW (i.e.06 MW extension)	CE(P&E)/06 2019

Further, it is being issued subject to the terms & conditions as noted below:

1. The Demand Notice is tentative, amount of work may vary according to the site requirement and enhancement in the rates of material / civil work etc.
2. The complete right of way facilities as well as clearance / permission from concerned administrative office for the electrical network to be constructed will be sole responsibility of the sponsor / applicant.
3. Any cost if required additionally due to right of way problem or escalation in cost of material during construction work or any other unforeseen reason will have to be deposited by the applicant". The actual material and its installation charges for the network to be installed should be charged at the prevailing store issue rates at the time of execution of the job. Difference / variation if occurred (less/excess) shall be adjusted accordingly after completion of the entire work. The work shall be taken in hand after taking an undertaking from the consumer in this regard.
4. The work for installation of 2nd metering CTs/metering equipment on 132 KV side shall be carried out by PD (GSC) IESCO Islamabad after receipt of Capital cost & Security amount from the sponsor / applicant as per detail mentioned in the sanction letter.


Chief Engineer (P&E)
IESCO Islamabad

Copy to:

1. Finance Director IESCO Head office Islamabad. He is requested to intimate this office as and when the above mentioned amounts received from the sponsor. Further the capital cost may be credited to PD (GSC) IESCO Islamabad.
 2. Project Director (GSC) IESCO Ibd
 3. SE (E) IESCO Rawalpindi Circle Rawalpindi
 4. XEN (E) IESCO Cantt Division Rawalpindi.
- Master File.
- } for information & necessary action

SECURITY AMOUNT



پاکستان کا بجلی اور پانی کاتر قیاسی ادارہ (شعبہ برقیات)

11.04.2019 تاریخ
Hs-588
درخواست رجسٹریشن نمبر
EOL
قسم درخواست
EOL
قسم مطلوبہ سپلائی
Bharia Town Phase-IV Islamabad
قسم انڈسٹری یا ٹیکسٹائل
25MW to 31 MW (06 MW extension)
مطلوبہ مجموعی لوڈ (کلو واٹ میں)
11 KV
مطلوبہ سپلائی وولٹیج
C-3 (TOD)
متعلقہ ٹیرف شیڈول / گروپ

06
30.07.2019
2714356000300
ذیماندہ نوٹس کا سلسلہ وار نمبر
ذیماندہ نوٹس کی تاریخ کا اجراء
درخواست حصول نکیشن کوالاٹ شدہ اکاؤنٹ / حوالہ نمبر
(جس کے تحت رقوم بینک میں ادارہ کے متعلقہ افسر کے پاس جمع کرانی ہیں)
ادارہ کے منظور شدہ بینک کا نام
ادارہ کے متعلقہ ریونیو افسر کے دفتر کا مکمل پتہ
CSO (P) IESCO Cantt: Rwp

ڈیمانڈ نوٹس

(اطلاع نامہ منظوری درخواست و طلبی اخراجات سروس کنکشن)

Engr. M. Saleem Dy. Chief Executive Bahria Town Phase-IV (Pvt) Ltd Rwp

محترمی احترام،
آپ کو بذریعہ ڈیمانڈ نوٹس بذیاد اطلاع دی جاتی ہے کہ آپ کی درخواست برائے حصول نکیشن بجلی جس کے کوائف اب درج کئے گئے ہیں افسر مجازانہ ادارہ کی مروجہ عام شرائط بجلی کے علاوہ مندرجہ ذیل شرائط پر منظوری کر لی ہے۔

۱۔ آپ اس نوٹس کے اجراء کی تاریخ سے 30 Days کے اندر اندر مندرجہ ذیل رقوم ادارہ کے منظور شدہ بینک میں یا خود ادارہ کے متعلقہ افسر کے پاس جمع کروا کر ان کی ادائیگی سے متعلق رسید نمبر اور تاریخ سے میرے دفتر کو مطلع کریں۔

(الف) اخراجات سروس نکیشن مطابق منظور تخمینہ خرچہ **Rs.164,40,000/-** یہ رقم ادارہ کے متعلقہ افسر **CSO (P) IESCO Cantt: Rwp** کے پاس جمع کرانی ہے) اگر نکیشن لگانے سے پہلے اخراجات سروس نکیشن منظور شدہ تخمینہ سے زیادہ پائے گئے تو جمع شدہ رقم کے فرق کے برابر جمع کرانا ہوگی جس کے لیے اضافی ڈیمانڈ نوٹس جاری کیا جائے گا۔
(ب) بقایا جات بوجھ عدم ادائیگی سابقہ بل بجلی وغیرہ۔ روپے (یہ رقم ریونیو افسر سے آخری بل وصول کر کے بینک میں جمع کرانی ہے)۔

نوٹ:- اگر آپ گھریلو، تجارتی (کمرشل) صنعتی تھوک سپلائی کے درخواست دہندہ یا صارف ہیں آپ اس سلسلہ میں ڈیمانڈ نوٹس بذیادگی ذیلی ہوت کو (جو آپ کے جواب کے لیے مختص کی گئی ہے) پر کریں اور اس پر اپنے دستخط ہمہ تاریخ ثبت کر کے میرے دفتر کو واپس بھجوائیں۔

۲۔ آپ اس نوٹس کے اجراء کی تاریخ سے 30 Days دن/ماہ کے اندر اپنی عمارت کی اندرونی وائرنگ کے پختہ اور معیاری ہونے اور اپنے آگہ جات برائے استعمال بجلی کی تنصیب مکمل ہو جانے کے ثبوت میں گورنمنٹ کے منظور شدہ وائرنگ کنٹریکٹر سے نسبت رپورٹ حاصل کر کے برائے مزید حکمانہ معائنہ اور نسبت میرے دفتر کو بھجوائیں اور رسید حاصل کر کے (غالی ٹسٹ رپورٹ فارم سی بی۔ ۷ لطف ہے)

۳۔ آپ نے چونکہ ادارہ کو بجلی کی سپلائی کی پیشکش کے لیے اپنا میٹر مہیا نہیں کیا اس لیے آپ سے ادارہ کی مروجہ سروس چارج شیڈول کے مطابق روپے ماہوار کرایہ میٹر چارج کیا جائے گا۔
۴۔ ڈیمانڈ نوٹس برائے زر ضمانت علیحدہ ارسال کیا گیا ہے نکیشن کی کاروائی دونوں ڈیمانڈ نوٹس کی رقوم علیحدہ علیحدہ داخل ہونے کے بعد شروع ہوگی۔ (جو غیر متعلقہ ہو لوکاٹ دیا جائے)
اگر آپ نے ڈیمانڈ نوٹس بذیادگی کے جواب میں مندرجہ بلا شرائط کی مقررہ معیار کے اندر تعمیل نہ کی آپ کی درخواست فارم برائے حصول بجلی کوالاٹ شدہ جاری نمبر کالناٹ نہیں رکھنا ہے گا۔ ڈیمانڈ نوٹس بذیادگی اجراء سے 30 Days خود بخود غیر موثر تصور ہوگا۔
خیر اندیش

Rs.164,40,000/-
One Crore Sixty four Lac & Forty thousand Only

Due Date: 29.08.2019

Chief Engineer (P&E)
Islamabad Electric Supply Co.
Islamabad

برائے استعمال بینک

(متعلقہ بینک اس ہرٹ کو ڈیمانڈ نوٹس سے علیحدہ کر کے اپنے بینک سکرول کے ساتھ دفتر متہم بجلی کو بھیجے گا)

Engr. M. Saleem Dy. Chief Executive Bahria Town Phase-IV (Pvt) Ltd Rwp

۱۔ درخواست دہندہ یا صارف کا نام اور مکمل پتہ
۲۔ درخواست رجسٹریشن نمبر
۳۔ ڈیمانڈ نوٹس کا سلسلہ وار نمبر
۴۔ درخواست کوالاٹ شدہ اکاؤنٹ / حوالہ نمبر
۵۔ منظور شدہ بینک کا نام اور پتہ

Rs.164,40,000/-

مہر دستخط افسر بینک

منیجر پلاننگ اینڈ انجینئرنگ
انٹیکو بیٹا افس اسلام آباد

برائے استعمال کمپیوٹر سنٹر (کوائف ڈیمانڈ نوٹس)

ذیماندہ نوٹس کا نمبر
ذیماندہ نوٹس کی تاریخ کا اجراء
درخواست رجسٹریشن نمبر
ذیماندہ نوٹس کا نام
Hs-588
06
30.07.2019
Hs-588
Rs.164,40,000/-
درخواست فارم نمبر
واجب الادارہ رقم



ISLAMABAD

Electric Supply Company Limited

Head Office, Street No. 40, Sector G-7/4, Islamabad

www.iesco.com.pk

No. 316-20 /CEO/IESCO/CE(P&E)/HS-58Date: 12/01/2022

Engr. Muhammad Saleem
Dy. Chief Executive
Bahria Town (Pvt) Ltd
Rawalpindi

Subject: TENTATIVE DEMAND NOTICE FOR EXTENSION OF LOAD FROM 20 MW TO 45 MW (25 MW EXTENSION) LOAD IN RESPECT OF EXISTING BULK SUPPLY CONNECTION UNDER TARIFF C-3 OF BAHRIA TOWN PHASE-VIII RAWALPINDI BEARING REFERENCE NO. 27-14615-6064500

Reference: Your office letter No. No. No.786/BTS/EXTN GS PH-8 dated 04-09-2021.

The Chief Executive Officer IESCO has been pleased to accorded the approval for extension of load from 20 MW to 45 MW (25 KW Extension) in respect of existing Bulk supply connection under tariff C-3 energized through 220/132 KV Bahria Town Grid station of Phase-VIII having reference No. 27-14615-6064500.

You are therefore requested to deposit the Security amount as mentioned below against subject work within **30 days** positively from the issue date of this letter / demand notice.

Sr. No.	Description	Estimated Amounts (Rs.)	Remarks
1.	Security amount	Rs. 68,500,000/-	This payment shall be deposited in the office of CSO (P) IESCO Cantt: Division Rawalpindi as per attached demand notice No.54 dated 12.01.2022

Note: After making the above payment this office may be informed immediately for further necessary action.

1. The payment of above security amount shall in no way absolve the Sponsor i.e. M/s Bahria Town of its obligations and liabilities including the following: -
 - i) Commencement of work shall be subject to condition that the Augmentation work of Grid Station shall be carried out by M/s Bahria Town (Pvt) Ltd itself in the light of recommendations of Load flow study carried out by Chief Engineer (TSW) IESCO Islamabad.
 - ii) Self-execution of work by the sponsor in accordance with terms and conditions of MOU already executed between IESCO and M/s Bahria Town and Design and Drawings approved by Chief Engineer (TSW) IESCO Islamabad.
 - iii) The Sponsor will arrange the factory acceptance test of Power transformer and other major items which are to be installed at Grid Station in the presence of IESCO representatives.
 - iv) The Sponsor will pay the testing & commissioning charges to IESCO as per prevailing rates.
 - v) Technical Committee will be constituted for energization of Transformer as well as issuance of SCO for load upto 45 MW after receipt of payments of Security amount, completion of work report to IESCO & verification of contractor wiring test report by the CE (P&E) IESCO Islamabad & NOC from Electrical Inspector Govt. of Punjab from the applicant.
 - vi) All other terms & conditions of MOU signed between IESCO & M/s Bahria Town (Pvt) Ltd on 29.11.2007 shall remain the same / intact.


Chief Engineer (P&E)
IESCO Islamabad

Copy to:-

1. Chief Engineer (Dev) IESCO Islamabad.
 2. SE (E) IESCO Cantt Circle Rawalpindi for information.
 3. XEN (E) IESCO Cantt Division Rawalpindi for information.
 4. CSO (P) IESCO Cantt: Division Rawalpindi along with copy of **D.N No.54 dated 12.01.2022**. He is required to intimate this office immediately after receipt of security amount from the consumer.
- > Master File

درخواست رجسٹریشن نمبر **HS-58** تاریخ **04.09.2021**
 قسم درخواست **EOL**
 قسم مطلوبہ سپلائی **Bulk Supply**
 قسم انڈسٹری یا ٹیکسٹائل **Bahria Town Phase-VIII Rawalpindi**
 مطلوبہ مجموعی لوڈ (کلو واٹ میں) **20 MW to 45 MW (25 MW Extension)**
 مطلوبہ سپلائی وولٹیج **11 KV**
 متعلقہ ٹیرف شیڈول / اگر روپ **G-3**

ڈیمانڈ نوٹس کا سلسلہ وار نمبر **54**
 ڈیمانڈ نوٹس کی تاریخ کا اجراء **12.01.2022**
 درخواست حصول کنکشن کوالاٹ شدہ اکاؤنٹ / حوالہ نمبر **27-14615-6064500**
 (جس کے تحت رقوم بینک میں ادارہ کے متعلقہ افسر کے پاس جمع کرانی ہیں)
 ادارہ کے منظور شدہ بینک کا نام **CSO (P) Division Cantt Rwp**
 ادارہ کے متعلقہ ریویو افسر کے دفتر کا مکمل پتہ

ڈیمانڈ نوٹس

(اطلاع نامہ منظوری درخواست و طلبی اخراجات سروس کنکشن)

Dy.Chief Executive Bahria Town Services Rawalpindi

محرمی / محترم (درخواست دہندہ یا صارف کا نام اور مکمل پتہ)
 آپ کو بذریعہ ڈیمانڈ نوٹس ہذا اطلاع دی جاتی ہے کہ آپ کی درخواست برائے حصول کنکشن بجلی جس کے کوائف اوپر درج کئے گئے ہیں افسر مجاز نے ادارہ کی مروجہ عام شرائط بجلی کے علاوہ مندرجہ ذیل شرائط پر منظوری کر لی ہے۔

30 Days

۱۔ آپ اس نوٹس کے اجراء کی تاریخ سے **30 Days** اندر اندر مندرجہ ذیل رقوم ادارہ کے منظور شدہ بینک میں یا خود ادارہ کے متعلقہ افسر کے پاس جمع کروا کر ان کی ادائیگی سے متعلق رسید نمبر اور تاریخ سے میرے دفتر کو مطلع کریں۔

(الف) اخراجات سروس کنکشن برطابق منظور تخمینہ خرچ **Rs.68,500,000/-** یہ رقم ادارہ کے متعلقہ افسر **CSO (P) Division Cantt Rwp** کے پاس جمع کرانی ہے) اگر کنکشن لگانے سے پہلے اخراجات سروس کنکشن منظور شدہ تخمینہ سے زائد پائے گئے تو جمع شدہ رقم کے فرق کے برابر جمع کرانا ہوگی جس کے لیے اضافی ڈیمانڈ نوٹس جاری کیا جائے گا۔
 (ب) بقایا اجات بوجہ عدم ادائیگی سابقہ بل بجلی وغیرہ (یہ رقم ریویو افسر سے آخری بل وصول کر کے بینک میں جمع کرانی ہے)۔

نوٹ:- اگر آپ گھریلو تجارتی (کمرشل) صنعتی تھوک سپلائی کے درخواست دہندہ یا صارف ہیں آپ اس سلسلہ میں ڈیمانڈ نوٹس ہذا کی ذیلی پرت کو (جو آپ کے جواب کے لیے مختص کی گئی ہے) پر کریں اور اس پر اپنے دستخط ہمہ تاریخ ثبت کر کے میرے دفتر کو واپس بھجوائیں۔

۲۔ آپ اس نوٹس کے اجراء کی تاریخ سے **30 Days** دن ماہ کے اندر اندر اپنی عمارت کی اندرونی دائرہ کار کے پختہ اور معیاری ہونے اور اپنے آئٹم جات برائے استعمال بجلی کی تنصیب مکمل ہو جانے کے ثبوت میں گورنمنٹ کے منظور شدہ دائرہ کار کنٹریکٹر سے ٹسٹ رپورٹ حاصل کر کے برائے مزید حکمانہ معائنہ اور ٹسٹ میرے دفتر کو بھجوائیں اور رسید حاصل کر کے (خالی ٹسٹ رپورٹ فارم سی پی۔ کے لف ہے)

۳۔ آپ نے چونکہ ادارہ کو بجلی کی سپلائی کی پیمائش کے لیے لہنا میٹر مہیا نہیں کیا اس لیے آپ سے ادارہ کی مروجہ سروس چارجز شیڈول کے مطابق **30 Days** روپے ماہوار کرایہ میٹر چارج کیا جائے گا۔
 ۴۔ ڈیمانڈ نوٹس برائے ضمانت علیحدہ سال کیا گیا ہے کنکشن کی کارروائی دونوں ڈیمانڈ نوٹس کی رقوم علیحدہ علیحدہ داخل ہونے کے بعد شروع ہوگی۔ (جو غیر متعلقہ ہو تو کاٹ دیا جائے)
 اگر آپ نے ڈیمانڈ نوٹس ہذا کے جواب میں مندرجہ بالا شرائط کی مقررہ معیار کے اندر تعمیل نہ کی آپ کی درخواست فارم برائے حصول بجلی کوالاٹ شدہ جاری نمبر کا لحاظ نہیں رکھا جائے گا۔ ڈیمانڈ نوٹس ہذا (تاریخ اجراء سے **30 Days** خود بخود غیر موثر تصور ہوگا۔

خیر اندیش

ڈپٹی مینیجر پلاننگ اینڈ انجینئرنگ
 انیسکو بیڈ آفس اسلام آباد

برائے استعمال بینک

(متعلقہ بینک اس پرت کو ڈیمانڈ نوٹس سے علیحدہ کر کے اپنے بینک سکروں کے ساتھ دفتر تمہم بجلی کو بھیجے گا)

Dy.Chief Executive Bahria Town Services Rawalpindi

۱۔ درخواست دہندہ یا صارف کا نام اور مکمل پتہ
 ۲۔ درخواست رجسٹریشن نمبر **HS-58** تاریخ **04.09.2021**
 ۳۔ ڈیمانڈ نوٹس کا سلسلہ وار نمبر **54** تاریخ **12.01.2022**
 ۴۔ درخواست کوالاٹ شدہ اکاؤنٹ / حوالہ نمبر **27-14615-6064500**
 ۵۔ منظور شدہ بینک کا نام اور پتہ

Rs.68,500,000/-

مہر دستخط افسر بینک

Chief Engineer (P&E)
 Supply Co.
 مینیجر پلاننگ اینڈ انجینئرنگ
 انیسکو بیڈ آفس اسلام آباد

برائے استعمال کمپیوٹر سنٹر (کوائف ڈیمانڈ نوٹس)

ڈیمانڈ نوٹس کا نمبر **54** تاریخ **12.01.2022**
 ڈیمانڈ نوٹس کی تاریخ کا اجراء
 درخواست رجسٹریشن نمبر **HS-58** تاریخ **04.09.2021**
 درخواست فارم نمبر **HS-58** تاریخ **12.01.2022**
 واجب الادا رقم **Rs.68,500,000/-**



www.iesco.com.pk

ISLAMABAD

Electric Supply Company Limited

Head Office, Street No.40, Sector G-7/4, Islamabad

No. 307-15 /CEO/IESCO/CE(P&E)/HS-58

Date: 12/01/2022

Engr. Muhammad Saleem

Dy.Chief Executive

Bahria Town (Pvt) Ltd

Rawalpindi

Subject: SANCTION FOR EXTENSION OF LOAD FROM 20 MW TO 45 MW (25 MW EXTENSION) LOAD IN RESPECT OF EXISTING BULK SUPPLY CONNECTION UNDER TARIFF C-3 OF BAHRIA TOWN PHASE-VIII RAWALPINDI BEARING REFERENCE NO. 27-14615-6064500

Reference: Your office letter No. No. No.786/BTS/EXTN GS PH-8 dated 04-09-2021.

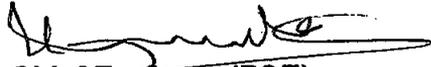
The Chief Executive Officer IESCO has been pleased to accorded the approval for extension of load from 20 MW to 45 MW (25 KW Extension) in respect of existing Bulk supply connection under tariff C-3 energized through 220/132 KV Bahria Town Grid station of Phase-VIII having reference No. 27-14615-6064500. -

Terms and conditions

1. Approval / sanction for extension from 20 MW to 45 MW (25 KW Extension) in respect of existing Bulk supply connection under tariff C-3 energized through 220/132 KV Bahria Town Grid station of Phase-VIII having reference No. 27-14615-6064500.
2. Issuance of demand notice by the office of Chief Engineer (P&E) IESCO for security amounting to Rs. **68,500,000/- (68.50 million)** (Total Security Rs. 123,300,000-54,800,000 already paid) against ultimate load demand of 45 MW (20 MW to 45 MW) @ Rs.2740/ per KW.
3. The Augmentation work of Grid Station shall be carriedout by M/s Bahria Town (Pvt) Ltd itself in the light of recommendations of Load flow study carriedout by Chief Engineer (TSW) IESCO Islamabad.
4. The extension of load will be regularized after receipt of above required security amount from the Sponsor and the Augmentation work at the grid station shall be carriedout by the sponsor himself under supervision of Chief Engineer (Development) IESCO Islamabad strictly in the light of MOU signed between IESCO & Bahria Town (Pvt) Ltd on dated 29.11.2007.
5. M/s Bahria town (Pvt) ltd shall abide by all the NEPRA/PPMC/IESCO & NTDC instructions / rules, design & specifications.
6. The Sponsor will pay the testing & commissioning charges to IESCO as per prevailing rates.
7. The sponsor shall provide test report for total load i.e. 45 MW & NOC from the office of Electrical Inspector Govt. of Punjab Energy department.
8. Technical Committee will be constituted & SCO will be issued for energization of Transformer as well as extended load upto 45 MW after receipt of payments of Security amount, completion of work report to IESCO and verification of contractor wiring test report by the CE (P&E) IESCO Islamabad .
9. All requirements dictated by Commercial Procedure, Standard design instructions, electricity rules, tariff applicable should be strictly met with according to the latest instructions and MOU already signed between IESCO and Management of Bahria Town.
10. The work will be executed in accordance with the design & drawings approved by Chief Engineer (TSW) IESCO Islamabad.
11. The Sponsor will arrange the factory acceptance test of Power transformer and other major items which are to be installed at Grid Station in the presence of IESCO representatives.
12. The drawings regarding extension of Grid Station shall be submitted to Chief Engineer (TSW) IESCO for vetting and approval, at the cost of M/s Bahria Town.

13. Existing tariff shall remain un-changed.
14. All other Departmental formalities should be observed before energization of extended load.
15. All other terms & conditions of MOU signed between IESCO & M/s Bahria Town (Pvt) Ltd on 29.11. 2007 shall remain the same / intact.

XEN (E) IESCO Operation Division Cantt: Rwp will monitor the implementation of all the above noted terms and conditions in true letter and spirit.


**Chief Engineer (P&E)
IESCO Islamabad**

Copy to:

1. CE (Dev.) IESCO Islamabad for information please.
2. CE (TSW) IESCO Islamabad for information please w.r t load flow study received vide letter # 833 dated 25-10-2021.
3. CE (T&G) IESCO Islamabad. for information please.
4. SE (E) IESCO Cantt Circle Rawalpindi. for information
5. XEN (E) IESCO Cantt: Division Rawalpindi. for information
6. XEN (P&I) IESCO Islamabad. for information
7. XEN (T&G) IESCO Islamabad. for information
8. XEN (SS&TL) IESCO Islamabad.

Master File

Bahria Town (Private) Limited

Company's Profile

Bahria Town (Private) Limited (BTL) is a company registered under the Company's Ordinance 1984.

Bahria Town (Pvt) Ltd is one of those housing schemes which are unique in many aspects providing numerous facilities to its residents. A spacious net work of major and minor roads with footpaths, ornamental plants and fancy street lights is an integral part of BTL. Beautiful play grounds and parks, all types of sports facilities including a mini golf course add glamour to the housing scheme.

Keeping in line with the international standards all utilities are underground; it has its own grid station, telephone exchange and Sui gas net work. Community centre, wedding halls, clubs, education and health facilities, fire brigade and many more adds to the comfort and living standard of its residents. Environmental aspects have been adequately taken care off through BTL horticulture department. Proper waste water treatment plants are in place and disposal of solid waste and its proper disposal have been designed on the most modern methods.

The proponent of BTL is Mr. Malik Riaz Hussain and the scheme is located 6-8 kms from Rawalpindi and 10-15 kms from Islamabad. Total area of the housing scheme is approximately 106,000 kanals out of which 76,000 kanals are in Rawalpindi and 31,000 kanals are in Islamabad territory. It will accommodate an estimated population of 100000. Globally the construction and housing industry accounts for 10-12 per cent of the GDP and 7 percent employment. The current project is providing numerous job opportunities directly and indirectly. It is playing an important role in boosting the economy of the Country because numerous industries are involved during the design, construction and operational phases of the project.

Amazing facts about Bahria Town.

1. Largest private sector developer in Asia it is the first real estate developer in Pakistan to have a fully integrated Enterprise Resource Planning and Management System.

2. Bahria Town has over hundreds of heavy construction equipment units deployed at the Lahore and Rawalpindi projects sites. The worth of this equipment is over 4 billion rupees with strict compliance to international quality and safety codes. Bahria Town is the first and only developer in Pakistan to maintain such a high inventory of equipment. This speaks of the commitment and forward planning of the organization. All other developers use third parties to complete the development.
3. First ever project in private sector with underground provision of utilities and supplies.
4. The first of its kind state of the art call centre operational 365 days a year.
5. The first ever real estate developer in Pakistan to transform into local multinational with a corporate ideology based on "Community First and Profitability Follows".
6. Our driving force is choosing change over compliancy, challenge over goals, pioneers over followers and life style.
7. Bahria Town pays millions of rupees in direct and indirect taxes. Conducting its business as a progressive corporate member of the society it provides opportunities to many in the form of project management and customer driven initiatives.
8. Bahria Town employs more than 10,000 workers in direct and indirect employment, who are working tirelessly to develop the Current projects with operational excellence. Quality and safety are the two most important factors besides facilities like school, health cover, career path, training & development and financial aid for the needy.
9. The organization provides employment opportunities for over 1,000 local suppliers and creates another 15,000 jobs associated through Supply chain network in Islamabad and Lahore.
10. 100,000 households are dependent on Bahria Town for their sustenance and development through direct, indirect and supply chain associated employment.

11. Bahria Town enjoys the largest member base in Pakistan. It has over 1500,000 customers, making in the largest real estate developer in Asia.
12. Home Plus is the third largest card company in Pakistan with a member base of over 100,000; belonging to different regions of Pakistan, with a huge response from the rural areas.
13. If the direct indirect employees of the Bahria Town are lined up with their arm stretched wide open along with the Bahria's equipment they will form a line from Lahore to Rawalpindi and Karachi.
14. Bahria Town is an equal opportunity employer and has a richly diverse workforce. The employee base consists of people belonging to different casts, creeds, religions and from different regions such as Philippines, Middle East, Malaysia and the United States.
15. If we line up the bricks that Bahria Town consumes in a year they will go around the world 5 times!

By the Grace of God Almighty Bahria Town (Private) Limited is the biggest name in housing sector today.

The Company was incorporated by the Bahria Foundation in collaboration with the private sector on 1st January 1996. Bahria Town still holds the record of having marketed 5,600 plots in 30 days. Ifs projects gained instant popularity in general public in Pakistan and amongst overseas Pakistanis as well and on account of very competitive prices and development per international standards. The Company holds the confidence of its more than 100,000 subscribers in Pakistan and all over the world today as it has implemented international development standards not seen/emulated in Pakistan ever before.

In Bahria Town projects, development works are executed scientifically Using plant and machinery worth approximately Rs. 17.5 billion. The development standards actually exceed metropolitan standards in Pakistan. The Bahria townships at Rawalpindi/Islamabad and Lahore present an eye- catching scene with full width carpeted streets and walkways on both sides of the streets paved with tiles. Services

are laid on both sides of the streets. Underground electrical system has pad mounted transformers meeting national standards on power distribution.

The project, launched on 1st January 1996, spreads over 12,000 kanals of and along picturesque Soan and Korang rivers. Its land use policy strictly conforms to CDA/RDA specifications. Eight out of Nine phases have already been completed. Work is in progress on in Phase Eight Extension. The entire project is expected to be completed by the year 2023.

Phase VIII and IX were announced in September 2003 and August 2004 respectively and were heavily oversubscribed. Phase VIII attracted around 15,000 members whereas 52,000 members booked their plots in Phase IX. Total land measuring some 80,000 kanals has been purchased and development is being carried out by Bahria Town itself and Habib Rafiq (Pvt) Ltd, a renowned Developer.

Bahria Bridges, built by the Company at its own expenses over Korang river, Soan river conforms to NHA AA' standard (75 tons rating). It is by far the largest bridge built in Pakistan by any housing company for its Use. The bridge is in fact social service rendered by Bahria Town in getting people together as it links CDA Zone V with the city of Rawalpindi through an alternate and much needed link route. Another bridge has been built on Soan River that will connect Bahria Town with GT Road.

Grid Station of 1 x 220 KV and 2 x 132KV/11KV installed by Bahria Town at its own cost are now working and providing electricity to Bahria Town. Distribution and billing of electricity is being handled by trained staff of Bahria Town.

2 x telephone Exchanges are also working in Bahria Town. Sui Gas is now available in Bahria Town.

Parks and a Zoo in Bahria Town Phase IV and Phase VIII are attracting a lot of Public from the adjoining areas even of the far areas of Rawalpindi/Islamabad. A large variety of animals and birds are available in the Zoo.

Projects of Bahria Town are as under:

1. Safari Villas, Rawalpindi.

It is a unique housing project with a picturesque landscape and a breath of fresh air in the thickly populated Rawalpindi city. Located on the bank of River Korang and adjacent to Safari Park it presents a true Scene. This uneven piece of land is an attractive and amazing creation of nature. Its surrounding river and population free pure environment makes it a dreamland. Three hundred Villas of different designs have been built in Safari-Villas. Safari Villas - I, II and III are fully completed and occupied. This is a completely secured gated community with our maintenance and security team present 24 hours a day at resident's service. It has a fully functional club, swimming pool, tennis court, squash courts and a small commercial centre. The school and college provide best educational facilities.

2. Safari Apartments, Rawalpindi.

Located strategically at the entry point of Bahria Town and Safari Villas, Safari Apartments give a unique look with their beautiful and symmetric designs. Eight blocks contain 100 Apartments. The entry point of block is wide, beautiful and laced with tiles. The project will reach completion within two years. A common compound wall with a security check point will prevent unauthorized entry. Round the clock maintenance facilities for the residents include electrician, plumbers, carpenters, sweepers and gardeners.

3. Safari Homes, Rawalpindi

Safari Homes, a project of 2,000 houses especially designed for low income people and constructed by a Turkish Firm M/s Areaa of international repute to construct 2,000 houses within a period of 2-3 years. Safari Homes is providing quality living to the people having low income.

4. Meadows/Executive Lodges, Rawalpindi

Meadows/ Executive lodges a project of 500 luxurious houses have been designed and launched specially for the Pakistanis returning from abroad and for local people . These houses are being sold at a price of Rs. 17.50 million to Rs.25.0 million. Around 1500 such houses have been constructed in Bahria Town Phase II, III and VI.

5. Bahria Town Lahore Project

After the successful launching of a project at Rawalpindi/Islamabad. Bahria Town launched its second housing project at Lahore on 23 January 1997. The project has approximately 50,000 kanals of land which is being developed out of which sector, A, B, Executive Lodges. 5-7 Marla Scheme have been fully developed. Sector C having 15,000 Customers launched in September 2004 is being developed by Habib Rafiq, a renowned land developer.

6. Executive Lodges.

For those who like more room and more garden space, the area designated for Executive Lodges offers a choice of four to thirty-six kanals plots. You have the option to make your own farm house or have our architects design and build for you. Within easy reach, yet secluded Executive Lodges offers privacy and tranquility in a world full of day-today stress.

You can wake up to the trilling of birds every morning, away from the noise and pollution, surrounded by trees in a tranquil setting.

7. Safari Homes, Lahore.

Safari Homes a project of 1,000 houses especially for low income people has already been booked. 100 houses have been completed and remaining are almost 80 % complete. These houses are being constructed under the supervision of highly qualified team of professionals. Safari Homes will provide quality living for the people having low income.

8. Awami Villas, Rawalpindi/Islamabad.

The desire of having a home has been an elusive dream for many Pakistanis. Now on completion of 10 successful years of Bahria Town, it proudly announced a new low cost housing project of Awami Villas deploying the steel pre fabricated modular structure technology. Awami villas will cater exclusively for the demands of the low income class and is aimed to mitigate the housing crisis of our Country. Over 100,000 houses will be built and made available through an easy installment plan stretching over a 16 year period. The phase I of the project has

been launched in Rawalpindi. Machinery for fabrication of wall panels has been imported at a cost of US\$ 3.0 million including sheds. The factory has been commissioned on 14th August, 2006. Necessary land for the project adjacent to DHA Phase 2 extension has been purchased and is being developed.

9. Bahria Heights.

Bahria Heights is another prestigious project of Bahria Town situated in Phase-I. It is a project of quality furnished 2-Bed/Studio apartments in a beautiful location. Bahria Heights was launched on 26th June 2005 and all 1 the units have been sold out. It meets all the international quality standards to lift your luxurious living in Pakistan.

Various projects like Bahria Springs, Bahria Oriental Gardens, Bahria Golf City, Bahria Paradise, Bahria Gateway, Bahria Heights-I II be launched in the near future. Bahria Enclave-I, Bahria Enclave-II, Agro Farming Scheme and Bahria Golf City Murree projects are also part of Bahria Town and work in progress in most of the projects. .

Human Resource Development

Bahria Town employs more than 2,500 people on its projects contributing to human resource development in an important sector of Pakistan's economy.

Environmental Consciousness

Bahria Town (Private) Limited is an environmentally conscious Company. All its projects are designed to meet national standards on pollution. Proper sewerage treatment plants have been installed and proper collection/disposal of solid waste is being carried out through hydraulic Compacters purchased by Bahria Town.

Social Obligations

Bahria townships are planned with mosques, schools, colleges, clubs, hospitals and green areas. Mosques have already been constructed in Bahria Town Phase-I, Safari Villas Rawalpindi and Bahria Town, Lahore.

A club with in Safari Villas with a swimming pool, a tennis court, Squash Court and a fitness centre is available for the residents of Safari Villas.

100 bed hospital in Phase-VIII equipped with CT Scan and MRI and Open Heart Surgery is operational.

A College named after the world-renowned nuclear scientist and head of KRL, Dr A Q Khan in Safari Villas is providing quality education.

A Campus for university is completed in Bahria Town, Phase II.

A medical Centre equipped with latest equipment and qualified doctors and staff is fully operational and providing medical facilities to the general public of the area around Safari Villas.

Management at Corporate Level

The Board of Directors

The affairs of the Company are governed by a Board of Directors who are also the co-owners of the Company. Their names appear in annexes. The shareholders meet at Annual General Meeting once a year. The directors meet as frequently as needed for smooth running of Company's affairs but not more than four months apart. Monitoring the progress of Development works is an essential item on Company's agenda.

Chairman's Vision of the Projects

The Chairman, who is the driving force behind the Company and the Board of Directors, has a vision which can be described as under:-

The time has come to offer better living standard to our people who have suffered tremendously at the hands of dishonest developers. Let us develop Bahria townships with standards matching those seen abroad so that our projects become an example for others to follow. While doing so, let's ensure that cost remains affordable. Let there be no penny pinching on attainment of quality. We would do with marginal profits but we would not compromise on quality. If we make our projects the very best in the market, we would naturally be the market leaders and we would make a niche in the market for ourselves. This way we can stay in the lead and in business for a very long time.

The Board of Directors and senior managers uphold Chairman's vision and the result of this synergism is that anyone who visits Bahria Town projects at Rawalpindi/Islamabad and Lahore comes back full of praise for the quality of development works.

Management Strategy

Company's eight-point management strategy stands on the following Corner stones:

1. **Use of Corporate Assets.** A sensible re-induction of profits ensures the success of new projects. Major projects like turnkey Construction of houses by the hundreds thus become possible.
2. **Financial Soundness.** Is ensured by generating and maintaining a healthy cash flow. We also retain a core reserve in surplus property (land and houses).
3. **Building Value of Property as a Long Term Investment.** Bahria Town projects promise excellent return on investment by providing unprecedented quality of work and services by virtue of which Bahria Town projects are rated head and shoulders above the competition.
4. **Quality of Management.** Which is a product of civil-military leaders. Civilian Chairman brings senior officers provide the combination of professional expertise while ex-military much-needed drive for a "fast track" execution of our projects. Technical consultancy is being provided by the Consultants of the International repute like TAK Management, Maxcorps, Ranhill, Akitek Jururancang, E&G Parslow, etc.
5. **Ability to Attract, Develop and Keep Talented People.** Our doors are open to anyone who can prove his or her talent in one of many fields of activities and interests we are engaged in.
6. **Community and Environmental Responsibility.** We stand committed to meet community social, education, health, recreational and religious responsibilities. We also stand committed to treat our sewer before discharging it into the rivers. It would be our endeavor to invoke segregation of garbage into biodegradable and recyclable (paper, metal and glass) Categories.
7. **Quality of Products and Services.** We exceed CDA/RDA/LDA standards in that we provide sewer, fresh water and electrical services on both sides of the street. Hence no need to cut our expensive carpeted streets.

8. **Innovativeness** to explore additional features and services for the clientele such as the planning of a Cornice along the Soan River which would have viewpoints and ice-cream parlrs for the residents for recreation.

Management at Project Level

Each project staff is headed by a General Manager Project. Each project has highly professional staff including engineers, surveyors, and others at different levels. All Project heads report to Deputy Chief Executive who ensures implementation of policies framed by the Board of Directors, The organization of Bahria Town Rawalpindi/Islamabad is available in the Annexes. The number of personnel employed in the Head Office is around 200 which is not much when judged in the light of diverse tasks undertaken.

Entity

City vast spaces, huge arsenal of heavy earth moving machinery worth greater than Rs. 04 billion, 15000 man strong engineering and development team, 500 specialist executives One Visionary leading the lot to set the tone for a mega real estate development. At the cutting edge of urban development on a scale unsurpassed elsewhere in the world, it charts new trends and vision in urbanization, economic and physical planning for urban growth.

Achievement

Over 76,000 kanals of land based infrastructure fully developed in Islamabad and rawalpindi, Bahria Town developments represents a unique mark of distinction for Pakistan as they continue to develop master planned communities which are clearly ahead of their time. These futuristic communities are serviced with huge infrastructure network ranging from dedicated electric grid stations to schools and service hospitals. The achievement of all this in short span of 26 years speak for the robustness and operational excellence of the company.

Vision

Bahria Town shall be pioneering. Innovating and will become a leading source of housing and lifestyle solutions to the masses and riches of Pakistan. We shall employ the most quality HR, Cutting edge tools, best of the market partners and efficient, robust

and quick delivering systems and processes for the ultimate satisfaction for our members and to become the first choice for every housing decision.

DISTRIBUTION SYSTEM

- **Type:** Underground Power Distribution System.
- **Technology:** Ring main with open loop system.

Equipment Make

- 11KV 3 Way /4 Way Switches Siemens/Schneider/ABB
- Termination and Straight Joints Reychem

- Cables

- HT XLPE/PVC 120mm² 3-Core & 500mm² /240mm² Single Core Newage/H.M Cables
- LT PVC/PVO 120mm² 4-Core Newage/H.M Cables
- Pad Mounted Translormer 100KVA, 200KVA, 40KVA, 630KVA, 1250 KVA Pel, Climax, Transfo Power
- Distribution Boxes General Switchgear/R.s Electric
- Street Lighting.
 - M/s Steel Poles with paint Jamal Pepe/Bashir Sons
 - Fixtures
 - Cables
 - Fancy Lights
 - Control Panels Street Light

TECHNICAL DETAILS OF DISTRIBUTION SYSTEM EQUIPMENT:

1. 11-KV PAD MOUNTED 3-WAY AND 4-WAY SWITCHES:-

The pad mounted switches shall be compact Load Break switches and shall be suitable for installation in 3-phase 11 KV underground distribution system of the following characteristics:

The switches shall have the following ratings:-

- | | |
|---|-------------------|
| - Rated Voltage | 11 kV |
| - Maximum design voltage | 12 kV |
| - Frequency | 50 Hz |
| - Rated normal current | 400 Amps |
| - Rated short time current (r.m.s) | 10 kA |
| - Rated short circuit making capacity peak | 25 kA/21 KA 3 Sec |
| - Rated transformer off-load breaking capacity (r.m.s) | 6.3 A |
| - Rated cable charging breaking capacity (r.m.s) | 2.5 A |
| - Impulse withstand voltage | 95 kV |
| - Rated short circuit making capacity and rated short time current for integral earthing device shall be the same as for main contacts. | |
| - The maximum temperature rise shall not exceed 40C when the switch is in clean condition and is carrying its rated normal current continuously | |

The material and manufacturing of the equipment alongwith specification and testing shall be in accordance with the WAPDA Specifications No. DD-S-46:90 and to the approval of the Consultant/Engineer.

2. Pad Mounted Transformers 630KVA, 400KVA, 100KVA and 200KVA

("KIOSKS"):-

The mechanical and electrical characteristics of 3-Phase Pad Mounted 1000/415 Volts Transformers shall be in accordance with WAPDA.

Specifications No. P-41:81 (UDC 621, 314, 212). Updated

Transformers

- Voltage 11/0.415 KV
- Vector Group Dyn 11
- Capacity 200 KVA & 100 KVA
- Tap Changer Off Load
- Frequency 50 Hz

H.T Compartment

- HRC Fuses
- Arc Stranglers

L.T Compartment

- L. T MCCBs of following rating for the protection of transformer and to feed the outgoing L.T Circuits.
 - a) 100 KVA
 - 250 Amp – 50 Ka Main Breaker
 - 100 Amp (Adj) – 25 KA all outgoing feeders
 - b) 200 KVA
 - 500 Amp - 50 KA Main Breaker
 - 200 Amp – 25 KA all outgoing feeders
 - c) 400 KVA
 - 1000A-50 KA Main Breaker
 - 250 A 35 KA Main Breaker
 - d) 630 KVA
 - 1600 A – 50 KA Main Breaker
 - 250 – 35 KA Main Breaker

- Frequency 50 Hz
- Maximum short circuit rating 25 KA

Indoor terminations shall be made in pad mounted steel enclosures and switchgear panels where dust and severe condensation is liable to occur.

The termination kits shall conform to WAPDA specifications P-184:86.

b) 11-KV Power Cable Splices

The joint and termination kits shall be suitable for cable of following description:-

- Single Core Cable
- Three Core Cable

The splices and terminations shall be suitable for operation at Ambient temperature of 50°C maximum and suitable for three phase underground 11-KV distribution system of the following Characteristics:-

- Nominal System Voltage 11 kV
- System Highest Voltage 12 kV
- Frequency 50 Hz
- Maximum short circuit rating 250 KA
- Tensile strength min 17.5 kg/sq cm
- Elongation at break 500%
- Dielectric strength min 20 kV/mm
- Volume resistivity 10^{15} ohm-cm
- Ozone resistance No effect when expected to 0.04% ozone by volume for 3 hours.

The material shall be according to WAPDA specifications P-86:80(UDC 621,315, 61) (amended to-date).

5. L.T Power Cables:-

All LT Cables from transformer to LT L.T. Distribution boxes are 185/120 mm PVC/PVC insulated aluminum, cables. The cable are suitable for operation in a 415/ 240 Volts, 50 Hz three phase multiple neutrally earthed distributed system. The cable shall be 4-core PVC/PVC cable suitable for direct burial or for installation in air or running in the ducts. The duct and soil conditions varying from dry to wet. The maximum Ambient Temperature shall be 50°C and the relative humidity may range up to 100%. The cable shall be suitable for conductor operating temperature as follows:-

- Continuous Operation 70 °C
- Short circuit (5 sec. maximum duration) 160 °C

The street light cables shall be of sizes:-

- The cables are as per WAPDA's Specifications No. Volts DD-S-8:84, 600/1000 (SID Cables), PVC insulated, PVC sheathed.
- BS Specifications shall be followed for those sizes where WAPDA Specifications are not applicable.

6. L.T Distribution Boxes (Service Boxes):-

The LT three phase distribution/metering boxes (feeder pillars) are used for making connection of underground services to underground LT mains. The distribution boxes shall be suitable for installation and operation in 3-Phase – 4 wire distribution system of the following characteristics:-

- Nominal System Voltage 415/240 Volts
- System Highest Voltage 460/260 Volts
- Frequency 50 Hz

The maximum Ambient Temperature may be 55°C and may range up to 100%.

The bus bars shall be of aluminum of 99.5% purity having 61% AC conductivity and minimum tensile strength of 8.4 kg/mm. The bus bars shall be extruded or hard drawn. The size of bus bars shall be 50 X 10 mm. These shall have a smooth finish, free from sharp edges, holes and cavities etc.

7. Street Light Fittings & Fixtures:-

Street Light Poles

- 12, 10, 8 and 6 meter high single arm and double arm poles hot dip Galvanized or painted.

Street Light Fixtures

- On Main Roads light fixtures are HRC 511 with 250Watt light with power factor correction capacitor, ballast, ignitor (for SON) etc.
- On Small Roads & steel fixtures are HSPQ with 125Watt HPL light

Lighting Fixture Control Gear

- Ballast
- Ignitor
- Holder
- Capacitor

8. Street Light Control Panel:-

The Street light control panels are comprise of the control device and A. C. contactor for correct and reliable opening and closing of the contacts. The control device is photoelectric timer. The equipment are installed within a weather proof, dust proof and moisture proof cabinet. The MCB shall control a group of lights and MCCB is be rated to their total current.

The photoelectric cell timer and actuating relay shall have the features mentioned below:-

Photo Electric Cell

The photoelectric cell have the following

ratings:-

- Operating Voltage Range 210 to 250 Volt AC
- Load Current Capacity 10 Amps

Relay (Magnetic Contractor)

It shall be of triple pole, single throw and of electromagnetic type. Pole magnet shall be dimensionally stable. Performance shall be chatter free. Contacts shall be of long life at rated load. Some arrangements shall be provided with the armature to counter-act the effect of high inrush current.

The A. C. contactor for closing and opening of electrical street lighting circuits shall have the following features:-

- Maximum Ambient Temp. 50 °C
- Relevant Humidity 100%
- Operating Voltage 415 Volt A.c
- Control Supply Voltage 215 Volt Single Phase
- Frequency 50 Hz

9. Earthing System:-

Earthing for Out Door Pad Mounted Equipment:

The earth electrode shall consist of M.S. Galvanized rods 5/8"x 10' feet long thoroughly hammered into the ground. The rod shall be connected to the earth conductor by means of a connector clamps which shall be tightened properly. After tightening, the connector shall be covered with Bitumen to prevent ingress of moistured soil. The rod shall be hammered to a level 10/20ft below ground level.

The number of rods forming on Earthing point shall depend upon the Earth resistance. The earth resistance at any point in the system shall not exceed 05 ohms and it maybe necessary to use more than one rod to achieve the specified Earth resistance.

GRID STATIONS

1. GRID STATION 220/132 KV(Phase-VIII):-

- **Type:** 220KV IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 1x 220/132KV Tfmr 63 MVA (On Load) Siemens (Mexico)
- 1x 220/132KV Tfmr 63 MVA (Standby) Siemens (Jinan China)
- 11KV Switchgear and PFI Plant Siemens

2. GRID STATION 132/11.5KV (Phase-VIII):-

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 10/13MVA Siemens
- 132/11.5 KV Transformer 20/26 MVA Siemens (TBEA China)
- 11KV Switchgear and PFI Plant Siemens

3. GRID STATION 132/11.5KV (Phase-IV):-

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 10/13MVA Siemens
- 132/11.5 KV Transformer 20/26 MVA Siemens
- 11KV Switchgear and PFI Plant Siemens

4. GRID STATION 132/11.5KV (Bahria Enclave):-

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 2x20/26 MVA Siemens (Chint China)
- 11KV Switchgear and PFI Plant Siemens

POWER SOURCES AVAILABILITY:

1. 220/132 KV Grid Station Phase-VIII

The Power Source is taken as 220KV Line Sangjani ~ Rawat with In/Out arrangement for 220/132KV Grid Station having capacity of 63 MVA Transformer alongwith an additional 1 No. 63 MVA Transformers Bay tested ready for energization at 220 KV Grid Station Phase-VIII.

2. 132/11.5 KV Grid Station Phase-VIII

The Power Source is taken from 220/132KV Grid Station Bahria Town Phase-VIII. Grid Station having capacity of 1x10/13MVA Transformer Bay and 1x20/26 MVA Transformer Bay. Augmentation of 10/13 MVA Transformer with 40 MVA Transformer is under process and likely to be completed by December 2022.

3. 132/11.5 KV Grid Station Phase-IV

The Power Source is taken from 132KV T/L Rawat ~ Chaklala with In/Out arrangement. Grid Station having capacity of 1x10/13MVA Transformer Bay and 1x20/26 MVA Transformer Bay. Augmentation of 10/13 MVA Transformer with 40 MVA Transformer is under process and likely to be completed by December 2022.

4. 132/11.5 KV Grid Station Bahria Enclave

The Power Source is taken from 132KV University ~ Nilor T/L with In/Out arrangement. Grid Station having capacity of **2x20/26MVA** Transformer Bays has been energized in 2019 on No Load.

Technical Details of Grid Stations Equipment:

1. **220 KV Grid Station Phase-VIII**

220 KV Auto Transformer

- Voltage 220/132 KV
- Vector Group YNAD1
- Capacity 2x40/50/63 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

220 KV Circuit Breaker

- Voltage Rating 245 KV
- Current Rating 2000 Amp
- Short Circuit Level 40 KA
- Type of Breaker 3AP1FSF6

220 KV Isolators

- Voltage Rating 245 KV
- Current Rating 2000 Amp
- IK 40KAmp

220 KV Current Transformer

- Voltage Rating 245 KV
- Protection CT's 600/1200/2400/1,1,1
- Cores 5

220 KV Capacitive Voltage Transformer

- Voltage 245 KV
- Voltage Ratio 220 KV/110V
- Type Extended Creepage Distance

220 KV E/Switch

- Rated Capacity 245 KV
- Current Rating 2000Amps
- IK 40KA

220 KV Lightening Arrestors

- Type 3EP4-198-2PF32-10A1
- UR 198 KV
- UC 158 KV

2. **132 KV Grid Station Phase-VIII**

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 1X 10/13 MVA
1X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Cree page Distance

11 KV Switch Gear

- **Incoming Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- **Outgoing Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- **11 KV Capacitor Bank**
- Voltage 11 KV
- Capacity 4.8 MVAR & 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

3. **132 KV Grid Station Phase-IV**

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 1X 10/13 MVA
1X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

11 KV Switch Gear

- **Incoming Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- **Outgoing Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- **11 KV Capacitor Bank**
- Voltage 11 KV
- Capacity 4.8 MVAR & 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

4. 132 KV Grid Station Bahria Enclave

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 2X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Cree page Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

11 KV Switch Gear

- **Incoming Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- **Outgoing Panel**
- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- **11 KV Capacitor Bank**
- Voltage 11 KV
- Capacity 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

**National Electric Power Regulatory Authority
NEPRA**

Registrar Office

No. NEPRA/R/LAD-29/4010

November 24, 2010

**Subject: Grant of Distribution Licence No. 20/DL/2010
Licence Application No. LAD-29
Bahria Town (Pvt.) Limited (BTPL)**

Enclosed please find a copy of Distribution Licence No. 20/DL/2010 issued by this office to BTPL vide letter No. NEPRA/R/LAD-29/4005-09, dated November 24, 2010, along with determination of the Authority in the matter of grant of Distribution Licence to BTPL, for information, please.

Enclosure: As above


(Syed Safer Hussain)
Registrar

For information:

1. Chairman
2. Vice Chairman / Member (CA)
3. Member (Tariff)
4. Member (Licensing)
5. Member (S & P)

Distribution:

6. Director General (Technical)
7. Director General (Tariff)
8. Dy. Director (Licensing)
9. Dy. Director (Finance)
10. Deputy Director (IT)
11. Assistant Director (Library)

(Please place it on the NEPRA Website)



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad
Ph: 9206500, 9207200, Fax : 9210215
E-mail: registrar@nepra.org.pk

Registrar

No. NEPRA/R/LAD-29/4005-09

November 24, 2010

Malik Riaz Hussain
Chief Executive
Bahria Town (Pvt.) Limited
Phase-II, Bahria Town,
Rawalpindi

Subject: **Grant of Distribution Licence No. 20/DL/2010**
Licence Application No. LAD-29
Bahria Town (Pvt.) Limited (BTPL)

Please refer to your application No. nil dated February 10, 2007 to NEPRA for grant of a Distribution Licence.

2. Enclosed here is Distribution Licence No. 20/DL/2010, granted by the Authority to Bahria Town (Pvt.) Limited (BTPL). The Licence is granted to you pursuant to Section 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997). Further, the determination of the Authority in the subject matter is also attached.

3. Please quote above mentioned Distribution Licence No. in your future correspondence with the Authority.

Enclosure: As above

(Syed Safer Hussain)

CC (along with enclosures);

1. Secretary, Cabinet Division, Government of Pakistan, Islamabad
2. Secretary, Ministry of Water and Power, Government of Pakistan, Islamabad
3. Secretary, Irrigation & Power Department, Government of Punjab, Lahore
4. Chief Executive Officer, Islamabad Electric Supply Company Limited (IESCO), Islamabad

National Electric Power Regulatory Authority
(NEPRA)
Islamabad – Pakistan

DISTRIBUTION LICENCE

No. 20/DL/2010

In exercise of the Powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), the Authority hereby grants a Distribution Licence to:

BAHRIA TOWN (PRIVATE) LIMITED

Incorporated under the Companies Ordinance 1984

Under Certificate of Incorporation

No. L-09003 of 1996-97, dated January 14, 1997

For its Isolated Distribution System

Located at Rawalpindi/Islamabad, in the province of Punjab and Islamabad Capital Territory (ICT)

to engage in Distribution Business subject to and in accordance with the Articles and Schedule-I & II of this Licence.

Given under my hand this 24th day of November Two
Thousand & Ten, and expires on 23rd day of November, Two
Thousand & Thirty.

P. Hussain
Registrar



ht

AK

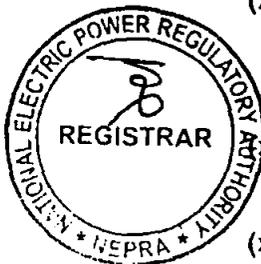
Article-1
Definitions & Interpretations

In this licence:-

- (i). "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of) 1997 as amended from time to time;
- (ii). "Authority" means the Authority constituted under Section 3(1) of the Act;
- (iii). "Applicable Documents" means the Act, the NEPRA rules and regulations, any documents or instruments issued or determinations made by the Authority under any of the foregoing or pursuant to the exercise of its powers under the Act, the Grid Code, the applicable Distribution Code, the Consumer Eligibility Criteria if any, or the documents or instruments made by the licensee pursuant to its generation licence, in each case of a binding nature applicable to the licensee or, where applicable, to its affiliates and to which the Licensee or any of its affiliates may be subject;
- (iv). "BSS" means the standards of British Standards Specifications;
- (v). "Competitive Trading Arrangement" means bilateral contract arrangements;
- (vi). "Consumer" means a person or his successor-in-interest who purchases or receives electric power from the Licensee for consumption and not for delivery or re-sale to others, including a person who owns or occupies a premises where electric power is supplied;
- (vii). "Consumer Eligibility Criteria" means the National Electric Power Regulatory Authority Consumer Eligibility Criteria 2003 as amended from time to time;

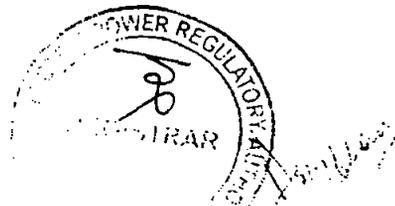


- (viii). "Distribution Business" means the business of distribution of electric power carried on or to be carried on by the Licensee pursuant to and in accordance with the terms of the distribution licence granted to the Licensee;
- (ix). "Distribution Code" means the distribution code prepared by IESCO and approved by the Authority in accordance with Rule 15 of the Rules as amended from time to time;
- (x). "Distribution System" means the distribution facilities situated within the Service Territory of IESCO or in the Isolated Service Territory of Licensee, owned or operated for distribution of electric power including, without limitation, electric lines or circuits, electric plant, meters, interconnection facilities or other facilities operating at the distribution voltage, and shall also include any other electric lines, circuits, transformers, sub-stations, electric plant, interconnection facilities or other facilities determined by the Authority forming part of the distribution system, operating at the distribution voltage;
- (xi). "Grid Code" means the NTDC Grid Code as amended from time to time;
- (xii). "IEC Standards" means the standards of International Electrotechnical Commission;
- (xiii). "IEEE Standards" means the standards of the Institute of Electrical and Electronics Engineers;
- (xiv). "IESCO" means the Islamabad Electric Supply Company Limited;
- (xv). "Isolated Service Territory" means the area specified in Schedule-I and Schedule-II of this licence within which the Licensee is exclusively authorized to conduct its Distribution Business



- (xvi). "Licensee" means Bahria Town (Private) Limited the holder of this licence for carrying out the Distribution Business, through its Distribution System, and shall include its legal successors and assigns duly approved by the Authority;
- (xvii). "NTDC" means National Transmission and Despatch Company Limited;
- (xviii). "Performance Standards" means the National Electric Power Regulatory Authority Performance Standards (Distribution) Rules, 2005 as amended from time to time;
- (xix). "Rules" mean the National Electric Power Regulatory Authority Licensing (Distribution) Rules, 1999 as amended from time to time;
- (xx). "Regulations" means the regulations made under the Act;
- (xxi). "Service Territory" means the area specified in the distribution licence of IESCO within which it is exclusively authorized to conduct its distribution business;
- (xxii). "Tariff Rules" means the National Electric Power Regulatory Authority Licensing (Tariff Standards and Procedure) Rules, 1998 as amended from time to time; and
- (xxiii). "Transmission Facilities" means electrical transmission facilities including electrical circuits, transformers and sub-stations operating at or above the minimum transmission voltage.

1.2 Words and expressions used but not defined herein bear the meaning given thereto in the Act or the Rules.



Article-2
Application of Rules

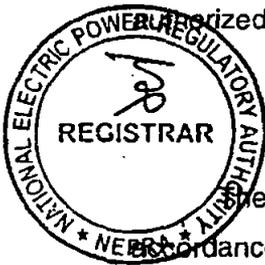
This licence is issued subject to the provisions of the Rules.

Article-3
Grant of Licence

3.1 This licence is granted to the Licensee to engage in the distribution business within the Isolated Service Territory in accordance with duties and responsibilities of a distribution licensee under Section 21 of the Act.

3.2 At the time of the grant of this licence, where the line part of a Distribution System owned/operated by the IESCO, as its existing Distribution System operating at 11 KV or less is located within three (3) meters of spatial distance on either side of the 11 KV Distribution System of the Licensee as shown in Schedule-I & II of this licence, such 11 KV Distribution System of the Licensee shall be converted into an underground system where such proximities exist, in accordance with Distribution Code or relevant international standards including BSS, IEC Standards or IEE Standards etc.

3.3 The Licensee shall not alter or modify its 11 KV Distribution System as authorized in Schedule-I & II of this licence, without prior approval of the Authority.



Article-4
Licence Fee

The Licensee shall pay to the Authority the licence fee on annual basis in accordance with the National Electric Power Regulatory Authority (Fees) Rules, 2002 as amended from time to time.

Article-5
Terms and Renewal

5.1 The term of this licence shall be twenty (20) years from the date of its issuance.

5.2 Unless suspended or revoked earlier, the Licensee may within ninety days (90) days prior to the expiry of the term of this licence, apply for renewal of the licence under the NEPRA Licensing (Application and Modification Procedures) Regulations, 1999 as amended from time to time.

Article-6
Tariff

6.1 The Licensee shall charge only such tariff from its Consumers as approved by the Authority.

6.2 The Licensee shall submit a formal tariff petition to the Authority within 90 days of grant of this licence in the manner and procedure prescribed under the Tariff Rules.

6.3 Pending the approval of its tariff, the Licensee shall not charge from its Consumers tariff higher than that of IESCO for the corresponding slabs/categories of Consumers.

Article-7
Competitive Trading Arrangement

7.1 The Licensee shall participate for the development of a Competitive Trading Arrangement in such manner as may be directed by the Authority from time to time. The Licensee shall, in good faith, work towards implementation and operation of the aforesaid Competitive Trading Arrangement in the manner and time period specified by the Authority. Provided that, any such participation shall be subject to any contract entered between the Licensee and another party with the approval of the Authority.

7.2 Any variation or modification in the above-mentioned contracts for allowing the parties thereto to participate wholly or partially in the Competitive Trading Arrangement shall be subject to mutual agreement of the parties thereto and such terms and conditions as may be approved by the Authority.

Article-8
Exclusivity

8.1. Without prejudice to the Distribution System of the IESCO and the Transmission Facilities of NTDC existing within the Isolated Service Territory of the Licensee, during the term of this licence, the Licensee shall have the exclusive right to provide electric power services, make sales of electric power, make schemes for electric power services and engage in incidental activities in its Isolated Services Territory subject to the provisions of Section 22 and 26 of the Act.



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8.2. Notwithstanding anything contained in Article 8.1 of this licence, the Licensee shall provide the required right of way (RoW) for erecting/laying the Distribution System/Transmission Facilities to IESCO or NTDC, for providing distribution and transmission services to areas located adjoining to Isolated Services Territory of the Licensee.

Article -9
Obligation to Connect and Supply

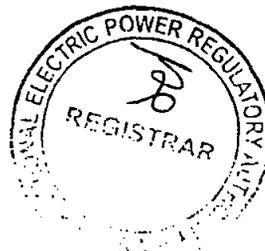
9.1 The Licensee shall be responsible to provide electric power services and make sales of electric power within its Isolated Services Territory on a non-discriminatory basis to all its Consumers who meet the Consumer Eligibility Criteria.

9.2 Except those under the provisions provided in the Act, Rules and Regulations made thereunder and other Applicable Documents, the Licensee shall not, in any manner whatsoever, discontinue or attempt to discontinue electricity distribution service or take any measure which may adversely affect the quality of electric power services to its Consumers for the reasons such as non-observance of bylaws of the housing society, its rules, regulations and policies etc.

9.3 Subject to the provisions of the Act, Rules, Regulations or any other Applicable Documents, the Licensee shall not in any manner whatsoever make electric power services conditional to its Consumers for fulfillments of any other contractual obligations.

Article-10
Isolation of the System

The Distribution System of the Licensee as delineated in Schedule-I & II shall be operated and utilized solely for the purpose of electric power services to its Consumers and not for sale, supply or delivery to any other person located outside its Isolated Service Territory.



Article-11
Purchase of Electricity in Bulk

Unless directed otherwise by the Authority, the Licensee shall have the option to either purchase electricity in bulk from the IESCO or from any other source of its choice including self-generation. In case of the self-generation, the provisions of Section 15 of the Act shall be applicable to the Licensee.

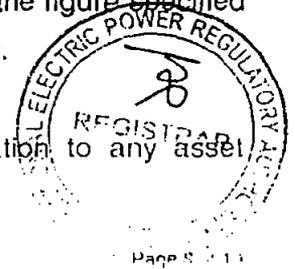
Article 12
Investment Programmes, Acquisition and Disposal of Assets

12.1 The Licensee shall not, except under a prior authorization of the Authority, acquire whether on ownership basis, lease, hire-purchase or through any other mode of possession or use any tangible or intangible asset of a nature or value inconsistent with or which is not expressly or by necessary implication stated in the investment programme of the Licensee approved by the Authority in accordance with its rules and regulations.

12.2 Until such time the investment programme of the Licensee is approved by the Authority in accordance with Rule 17(1), the Licensee may acquire assets required for the operation and maintenance of the Distribution System or assets of a value not exceeding ten percent (10%) of the figure of the approved investment programme of the Licensee for that year.

12.3 The Licensee shall not, except under a prior authorization of the Authority, sell or dispose of in any manner any tangible assets comprised in the Distribution System or any intangible assets accruing or likely to accrue to the Licensee from the distribution business in a manner inconsistent with or which is not expressly stated in the investment programme of the Licensee approved by the Authority in accordance with its rules and regulations, provided that until such time the investment programme of the Licensee is approved by the Authority in terms of Rule 17(1), the Licensee may dispose of or sell assets, value not exceeding ten percent (10%) of the figure specified in the approved investment programme of the Licensee for that year.

12.4 The Licensee shall not assume any encumbrance in relation to any asset unless the ownership thereof vests in the Licensee.



Article-13
Compliance with Performance Standards and Distribution Code

The Licensee shall comply with Performance Standards, Distribution Code, Grid Code and other Applicable Documents as prescribed by the Authority from time to time, to the extent applicable.

Article-14
Compliance with Safety Standards

14.1 The Licensee shall comply with the relevant safety standards as prescribed by the Authority from time to time including safety standards mentioned in the Performance Standards or Distribution Code, to the extent applicable.

14.2 In case, no such standards are prescribed in the Performance Standards or Distribution Code, then the Licensee shall comply with any relevant international standards including BSS, IEC Standards or IEE Standards etc.

Article-15
Compliance with Environmental Standards

The Licensee shall comply with the environmental standards as may be prescribed by the relevant authorities.

Article-16
Accounting Practice and Compliance of Uniform System of Accounts

The Licensee shall maintain separate accounts of its Distribution Business and shall comply with the provisions of the National Electric Power Regulatory Authority (Uniform System of Accounts) Rules, 2009.

Article-17
Maintenance of Record

17.1 The Licensee shall keep complete and accurate record and the data in respect of all aspects of the distribution business, in their original form. Three (3) months after the issuance of this licence the Licensee shall start maintaining the above mentioned record in electronic form as well.

17.2 Without prejudice to the provisions of the Rule 14(3) of the Rules, unless provided otherwise under the law or the applicable documents, all record and data



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shall be maintained. The Licensee shall not destroy or dispose of such record or data without obtaining prior written approval of the Authority.

17.3 All record and data maintained in an electronic form shall, subject to just claims of confidentiality, be accessible to the staff authorized by the Authority.

Article-18
Provision of Information

18.1 The obligation of the Licensee to provide information to the Authority shall be in accordance with Section 44 of the Act.

18.2 The Licensee shall be subject to such penalties as may be specified in the Rules made by the Authority, for failure to furnish such information as may be required from time to time by the Authority and which is or has been in the control or possession of the Licensee.

Article-19
Consumer Service Manual

In accordance with Section 21 of the Act read with Rule 9 of the Rules, within ninety (90) days of the issuance of this licence, the Licensee shall submit a consumer service manual for the approval of the Authority.

Article-20
Interpretation of the Licence Provisions

The Authority shall, in accordance with the provisions of the Act make the interpretation of any or all of the provisions of this licence. The Authority's decision in this regard shall be final.

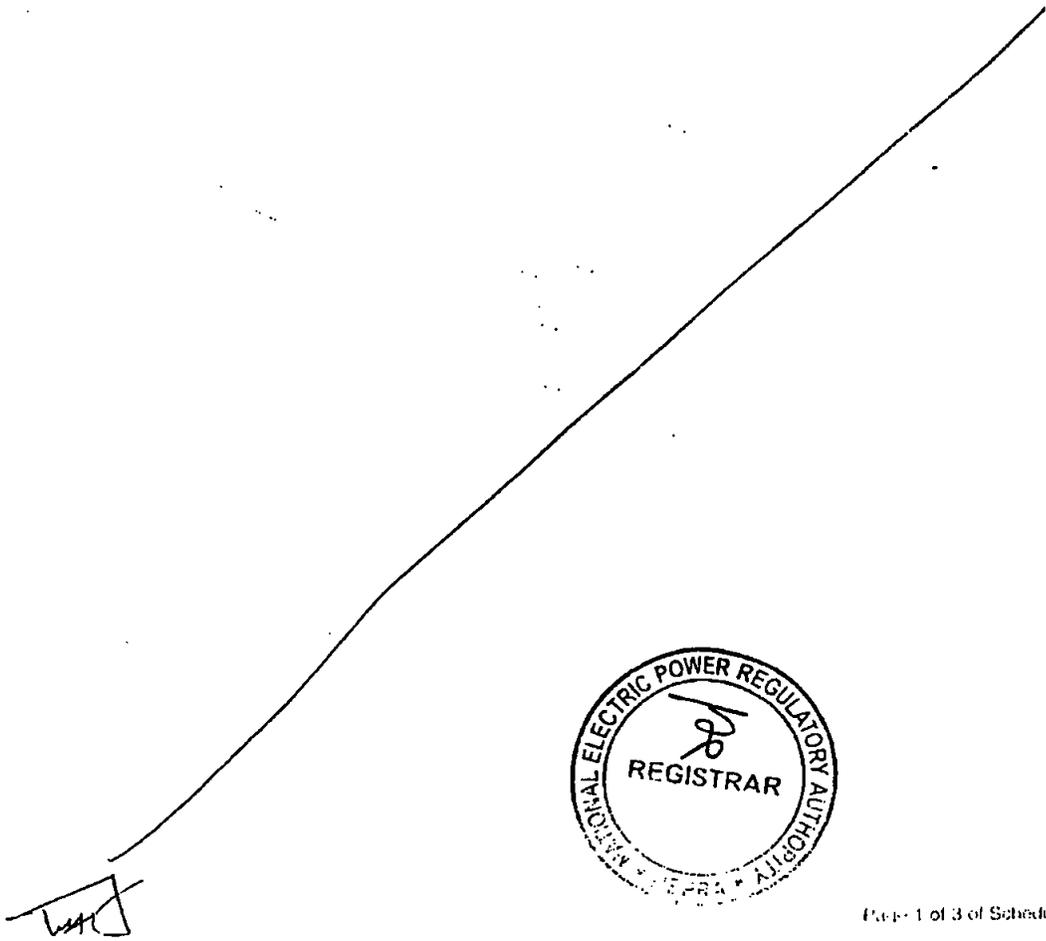
Article-21
Dispute Resolution

Any dispute or disagreement relating to any matter arising out of, or in connection with, the activities covered under this licence shall be submitted to the Authority for its decision.



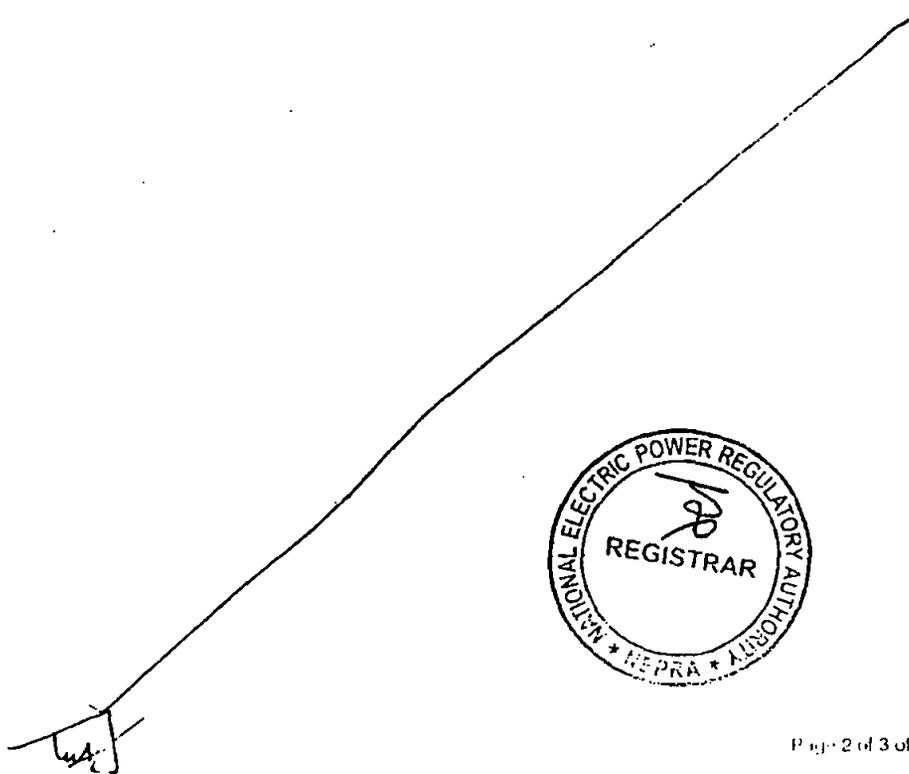
SCHEDULE-I

The details of Territory (i.e. geographical boundaries) of the Licensee within which the Licensee is authorized to conduct its Distribution Business.



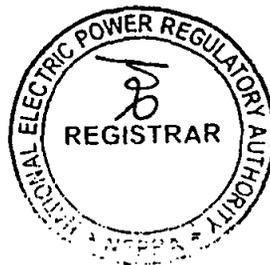
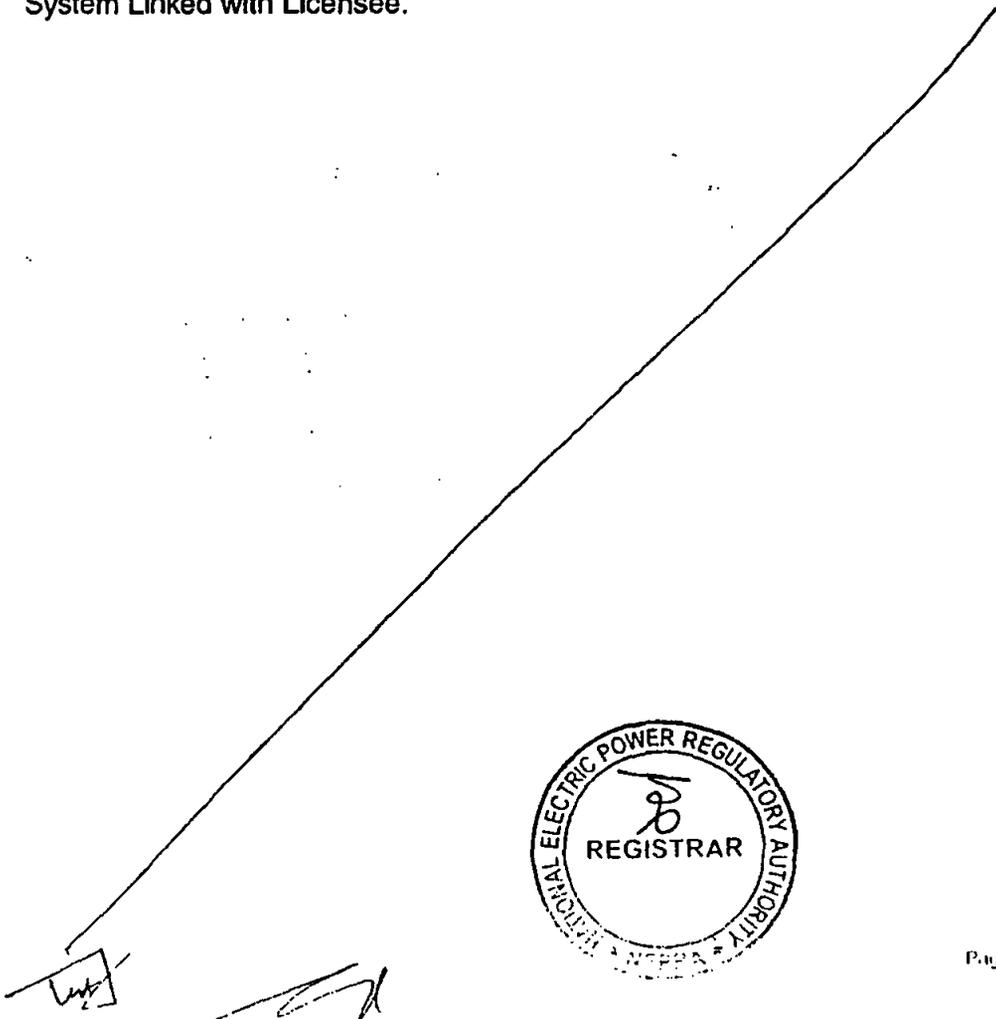
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[Feeder Map(s)]
of
Isolated Distribution Facilities
of
Bahria Town Rawalpindi/
Islamabad



SCHEDULE-II

The details of the distribution facilities [including length of feeder(s), feeder type (underground/overhead) and other specific details pertaining to the Isolated Distribution System Linked with Licensee.



**ISOLATED
DISTRIBUTION SYSTEM
DETAILS**

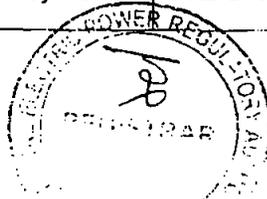
A. GENERAL INFORMATION

(i).	Name of Applicant	Bahria Town (Private) Limited Rawalpindi/Islamabad
(ii).	Registered/Business Office	Corporate Office-II, Phase-II Bahria Town Rawalpindi/Islamabad
(iii).	Location of Distribution Facilities	Rawalpindi/Islamabad

B. DISTRIBUTION NETWORK SYSTEM

(a). Bahria Town SAFARI VILLAS-I

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-1	
(v).	Length of Feeder/Cable	Feeder designated as F-1 is 3.50 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and then traces through Bahria Town Phase-II, Bahria Town Phase-I and terminates at Bahria Town Safari Villas-I.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50± 3% Hz



(b). **Bahria Town Phase-I**

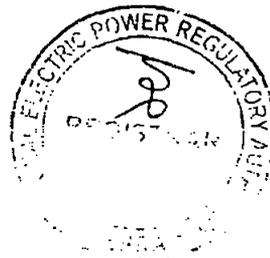
(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-2	
(v).	Length of Feeder/Cable	Feeder designated as F-2 is 3.20 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and then traces through Bahria Town Phase-II and terminates at Bahria Town Phase-I.	
(vi).	Regulation	Voltage Level	11KV \pm 5%/415 Volts \pm 2.5%
		Frequency Level	50 \pm 3% Hz

(c). **Bahria Town Phase-II**

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-3	

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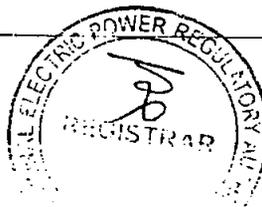
(v).	Length of Feeder/Cable	Feeder designated as F-3 is 3.10 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Phase-II.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

(d). **Bahria Town Phase-III**

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii)	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-4	
(v).	Length of Feeder/Cable	Feeder designated as F-4 is 2.60 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Phase-III.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

(e). **Bahria Town Phase-IV including Civic Center**

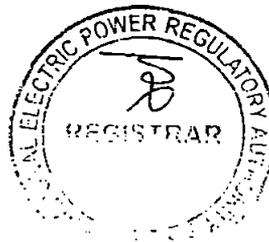
(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
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(ii).	Voltage Level (KV)	11 KV	
(iii)	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	Four (04) Feeder designated as F-5 (Tee-off), F-6 (Tee-off), F-8 & F-9	
(v).	Length of Feeder/Cable	<p>(i). Feeder designated as F-5 (Tee-off) is 0.29 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Phase-IV.</p> <p>(ii). Feeder designated as F-6 (Tee-off) is 0.23 kilometer in length, is a tee-off of the main feeder of F-6 (feeding to Bahria Town Phase-VI, emanating from 132 KV Grid Station, Located at Bahria Town Phase-IV), feeding Bahria Town Phase-IV;</p> <p>(iii). Feeder designated as F-8 is 4.2 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Civic Center;</p> <p>(iv). Feeder designated as F-9 is 0.64 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Civic Center.</p>	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

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(f). **Bahria Town Phase-V**

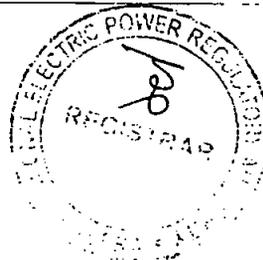
(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-5 (Main)	
(v).	Length of Feeder/Cable	Feeder designated as F-5 (Main) is 1.61 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Phase-V.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

(g). **Bahria Town Phase-VI**

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-6 (Main)	







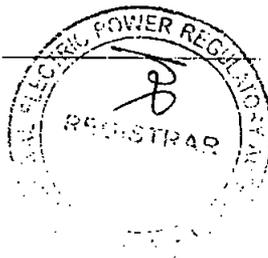
(v).	Length of Feeder/Cable	Feeder designated as F-6 (Main) is 1.69 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Town Phase-VI.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

(h). Bahria Paradise

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Underground Cable	
(ii).	Voltage Level (KV)	11 KV	
(iii).	Type of Cable	XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-7	
(v).	Length of Feeder/Cable	Feeder designated as F-7 is 0.78 kilometer in length emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV and terminates at Bahria Paradise.	
(vi).	Regulation	Voltage Level	11KV± 5%/415 Volts ± 2.5%
		Frequency Level	50 ± 3% Hz

(i). Bahria Town Safari Villas-II

(i).	Type of Distribution System (Over Head Lines/Underground Cables)	Over Head Feeder and Underground Cable	
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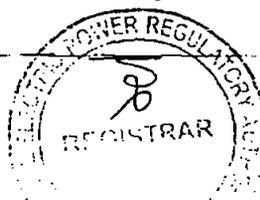


(ii).	Voltage Level (KV)	11 KV	
(iii)	Type of Conductor/Cable	ACSR OSPREY Conductor and XLPE Cable	
(iv).	No. of Feeders/Cables	One (01) Feeder designated as F-10	
(v).	Length of Feeder/Cable	Feeder designated as F-10 has a total length of 3.38 kilometer and is a combination of Underground Cable and Overhead Feeder. The Feeder emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV as an underground cable, measuring 1.59 KM crossing Bahria Paradise. This feeder then crosses the GT Road as an overhead feeder (measuring about 0.67 KM on 08 x HT 45 feet High Lattice Steel Poles). It is then terminated at Pole No.8 to be converted into other underground cable measuring about 1.12 KM and terminates at Bahria Safari Villas-II.	
(vi).	Regulation	Voltage Level	11KV \pm 5%/415 Volts \pm 2.5%
		Frequency Level	50 \pm 3% Hz

(j). **Bahria Town Phase-VII (including Bahria Garden City, Springs & Safari/Bahria Homes)**

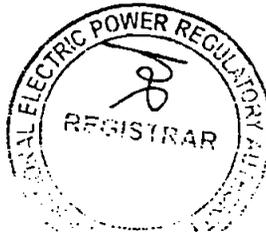
(i)	Type of Distribution System (Over Head) Lines/ Underground Cables)	Over Head Feeder and Underground Cable
(ii)	Voltage Level (KV)	11 KV
(iii)	Type of Cable	ACSR OSPREY Conductor & XLPE Cable
(iv)	No of Feeders/Cables	One (01) Feeder designated as F-11

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(v)	Length of Feeder/Cable	Feeder designated as F-11 has a total length of 23.84 kilometer and is a combination of Underground Cable and Overhead Feeder. The Feeder emanates from 132 KV Grid Station, Located at Bahria Town Phase-IV as an underground cable (measuring 1.59 KM crossing Bahria Paradise. This feeder then crosses the GT Road as an overhead feeder (measuring about 0.67 KM on 08 x HT 45 feet High Lattice Steel Poles) and continues as an overhead feeder tracing through Bahria Town Phase-VII, Bahria Town Garden City, Bahria Town Springs South and Bahria Town Safari. The Underground cable from the Overhead feeder is tapped at Pole No. 8 of Feeder (F-11) and it traverses for feeding Bahria Town Phase-VII, Bahria Town Garden City, Bahria Town Spring North, Bahria Town Spring South and Safari/Bahria Homes (Safari Valley).	
(vi)	Regulation	Voltage Level	11 KV \pm 5%/415 Volts \pm 2.5%
		Frequency Level	50 \pm 3% Hz

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GOVERNMENT OF THE PUNJAB IRRIGATION & POWER DEPARTMENT

Amir N

NO.U.S(P)(I&P) 4-4/95-

Dated Lahore, the

March, 1999

NOTIFICATION

In exercise of the powers conferred upon him by Section 28 of the Electricity Act, 1910 (Act No.IX of 1910), the Governor of the Punjab is pleased to give sanctions to the following Societies to purchase bulk supply from electric supply companies of WAPDA and to engage in the business of supplying energy within their area of supply for a period of 2 years with immediate effect or till NEPRA formulates a policy/procedure for issuance of Distribution Licences to these Societies, which ever is earlier subject to the terms and condition as envisaged in the agreement to be executed between the societies and Punjab Government.

1. Bahria Town Chaklala Scheme III, Rawalpindi. *and Lahore.*
2. Pakistan Rural Support Project, Shakargarh.
3. Chinar Bagh Housing Scheme Raiwind Road, Lahore.
4. Pakistan Technocrats Co-operative Housing Society, Lahore.
5. Ashrafi Town Raiwind Road, Lahore.
6. Public Health Engineering Co-operative House Society, Lahore
7. Superior Courts Employees Co-operative Housing Society Lahore.
8. Rizwan Garden Housing Scheme, Ghurki Bridge, Manawan, Lahore Cantt.

(SULEMAN GHANI)
Secretary to Government of the Punjab
Irrigation and Power Department

NO.U.S(P)(I&P)

Dated Lahore, the

March, 1999

A copy is forwarded to the Superintendent, Government Printing Press Punjab, Lahore with the request to publish the above notifications in the next issue of the Punjab Government Gazette and supply ten copies each to this Department.

SECTION OFFICER (POWER)

NO.U.S(P)(I&P)

Dated Lahore, the

March, 1999

A copy is forwarded to:-

- 1) The Chairman, National Electric Power Regulatory Authority, Government of Pakistan, Shahr-e-Jamriyat, G-5/2, Islamabad.
- 2) General Manager (Operation WAPDA, WAPDA House, Lahore.
- 3) Chief Engineer (Power), Irrigation and Power Department, 11-Old FCC, Ferozpur Road, Lahore.
- 4) Electric Inspectors concerned.
- 5) M/S:

SECTION OFFICER (POWER)



GOVERNMENT OF THE PUNJAB IRRIGATION & POWER DEPARTMENT

AGREEMENT BETWEEN M/S:BAHRIA TOWN, 60 IMRAN KHAN AVENUE, CHAKLALA SCHEME-III, RAWALPINDI AND GOVERNMENT OF THE PUNJAB.

This agreement made this 10th day of May, 1999 between M/S: Bahria Town, 60 Imran Khan Avenue, Chaklala Scheme-III, Rawalpindi, (hereinafter called Bahria Town which expression shall include their successors and assigns) on one part and the Governor of the Punjab through the Secretary, Irrigation and Power Department (hereinafter called the 'Government' which expression shall include its successors and assigns) on the other part.

WHEREAS the Government have vide their Notification No. U.S.(P)(I&P)4-4/98 dated 1st March, 1999 (hereinafter referred to as the said Notification) given sanction to M/S: Bahria Town, under section 28 of the Electricity Act, 1910 to engage in the business of supplying electric energy and have permitted Bahria Town to take their electric transmission lines to the area of supply and to supply electrical energy to the said area and such other consumers as the Government may approve, upon the terms and conditions hereinafter appearing if in area of the request of the Developers.

NOW THIS AGREEMENT WITNESSTH AS FOLLOWS:-

- 1 (a) Unless the context otherwise requires, the expressions used herein and defined in the said notification shall have the meanings respectively assigned to them in that Notification.
- (b) Expressions, words and terms used, but not defined in this notification shall have the same meanings as are assigned to them in the Electricity Act, 1910 or by the Rules made thereunder:-

2. AREA OF SUPPLY:-

The area of supply shall be, the area which is marked in the map or the areas which is permitted by the Government for the distribution of electric supply from time to time.

3. SCOPE OF SUPPLY:-

The supply of energy shall be confined to the Area of Supply.(Bahria Town Rawalpindi).

4. AERIAL LINES:-

Bahria Town shall not energise any aerial line unless the same has been inspected and approved by the Electric Inspector Punjab.



5. APPROVAL OF THE DISTRIBUTION NETWORK:-

- a) After preparing the complete plan of distribution network, Bahria Town shall apply to the Electric Inspector Punjab for its Scrutiny from technical points of view and approval. Bahria Town shall give details of the distribution network, methods of construction of the Aerial Lines etc.
- b) The Electric Inspector Punjab shall, thereafter examine the said plan and may approve the same or may advise certain amendments as may be necessary.
- c) Any addition/alteration in the already approved plan of distribution network shall also be subject to approval by the Electric Inspector Punjab.

6. NATURE OF SUPPLY:-

The nature and pressure of supply shall be alternating current, 50 cycles, 3 phase, 11,000 volts.

7. APPLICABILITY OF THE ACT AND RULES:-

In addition to any other obligations imposed on it by the Act, the supply of energy by Bahria Town shall be subject to the provisions of Section 9(2), 9(3), 17, 18(2), 19(1), 19(A), 21, 23, 24, 26, and 42 of the Act, Clauses VIII, X, XIV, XV, and XVI, of the Schedule attached to the Act, and the Electricity Rules, 1937 and any modification thereof, with the exception of Chapter III and Rule 37 to the same extent as if the Firm was licensee under part II of the Act.

Provided that for the purpose of Clause VIII of the Schedule to the Act, the liability of Bahria Town to supply energy to Government or any Local Authority shall be limited to the quantity available at the time of the requisition made under sub-clause (i).

8. LIST OF CONSUMERS:-

Bahria Town shall furnish to the Electric Inspector Punjab in the first instance a list of the persons with their addresses and the places where the energy is supplied by it. Any addition or alteration in the said list shall also be reported by Bahria Town to the Electric Inspector Punjab at the close of each month. Bahria Town shall ensure that no prospective consumer be a defaulter of energy charges of any other Licensee or Non-licensee.

9. REMOVAL OF TRANSMISSION & DISTRIBUTION NETWORK:-

9/10/15 After the termination/cancellation of the sanction under Section 28 of the Electricity Act, 1910, the Government may direct Bahria Town by a written notice to remove within 30 days all installations made by it for the purposes of supply of energy in the Area of Supply pertaining to 11 KV line supplying energy to the sub-station.

10. DISTRIBUTION OF ENERGY:-

Bahria Town shall receive energy from WAPDA in bulk for distribution Supply.



11. CHARGES OF THE SUPPLY OF ENERGY:-

- a) The charges for the supply of energy shall be the same which WAPDA charges from different categories of consumers. Any change in the said charges by WAPDA will mutatis mutandis apply to Bahria Town also. However, the energy policy of the Federal Government shall prevail.
- b) Upon initial connection Bahria Town shall be entitled to charge the actual costs of material and labour plus an additional 15 percent thereof, subject to the provisions contained in clause VI of the Schedule annexed to the Act. This provision shall as such apply in case of extension or addition in the line.

12. EXPIRATION OF THE SANCTION:-

This sanction shall take effect from date of issue for a period of two years or till NEPRA formulates a policy/procedure for issuance of Distribution Licences. Such sanction shall be further extendible at the request of the Developers.

13. RIGHT OF THE AUTHORITY TO TAKE OVER THE DISTRIBUTION NETWORK:-

The Government shall have the right to take over the distribution network of Bahria Town at any time, subject to applicable law and a notice of six months in writing.

14. REVOCATION:-

Subject to a notice of one month in writing, the Government may revoke this sanction at any time, if Bahria Town fails to comply with any of the conditions of this Agreement in the absence of any reasonable explanation or VIOLATES the relevant provisions of the Electricity Act, and the Rules framed thereunder.

15. ASSESSMENT OF THE VALUE OF THE DISTRIBUTION NETWORK:-

In case the Government takes over the distribution network of Bahria Town under condition No.13 or 14, the value thereof shall be payable by the Government. Such value shall be determined by negotiations with Bahria Town.

16. APPLICABILITY OF FINANCE ACT 1964:-

The supply of energy by Bahria Town shall be subject to the Finance Act 1964 and its amendment thereof, in respect of payment of Electricity Duty.

17. ARBITRATION:-

In the event of any question or dispute arising under or in connection with this Agreement between the Government and Bahria Town, the same shall be referred to a sole Arbitrator to be agreed upon within thirty (30) days by both parties hereto or failing that, to two Arbitrators, one to be nominated by each party. In case the two Arbitrators cannot decide

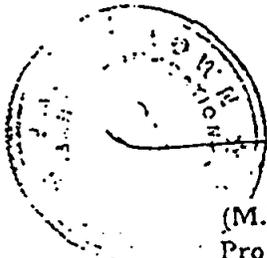


2/10/5

within the period stipulated by law or agreed upon between the parties the dispute shall be referred to an umpire to be nominated by the said two Arbitrators in writing before proceeding with the reference. The decision of the sole Arbitrator, the said two Arbitrators or the umpire so appointed by them as the case may be, shall be final and binding upon the parties. Upon every and any such reference, the assessment of costs incidental to the reference and the award respectively shall be in the discretion of the sole Arbitrator, the two Arbitrators or the Umpire, as the case may be.

IN WITNESS THEREOF THE Secretary to Government of the Punjab, Irrigation and Power Department and, Mr. M.F.K Lodhi Project Manager, Bahria Town, 60 Imran Khan Evenue Chaklala Scheme-III, Rawalpindi, for and on behalf of Bahria Town have caused these presents to be duly executed the day, month and the year first above written.

For and on behalf of the Behria Town



[Signature]
(M.F.K LODHI)
Project Manager
N.I.C.# 517-43-193532

FOR AND ON BEHALF OF THE
GOVERNMENT OF THE PUNJAB

[Signature]
(CH. MUHAMMAD ANWAR)
Deputy Secretary (Power)

WITNESS:-

[Signature]
(M. JAWEED AHSAN)
N.I.C.# 270-41-506513

[Signature]
(SH. MUHAMMAD YAHYA)
N.I.C.# 276-90-392341

[Signature]
(ENGR. WAHIED ASGHAR)
Director (Technical)
O/O: Chief Engineer (Power)

TECHNICAL DATA

1. Source of Power Supply

At present the source of Power Supply to Bahria Town (Pvt) Ltd (BTPL) is from IESCO. However, we may opt for any other source, if available, or go for self generation with due permissions/approvals.

2. Grid System Details

Sanctioned Load

2.1	220/132 KV Grid Station Phase-VIII Rawalpindi:	45 MW
2.2	132 KV Grid Station Phase-IV Rawalpindi:	52 MW
2.3	132 KV Grid Station Bahria Enclave Islamabad: and approval for 10 MW is under process with IESCO.	04 MW
2.4	Power Transformers augmentation/installation works at both Phase-IV and Phase-VIII Grid Stations is under process.	
2.5	11 KV Feeder for Bahria Golf City:	03.5 MW

3. Proposed Construction of New 132 KV Grid Station in Phase-VIII

In order to cater for the growing load requirement of Phase-VII & VIII and associated areas/sectors being developed, construction of a new 132 KV, 80MVA Transformation Capacity, has been approved by IESCO. Approval of Technical Design/Drawings is under process at present.

4. Total Numbers of Consumers

Total numbers of connections of all categories in Bahria Town Phase 1~8 are 41,304, Bahria Enclave Islamabad 4367 and Bahria Golf City 173.

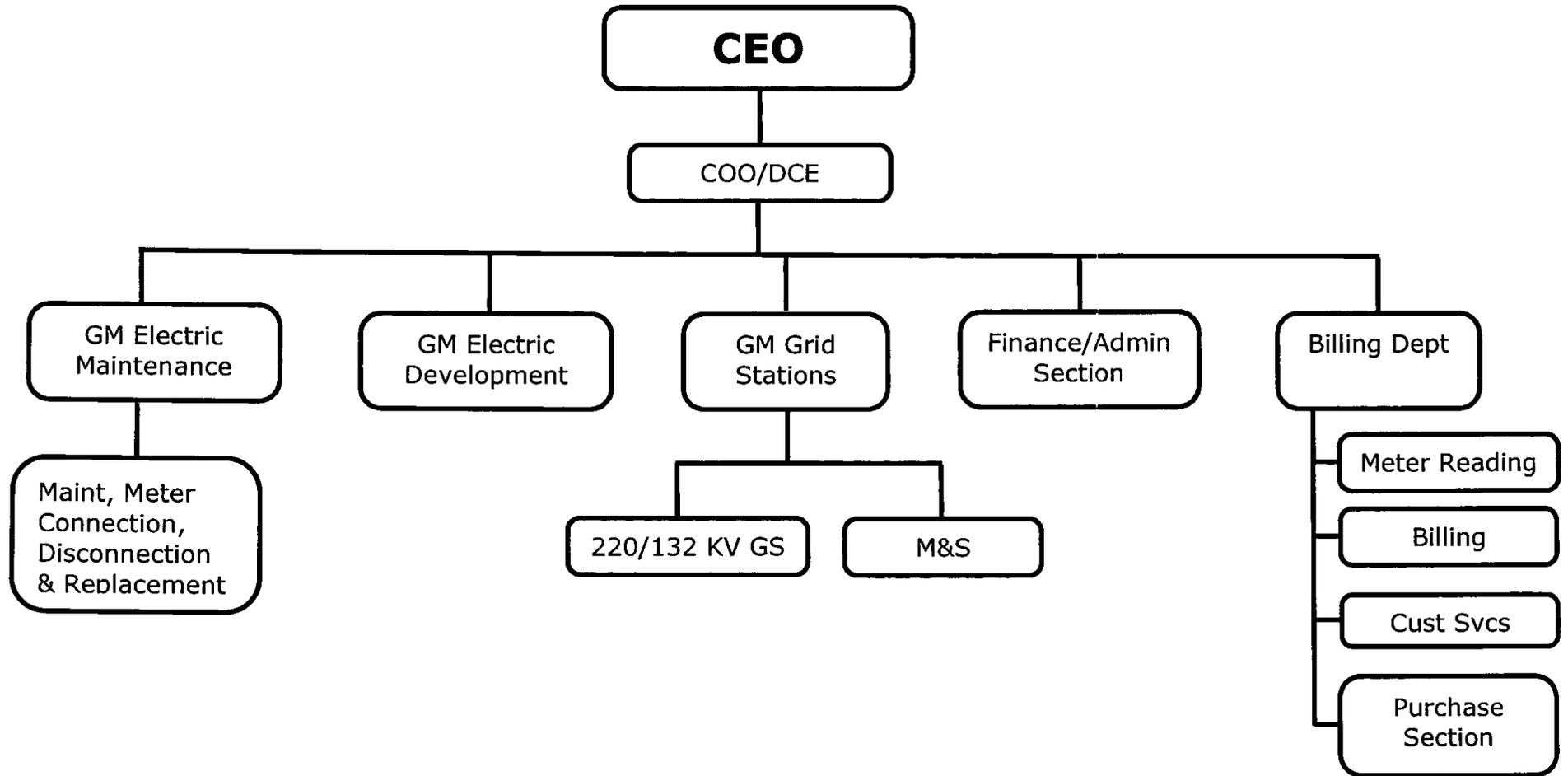
5. Type of External Electrification System

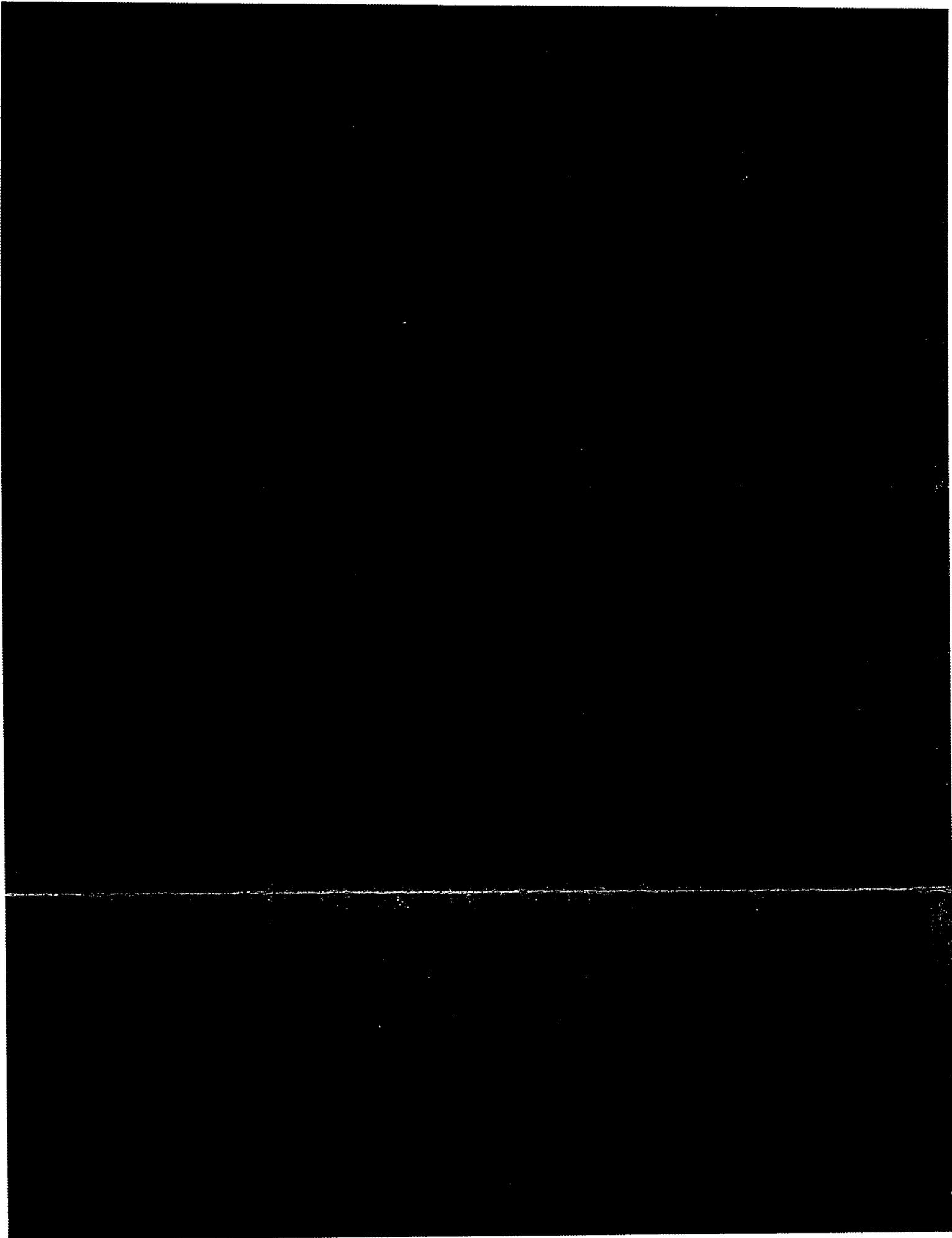
The external electrification system of BTPL is underground and comprises of HT/LT cables, Pad Mounted Transformers, $\frac{3}{4}$ Way Ring Main Switches (RMU), Distribution Boxes etc.

6. Operation and Maintenance of System

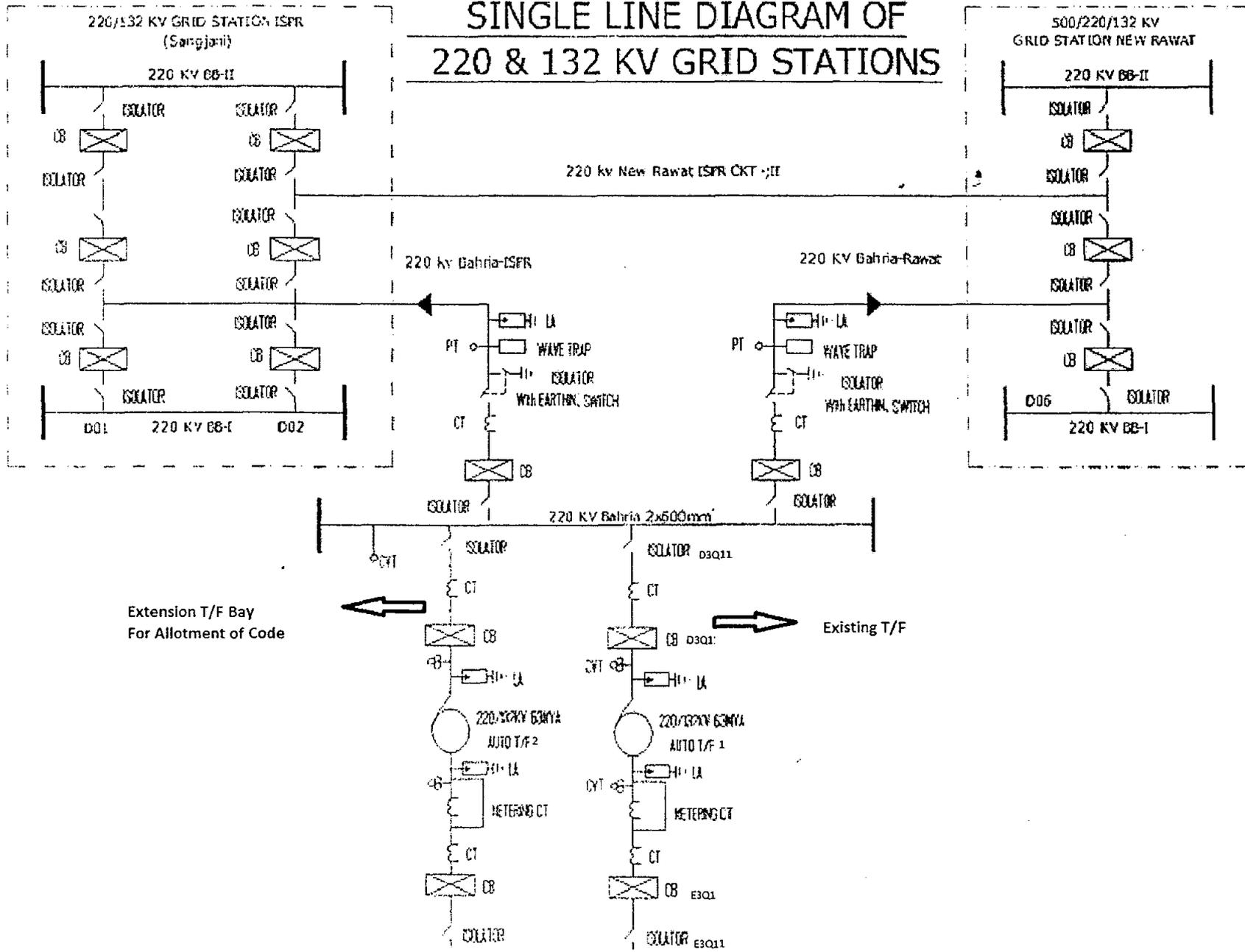
The Distribution System as well as 220/132/11 KV Grid Stations are being operated and maintained by BTPL through its qualified and experienced technical staff.

ORGANOGRAM
BAHRIA TOWN ELECTRIC SUPPLY WING
RAWALPINDI/ISLAMABAD

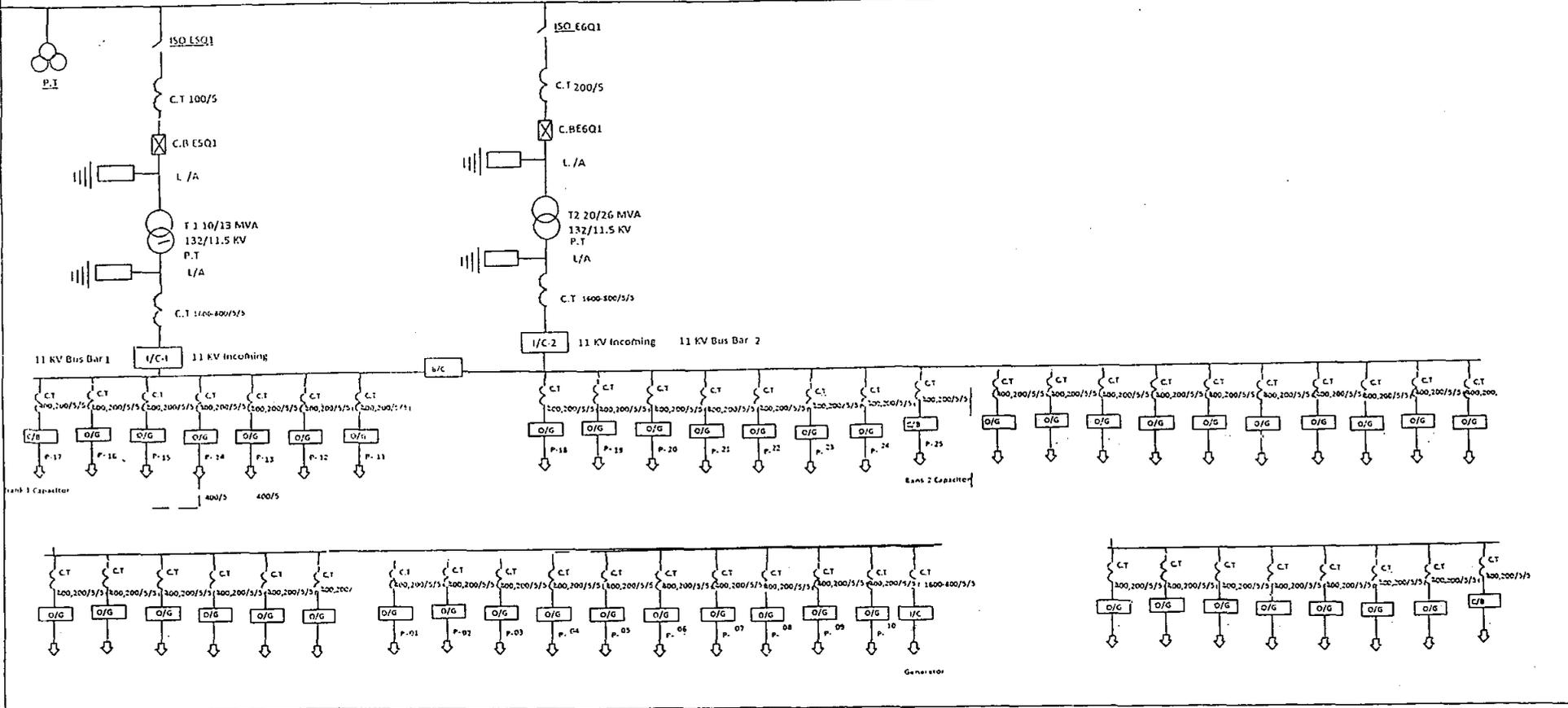




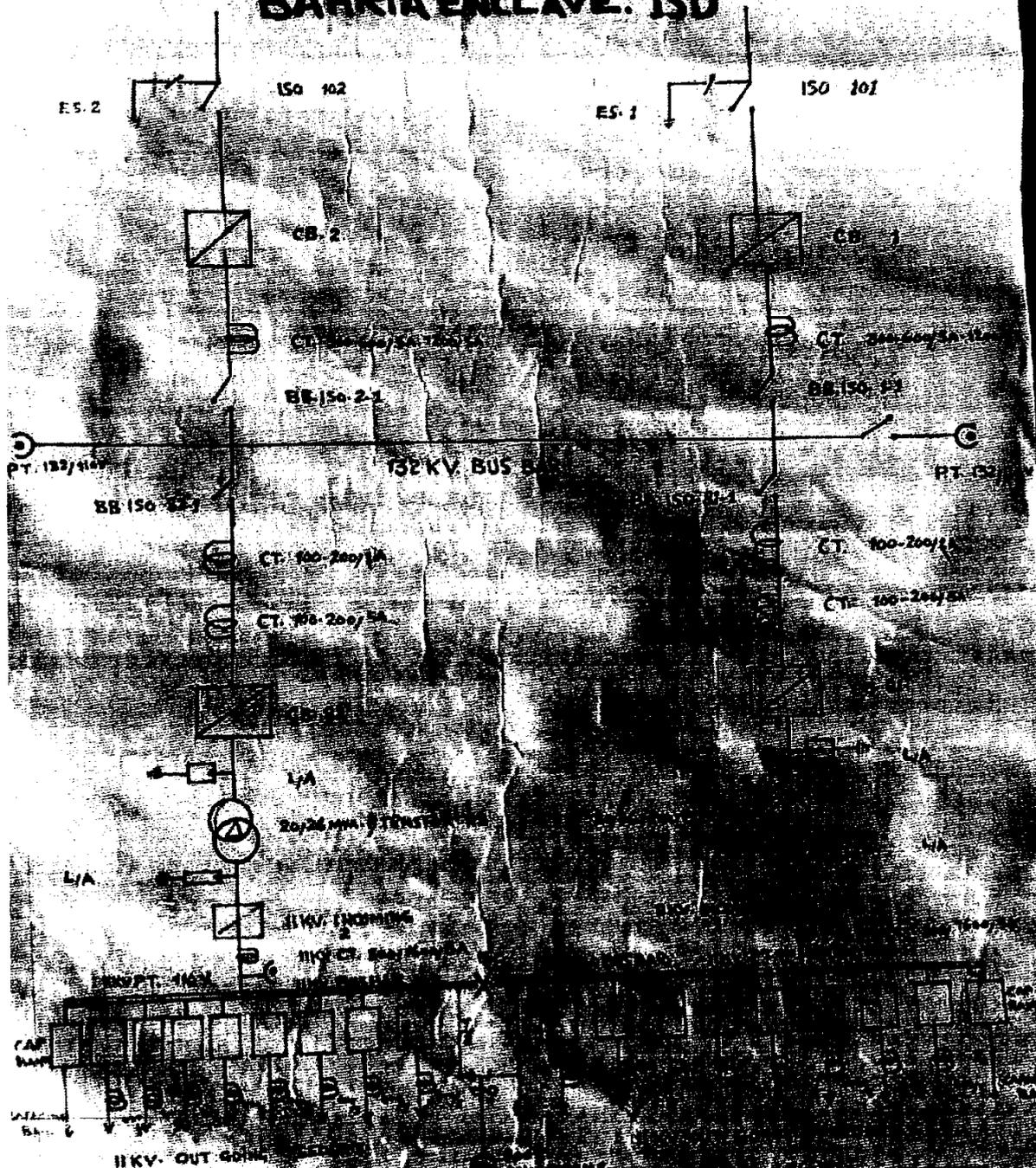
SINGLE LINE DIAGRAM OF 220 & 132 KV GRID STATIONS



Single Line Key Diagram of 132 / 11 KV Grid Station Phase VI B/Town

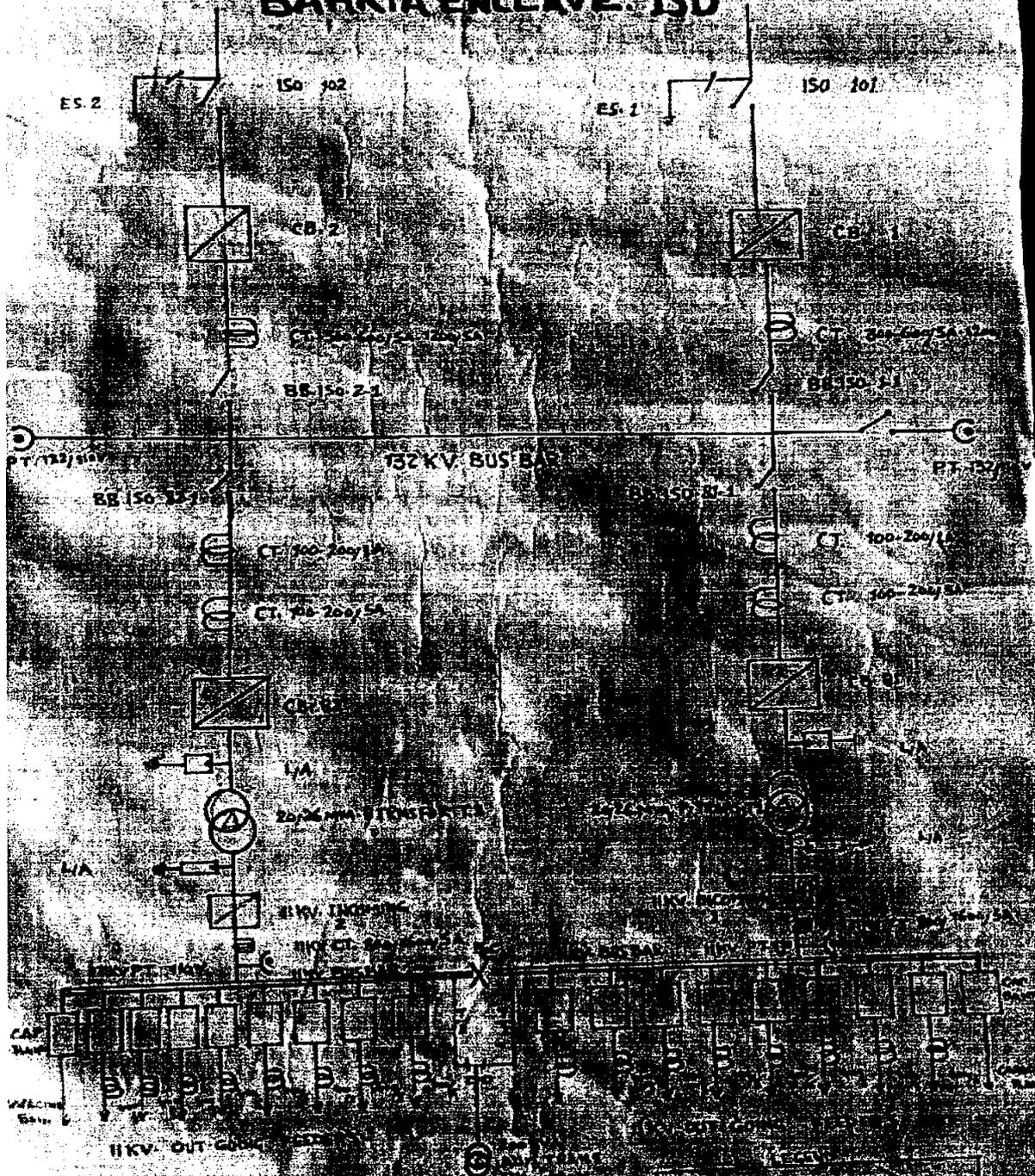


SINGLE LINE KEY DIAGRAM 132 KV G/STN BAHRIA ENCLAVE. ISD



DRAWN BY	
REVIEWED BY	
SUPERVISOR BY	
SYMBOLS	

SINGLE LINE KEY DIAGRAM 132 KV G/STN BAHRIA ENCLAVE. ISD



DESIGN BY	
APPROVED BY	
SUPERVISOR	
DATE	

Rana
Encl. Bahria

Rana

DISTRIBUTION SYSTEM

- **Type:** Underground Power Distribution System.
- **Technology:** Ring main with open loop system.

Equipment Make

- 11KV 3 Way /4 Way Switches Siemens/Schneider/ABB
- Termination and Straight Joints Reychem

- **Cables**

- HT XLPE/PVC 120mm² 3-Core & 500mm² /240mm² Single Core Newage/H.M Cables
- LT PVC/PVO 120mm² 4-Core Newage/H.M Cables
- Pad Mounted Translormer 100KVA, 200KVA, 40KVA, 630KVA, 1250 KVA Pel, Climax, Transfo Power
- Distribution Boxes General Switchgear/R.s Electric
- Street Lighting.
 - M/s Steel Poles with paint Jamal Pepe/Bashir Sons
 - Fixtures
 - Cables
 - Fancy Lights
 - Control Panels Street Light

TECHNICAL DETAILS OF DISTRIBUTION SYSTEM EQUIPMENT:

1. 11-KV PAD MOUNTED 3-WAY AND 4-WAY SWITCHES:-

The pad mounted switches shall be compact Load Break switches and shall be suitable for installation in 3-phase 11 KV underground distribution system of the following characteristics:

The switches shall have the following ratings:-

- | | |
|---|-------------------|
| - Rated Voltage | 11 kV |
| - Maximum design voltage | 12 kV |
| - Frequency | 50 Hz |
| - Rated normal current | 400 Amps |
| - Rated short time current (r.m.s) | 10 kA |
| - Rated short circuit making capacity peak | 25 kA/21 KA 3 Sec |
| - Rated transformer off-load breaking capacity (r.m.s) | 6.3 A |
| - Rated cable charging breaking capacity (r.m.s) | 2.5 A |
| - Impulse withstand voltage | 95 kV |
| - Rated short circuit making capacity and rated short time current for integral earthing device shall be the same as for main contacts. | |
| - The maximum temperature rise shall not exceed 40C when the switch is in clean condition and is carrying its rated normal current continuously | |

The material and manufacturing of the equipment alongwith specification and testing shall be in accordance with the WAPDA Specifications No. DD-S-46:90 and to the approval of the Consultant/Engineer.

2. Pad Mounted Transformers 630KVA, 400KVA, 100KVA and 200KVA

("KIOSKS"):-

The mechanical and electrical characteristics of 3-Phase Pad Mounted 1000/415 Volts Transformers shall be in accordance with WAPDA.

Specifications No. P-41:81 (UDC 621, 314, 212). Updated

Transformers

- Voltage 11/0.415 KV
- Vector Group Dyn 11
- Capacity 200 KVA & 100 KVA
- Tap Changer Off Load
- Frequency 50 Hz

H.T Compartment

- HRC Fuses
- Arc Stranglers

L.T Compartment

- L. T MCCBs of following rating for the protection of transformer and to feed the outgoing L.T Circuits.
 - a) 100 KVA
 - 250 Amp – 50 Ka Main Breaker
 - 100 Amp (Adj) – 25 KA all outgoing feeders
 - b) 200 KVA
 - 500 Amp - 50 KA Main Breaker
 - 200 Amp – 25 KA all outgoing feeders
 - c) 400 KVA
 - 1000A-50 KA Main Breaker
 - 250 A 35 KA Main Breaker
 - d) 630 KVA
 - 1600 A – 50 KA Main Breaker
 - 250 – 35 KA Main Breaker

- Frequency 50 Hz
- Maximum short circuit rating 25 KA

Indoor terminations shall be made in pad mounted steel enclosures and switchgear panels where dust and severe condensation is liable to occur.

The termination kits shall conform to WAPDA specifications P-184:86.

b) 11-KV Power Cable Splices

The joint and termination kits shall be suitable for cable of following description:-

- Single Core Cable
- Three Core Cable

The splices and terminations shall be suitable for operation at Ambient temperature of 50°C maximum and suitable for three phase underground 11-KV distribution system of the following Characteristics:-

- Nominal System Voltage 11 kV
- System Highest Voltage 12 kV
- Frequency 50 Hz
- Maximum short circuit rating 250 KA
- Tensile strength min 17-5 kg/sq cm
- Elongation at break 500%
- Dielectric strength min 20 kV/mm
- Volume resistivity 10^{15} ohm-cm
- Ozone resistance No effect when expected to 0.04% ozone by volume for 3 hours.

The material shall be according to WAPDA specifications P-86:80(UDC 621,315, 61) (amended to-date).

5. L.T Power Cables:-

All LT Cables from transformer to LT L.T. Distribution boxes are 185/120 mm PVC/PVC insulated aluminum, cables. The cable are suitable for operation in a 415/ 240 Volts, 50 Hz three phase multiple neutrally earthed distributed system. The cable shall be 4-core PVC/PVC cable suitable for direct burial or for installation in air or running in the ducts. The duct and soil conditions varying from dry to wet. The maximum Ambient Temperature shall be 50°C and the relative humidity may range up to 100%. The cable shall be suitable for conductor operating temperature as follows:-

- | | |
|---|--------|
| - Continuous Operation | 70 °C |
| - Short circuit (5 sec. maximum duration) | 160 °C |

The street light cables shall be of sizes:-

- The cables are as per WAPDA's Specifications No. Volts DD-S-8:84, 600/1000 (SID Cables), PVC insulated, PVC sheathed.
- BS Specifications shall be followed for those sizes where WAPDA Specifications are not applicable.

6. L.T Distribution Boxes (Service Boxes):-

The LT three phase distribution/metering boxes (feeder pillars) are used for making connection of underground services to underground LT mains. The distribution boxes shall be suitable for installation and operation in 3-Phase – 4 wire distribution system of the following characteristics:-

- | | |
|--------------------------|---------------|
| - Nominal System Voltage | 415/240 Volts |
| - System Highest Voltage | 460/260 Volts |
| - Frequency | 50 Hz |

The maximum Ambient Temperature may be 55°C and may range up to 100%.

The bus bars shall be of aluminum of 99.5% purity having 61% AC conductivity and minimum tensile strength of 8.4 kg/mm. The bus bars shall be extruded or hard drawn. The size of bus bars shall be 50 X 10 mm. These shall have a smooth finish, free from sharp edges, holes and cavities etc.

7. Street Light Fittings & Fixtures:-

Street Light Poles

- 12, 10, 8 and 6 meter high single arm and double arm poles hot dip Galvanized or painted.

Street Light Fixtures

- On Main Roads light fixtures are HRC 511 with 250Watt light with power factor correction capacitor, ballast, ignitor (for SON) etc.
- On Small Roads & steel fixtures are HSPQ with 125Watt HPL light

Lighting Fixture Control Gear

- Ballast
- Ignitor
- Holder
- Capacitor

8. Street Light Control Panel:-

The Street light control panels are comprise of the control device and A. C. contactor for correct and reliable opening and closing of the contacts. The control device is photoelectric timer. The equipment are installed within a weather proof, dust proof and moisture proof cabinet. The MCB shall control a group of lights and MCCB is be rated to their total current.

The photoelectric cell timer and actuating relay shall have the features mentioned below:-

Photo Electric Cell

The photoelectric cell have the following

ratings:-

- Operating Voltage Range 210 to 250 Volt AC
- Load Current Capacity 10 Amps

Relay (Magnetic Contractor)

It shall be of triple pole, single throw and of electromagnetic type. Pole magnet shall be dimensionally stable. Performance shall be chatter free. Contacts shall be of long life at rated load. Some arrangements shall be provided with the armature to counter-act the effect of high inrush current.

The A. C. contactor for closing and opening of electrical street lighting circuits shall have the following features:-

- Maximum Ambient Temp. 50 °C
- Relevant Humidity 100%
- Operating Voltage 415 Volt A.c
- Control Supply Voltage 215 Volt Single Phase
- Frequency 50 Hz

9. Earthing System:-

Earthing for Out Door Pad Mounted Equipment:

The earth electrode shall consist of M.S. Galvanized rods 5/8"x 10' feet long thoroughly hammered into the ground. The rod shall be connected to the earth conductor by means of a connector clamps which shall be tightened properly. After tightening, the connector shall be covered with Bitumen to prevent ingress of moistured soil. The rod shall be hammered to a level 10/20ft below ground level.

The number of rods forming on Earthing point shall depend upon the Earth resistance. The earth resistance at any point in the system shall not exceed 05 ohms and it maybe necessary to use more than one rod to achieve the specified Earth resistance.

GRID STATIONS

1. GRID STATION 220/132 KV(Phase-VIII):-

- **Type:** 220KV IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 1x 220/132KV Tfmr 63 MVA (On Load) Siemens (Mexico)
- 1x 220/132KV Tfmr 63 MVA (Standby) Siemens (Jinan China)
- 11KV Switchgear and PFI Plant Siemens

2. GRID STATION 132/11.5KV (Phase-VIII):-

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 10/13MVA Siemens
- 132/11.5 KV Transformer 20/26 MVA Siemens (TBEA China)
- 11KV Switchgear and PFI Plant Siemens

3. **GRID STATION 132/11.5KV (Phase-IV):-**

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 10/13MVA Siemens
- 132/11.5 KV Transformer 20/26 MVA Siemens
- 11KV Switchgear and PFI Plant Siemens

4. **GRID STATION 132/11.5KV (Bahria Enclave):-**

- **Type:** IN/Out Arrangement/System
- **Technology:** Air Insulated Switchgear (AIS)

Equipment Make

- Circuit Breaker. Siemens
- CT,s PTs. Disconnecter Switches EMEK
- Control & Relay Panels Siemens
- 132/11.5KV Transformer 2x20/26 MVA Siemens (Chint China)
- 11KV Switchgear and PFI Plant Siemens

POWER SOURCES AVAILABILITY:

1. 220/132 KV Grid Station Phase-VIII

The Power Source is taken as 220KV Line Sangjani ~ Rawat with In/Out arrangement for 220/132KV Grid Station having capacity of 63 MVA Transformer alongwith an additional 1 No. 63 MVA Transformers Bay tested ready for energization at 220 KV Grid Station Phase-VIII.

2. 132/11.5 KV Grid Station Phase-VIII

The Power Source is taken from 220/132KV Grid Station Bahria Town Phase-VIII. Grid Station having capacity of 1x10/13MVA Transformer Bay and 1x20/26 MVA Transformer Bay. Augmentation of 10/13 MVA Transformer with 40 MVA Transformer is under process and likely to be completed by December 2022.

3. 132/11.5 KV Grid Station Phase-IV

The Power Source is taken from 132KV T/L Rawat ~ Chaklala with In/Out arrangement. Grid Station having capacity of 1x10/13MVA Transformer Bay and 1x20/26 MVA Transformer Bay. Augmentation of 10/13 MVA Transformer with 40 MVA Transformer is under process and likely to be completed by December 2022.

4. 132/11.5 KV Grid Station Bahria Enclave

The Power Source is taken from 132KV University ~ Nilor T/L with In/Out arrangement. Grid Station having capacity of **2x20/26MVA** Transformer Bays has been energized in 2019 on No Load.

Technical Details of Grid Stations Equipment:

1. 220 KV Grid Station Phase-VIII

220 KV Auto Transformer

- Voltage 220/132 KV
- Vector Group YNAD1
- Capacity 2x40/50/63 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

220 KV Circuit Breaker

- Voltage Rating 245 KV
- Current Rating 2000 Amp
- Short Circuit Level 40 KA
- Type of Breaker 3AP1FSF6

220 KV Isolators

- Voltage Rating 245 KV
- Current Rating 2000 Amp
- IK 40KAmp

220 KV Current Transformer

- Voltage Rating 245 KV
- Protection CT's 600/1200/2400/1,1,1
- Cores 5

220 KV Capacitive Voltage Transformer

- Voltage 245 KV
- Voltage Ratio 220 KV/110V
- Type Extended Creepage Distance

220 KV E/Switch

- Rated Capacity 245 KV
- Current Rating 2000Amps
- IK 40KA

220 KV Lightening Arrestors

- Type 3EP4-198-2PF32-10A1
- UR 198 KV
- UC 158 KV

2. **132 KV Grid Station Phase-VIII**

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 1X 10/13 MVA
1X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Cree page Distance

11 KV Switch Gear

- **Incoming Panel**

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- **Outgoing Panel**

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- **11 KV Capacitor Bank**

- Voltage 11 KV
- Capacity 4.8 MVAR & 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

3. **132 KV Grid Station Phase-IV**

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 1X 10/13 MVA
1X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended
Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

132 KV Current Transformer

- Metering CT's
- Protection CT's 145 KV
With Extended Creepage
- Voltage Rating 20 KV
- Short Circuit Capacity
- 3 Core CT for Protection
- 2 Core CT for measuring
- Accuracy class for metering
- Ratings 800-400 / 5-5-5-5 A for Line
200-100 / 5-5-5-5 A for Tfmr

132 KV Current Potential Transformer

- Voltage 145 KV Type with Extended
Creepage Distance
- Voltage Ration 132/3 / 0.11/3 KV

132 KV Relay & Control Panels

- Line Control Panel CP-30
- Line Relay Panel RP-3
- Transformer Control Panel CP-50
- Transformer Relay Panel PP-4

132 KV Surge Arrestors

- Voltage Rating 120 KV with Extended
Creepage distance

11 KV Switch Gear

- Incoming Panel

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- Outgoing Panel

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- 11 KV Capacitor Bank

- Voltage 11 KV
- Capacity 4.8 MVAR & 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

4. 132 KV Grid Station Bahria Enclave

132 KV Power Transformer

- Voltage 132/11.5 KV
- Vector Group DYN 11
- Capacity 2X 20/26 MVA
- Tap Changer On Load
- Bushings Extended Creepage
- Frequency 50 HZ

132 KV Circuit Breaker

- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Level 31.5 KA
- Type of Breaker SF₆ with extended Creepage Distance

132 KV Isolators

- Bus Isolators
- Voltage Rating 145 KV
- Current Rating 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Cree page Distance

132 KV Line Isolators

- Voltage 145 KV
- Current 1600 Amp
- Short Circuit Capacity 20 KA
- Extended Creepage Distance

11 KV Switch Gear

- **Incoming Panel**

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Rating 2500 Amp
- Breaking Capacity 25 KV
- Operation System Spring Loaded Mechanism

- **Outgoing Panel**

- Type Metal Clad Indoor with Vacuum Circuit Breaker
- Circuit Rating 800 Amp
- Breaking Capacity 25 KV

- **11 KV Capacitor Bank**

- Voltage 11 KV
- Capacity 7.2 MVAR
200 KVAR Bank each
- WAPDA Specs P-165:89

SIX RUPEES

AGREEMENT

The draft Agreement is entered into at Islamabad the 25th day of January 2002 by and between Islamabad Electricity Supply Company Limited (Here in after called as IESCO/WAPDA) and Bahria Town (here in after called Sponsor).

The Terms of the Agreement are as follows: -

1. Bahria Town and Safari Villas will be treated as one entity henceforth as they are under the same management (sponsor).

a. The Grid Station will be built on minimum land of 32 Kanals to be provided by Sponsor after approval of site by NTDC. This piece of land will be transferred in the name of WAPDA/IESCO free of cost as WAPDA/IESCO property before execution of work.

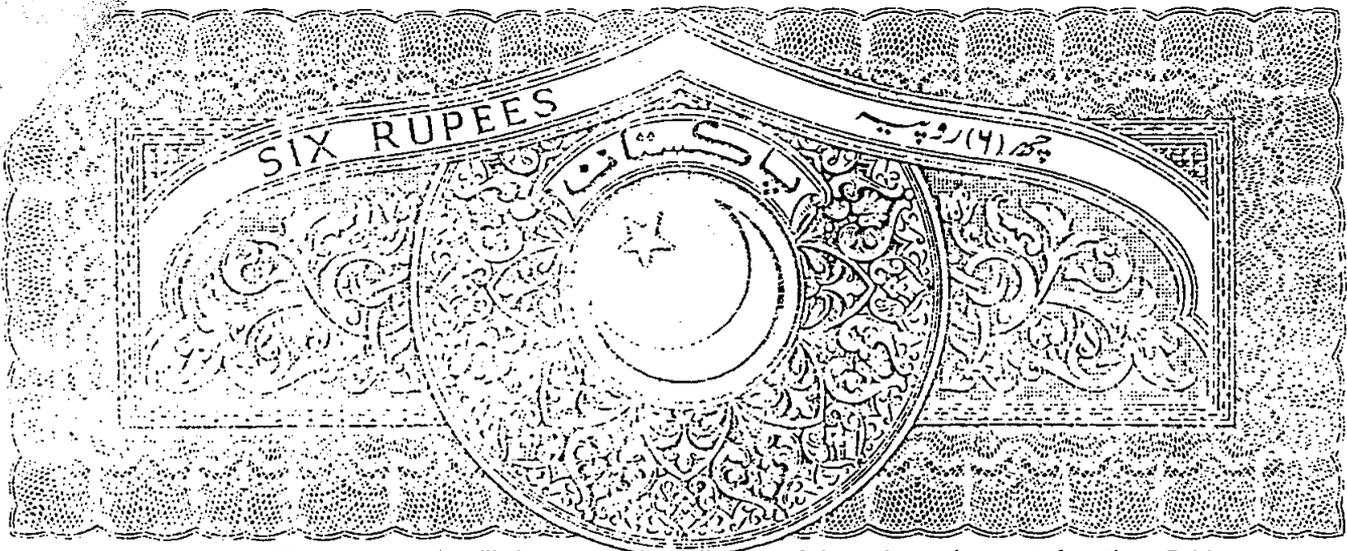
b. Grid Station will be constructed according to the Design Drawings issued by Chief Engineer (Design) NTDC, WAPDA. All the material/equipment to be purchased shall be in accordance with WAPDA specifications and shall be inspected/tested by representative of Chief Engineer (Design) NTDC, WAPDA/IESCO at manufacturer's premises at the expense of the Sponsor (for abroad only, one person at one time) as per WAPDA rules before installation at site.

c. Reasonable quantity of T&P and spare parts of equipment mutually agreed by Chief Executive Officer IESCO and Sponsor will be listed out in the BOQ at the time of procurement.

d. The draft for contract documents for purchase of material / equipment shall be got vetted from Chief Engineer (Design) NTDC, WAPDA. The copies of Purchase Orders of material / equipment and Work Orders shall be endorsed to Chief Engineer (Design) NTDC, WAPDA/Chief Executive Officer IESCO mentioning therein the inspection clause clearly stating that all material / equipment shall be accepted subject to clearance by WAPDA/IESCO.

e. The grid station will be constructed with space and provision for 3 Nos. 132KV/11 KV power transformers, associated control room, offices and residential colony as per Wapda standards / specifications. Bahria Town (Cont -

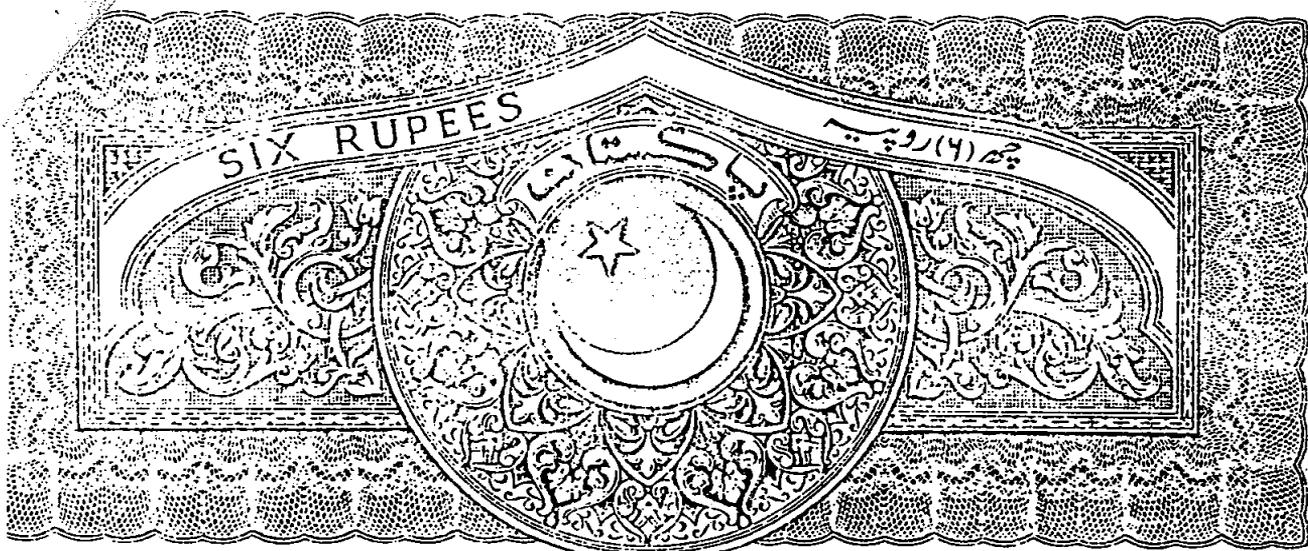
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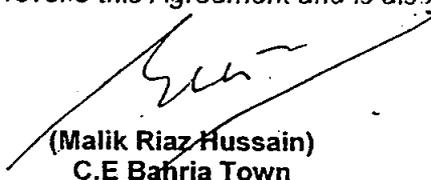
Management will however install material and equipment for the Grid Station to cater for their present load demand of 10 MW.

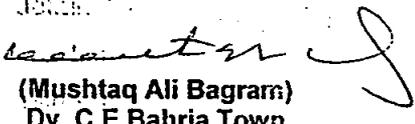
- f. WAPDA/IESCO will have the right to use this Grid Station to cater for any additional future load requirements other than Bahria Town.
- g. Wapda will construct 132 KV Double Circuit Transmission Line to connect Bahria Town Grid Station (In and out arrangements) at the expense of Sponsor).
- h. The grid station will be constructed under the supervision of Chief Engineer Design NTDC, WAPDA who or his representative will carry out regular stage inspections during the course of construction.
- i. The grid station after completion will be handed over to WAPDA/IESCO for maintenance, operation and other activities / extension etc. Operation / Maintenance after the construction of grid station will be done by WAPDA/IESCO.
- j. After completion of work, the Sponsor will offer the same for final inspection by CE Design NTDC, WAPDA through letter / completion report. Consequent to CE Design NTDC's, WAPDA letter of approval, final handing / taking over will take place at which date the grid station will be commissioned / energized and will become WAPDA / IESCO property. Replacement of any material / equipment damaged during the warranty period will be the responsibility of the Sponsor.

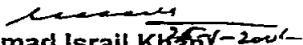
2. Complete right of way facilities will be provided by the Sponsor for the electrical network to be constructed for providing electricity to the Scheme.
3. One point supply under Tariff C-2 will be given through metering on 11 KV panel at Grid Station. The construction of HT / LT Distribution Network and its maintenance will be the responsibility of the Sponsor.
4. NOC from CDA and RDA, whichever is applicable, for the area (for which 10 MW load has been applied) will be provided by the Sponsor.
5. The Sponsors have applied for 10 MW load. They will not ask for any load extension for next 10 years. However after 10 years if they wish to extend the load further, then they will be bound to comply with the then prevalent policy of WAPDA/IESCO before any such extension is made.

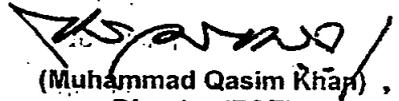


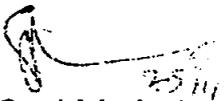
6. Bahria Town Management will construct Grid Station within Nine (9) months period failing which interim supply arrangements as detailed in Para-7 below will be disconnected and they will not challenge this action at any forum, legal or otherwise. Time period will start w.e.f. the day design of 132 KV Grid is approved and handed over by Chief Engineer (Design) NTDC, WAPDA to the Sponsor.
7. After signing of the Agreement, IESCO will provide supply under tariff C-1 through 3 Nos. 200 KVA transformers, locations to be specified by the sponsors, at their cost within 15 days of payment from the existing system. The Sponsor will also bear the cost for provision of HT line upto these locations. All departmental formalities will have to be completed before allowing connections. The Sponsor will not claim any refund when this interim arrangement is shifted to the permanent source after the infrastructure through Grid Station is provided. WAPDA will reserve the right to use this interim feeding arrangement for any use, after the energisation of Grid Station.
8. Any dispute arising out of the implementation / interpretation of the terms of the Agreement will be referred to Arbitration consisting of two Arbitrators each appointed by both parties. In case of inability to come to a constructive conclusion between the Arbitrators the matter will be referred to Chief Executive IESCO and his decision would be final.
9. If the sponsor is found acting in contravention of Agreement or any of his acts adjudged or liable to be adjudged prejudicial to any of the clauses contained herein or any other instructions issued from time to time, IESCO reserves the rights to revoke this Agreement and is also authorized to impose penalty as deemed fit.


(Malik Riaz Hussain)
C.E Bahria Town


(Mushtaq Ali Bagram)
Dy. C.E Bahria Town


(Muhammad Israil Khan)
Director (CM&O)
IESCO, Islamabad.


(Muhammad Qasim Khan)
Director (P&E)
IESCO, Islamabad.


(Syed Adeb)
CHIEF ENGINEER / TECHNICAL DIRECTOR
IESCO, Islamabad.

ADDITIONAL AGREEMENT

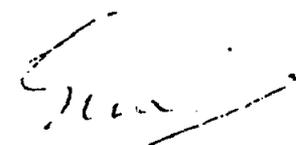
In pursuance of the Agreement dated 25th January 2002 between Islamabad Electricity Supply Company Limited (herein after called IESCO/WAPDA) and Bahria Town (herein after called the Sponsor), following conditions are being added on the request of the Sponsors (Bahria Town) and the directions of Chief Executive Secretariat Islamabad, which shall be considered as part and parcel of the agreement dated 25th January 2002.

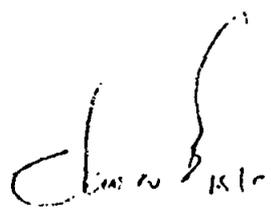
1. In addition to the interim arrangement already agreed and provided by WAPDA / IESCO under clause-7 of the agreement of 25th January 2002, additional 1.4 MW (1750 KVA) power under additional interim arrangement will be provided by WAPDA / IESCO through new network to be constructed, which will be provided subject to following conditions: -
 - a. 100% payment of the actual cost of one new independent 11 KV feeder from 132 KV Chaklala grid station will be paid by the Sponsor within 15 days of issuance of the demand notice.
 - b. As per Section-12 of Electricity Act and clause-21 of WAPDA Abridged Conditions of Supply, Bahria Town (The Sponsors) will provide complete right of way facilities for construction of new independent 11 KV feeder and will give an undertaking to the effect that "Any cost if required additionally due to right of way problem or escalation in cost of material during construction of work or any other reason will have to be deposited by them". The actual cost of material and its installation charges for the network to be installed / shifted shall be charged at the prevailing rates at the time of execution of the job. Excess cost / variation will have to be deposited by the sponsor after adjusting the deposited amount.
 - c. Payment of proportionate grid station cost of **Rs.5.74 Million** against 1.4 MW (1750 KVA) load by the Sponsor within 15 days of the issuance of the demand notice. This amount will be refunded after completion and handing / taking over of grid station to IESCO
 - d. Construction of the 11 KV feeder for the provision of 1.4 MW (1750 KVA) will be completed in a minimum period of 02 months by IESCO / WAPDA from the time of the realization of amounts as mentioned at paras a & c above. This time period will exclude any period wasted on any right of way problem or any other unforeseen event or happening.
 - e. This interim supply of 1.4 MW (1750 KVA) will be provided to the sponsor under tariff C-2, with metering on the 11 KV side at the grid station.
 - f. In accordance with conditions of C-2 tariff, the maintenance of 11KV and below distribution network will be the responsibility of the Sponsor.
 - g. The sponsor will be restricted to the use of 1.4 MW (1750 KVA) load and in case the load demand exceeds this limit, then this interim supply will be disconnected without any notice and they will not challenge this action at any forum, legal or otherwise.

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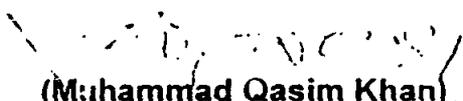
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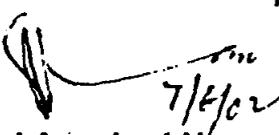
- f. The electrical supply through this interim arrangement shall only be allowed till the completion of grid station being constructed by the Sponsor and its handing over to WAPDA / IESCO as per clause 1(i) of the original Agreement signed on 25th January 2002. WAPDA / IESCO will reserve the right to use this interim arrangement (11KV feeder alongwith 11KV outgoing panel) for any use to meet its requirement. Further the Sponsor will also not claim any refund of amount deposited as per clause 1(a) above.
2. The rest of the terms and conditions remain the same as already mentioned in the Agreement of 25th January 2002, and will be applicable to this additional Agreement as well.

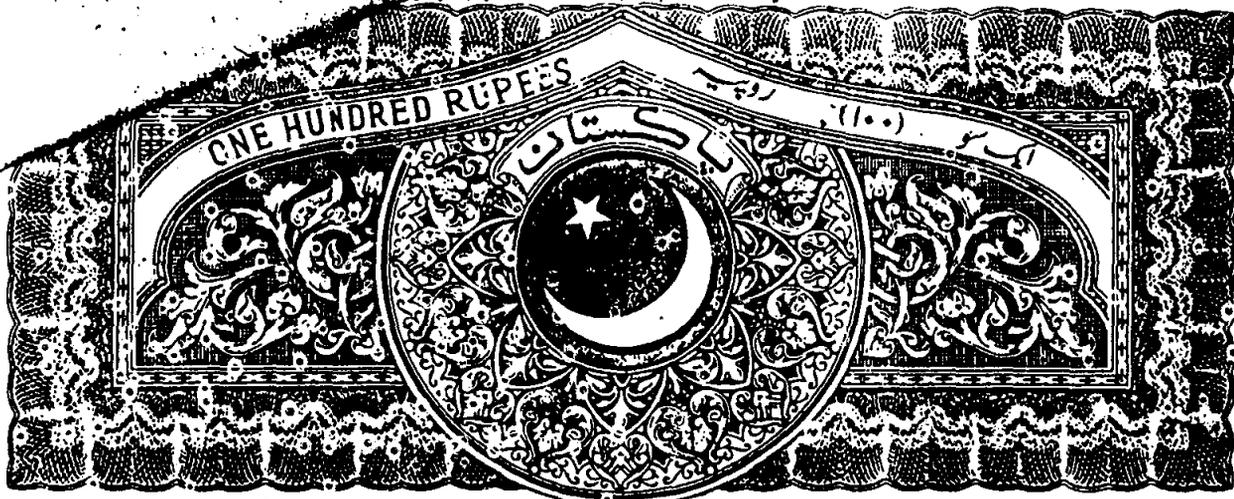

(Malik Riaz Hussain)
C.E Bahria Town.


(M. Ayaz Khan)
Dy. C.E Bahria Town


(Muhammad Israil Khan)
Director (CM&O)
IESCO, Islamabad.


(Muhammad Qasim Khan)
Director (P&E) 7/6/2002
IESCO, Islamabad.


(Syed Adeb-ul-Hassan)
7/6/02
CHIEF ENGINEER / TECHNICAL DIRECTOR
IESCO, Islamabad.

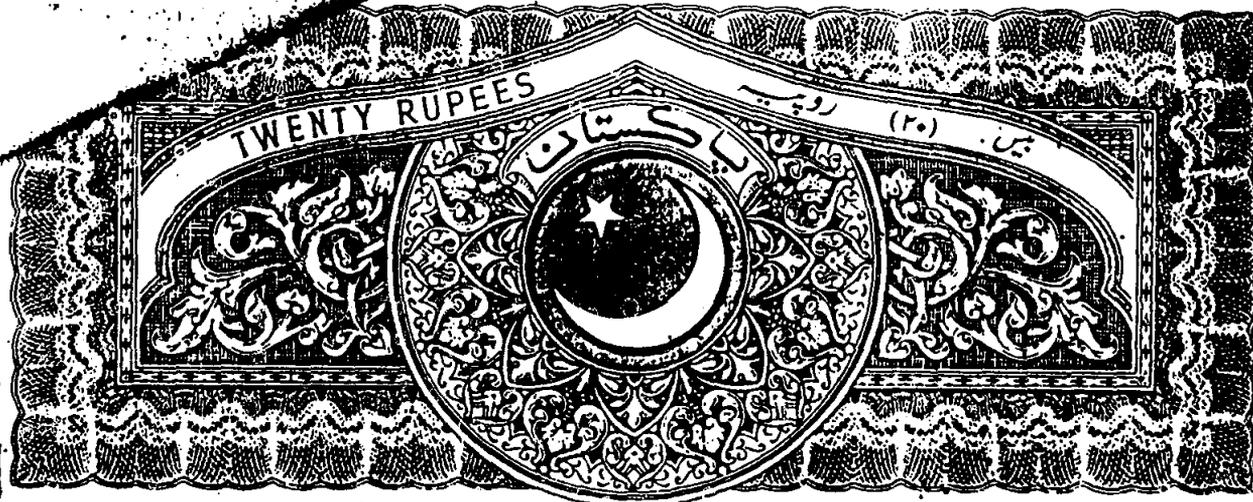


**MEMORANDUM OF UNDERSTANDING (MOU) FOR
PHASE-VIII GRID STATION BAHRIA TOWN (PVT.) LTD ISLAMABAD**

The Memorandum of Understanding (MOU) is entered into at Islamabad on **21 November 2007** by and between Islamabad Electricity Supply Company Limited (Here in after called as IESCO/WAPDA) and Bahria Town (Pvt.) Ltd Islamabad (Here in after called Sponsor). This MOU will cater for supply of power to all Projects launched by Bahria Town in Phases VIII-IX.

The terms and conditions of MOU are as follows:

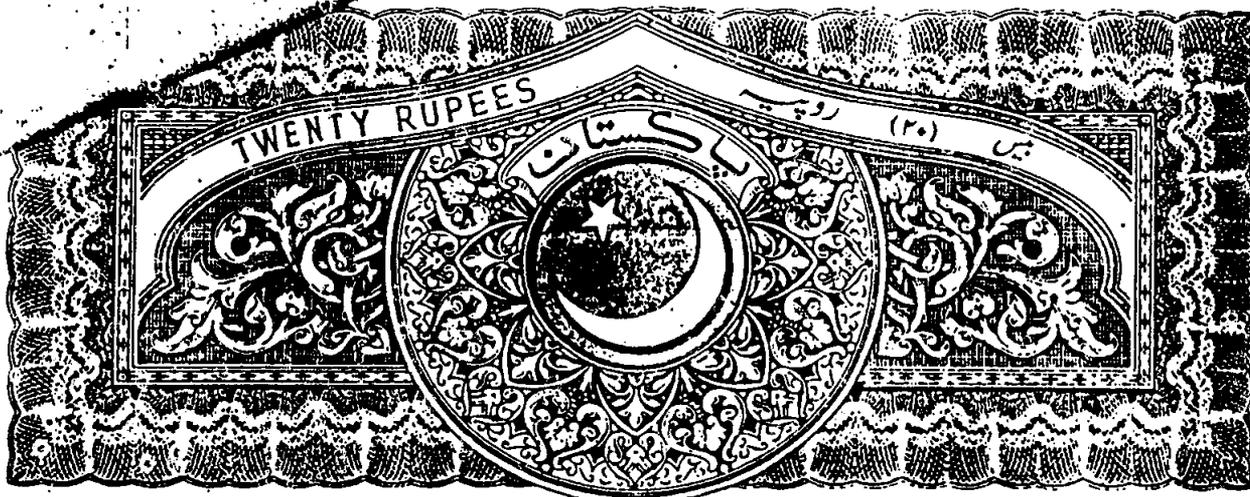
1. The initial load of Phase-VIII & IX of Bahria Town (Pvt.) Ltd Islamabad will be 10MW and ultimate load will be 47.206MW as per detail provided by the sponsor.
2. The sponsor shall construct 132/11KV Grid Station according to WAPDA design and specification to be approved by Chief Engineer Design (NTDC) WAPDA House Lahore for Bahria Town (Pvt.) Ltd Islamabad viz Safari Valley, Safari Homes and all other Projects launched by Bahria Town in Phase-VIII IX for One Point bulk supply connection under Tariff C-3, through metering on 132KV side at Grid Station.
3. The sponsor shall pay all the design, vetting and inspection charges regarding proposed 132KV Grid Station and its connecting lines, as and when demanded by IESCO.
4. The sponsor shall fulfill all the WAPDA, IESCO and NEPRA prerequisites necessary / described for bulk supply connection under Tariff C-3. The sponsor will provide NOC and Distribution License from NEPRA for phases VIII-IX and all subsequent Projects lying therein under IESCO jurisdiction before the energization of subject Grid Station.
5. The system inside the housing scheme will be laid down by the sponsor at his own cost as per criteria given below.
 - I) The Sponsor will be fully responsible for the procurement & installation of quality material according to WAPDA's approved specifications from the manufacturers approved by WAPDA. The colour code of such material shall be different from that of WAPDA (e.g. transformer to be of blue colour). In case WAPDA's/IESCO's material is found installed, IESCO reserve the right to lodge FIR.
 - II) The Sponsor will not purchase / use any material bearing WAPDA / IESCO monogram or WAPDA's / IE-CO's colour scheme or identification.
 - III) The procurement of material will be done by the sponsor from WAPDA's approved manufacturers. Alternatively, contractors appointed by the Sponsors may also purchase the material after getting the purchase order vetted by the sponsors before it is submitted to the IESCO for further vetting. However responsibility for purchase made by the contractor will rest with the sponsors.
 - IV) The name of the housing scheme, purchase orders No. with year of manufacturing and serial No. of the transformer shall be clearly punched / embossed / engraved on the body of the transformer and name plate with other relevant information.
 - V) The manufacturer will engrave the name of housing scheme, purchase order No. with date, year of manufacturing on each Reel of Conductor / Cable. The Reel shall have a different colour than the colour of the Reel supplied to WAPDA. Furthermore the subject information also to be provided on the cable on every 10th meter.



VI) After procuring the material you / sponsor will give information to IESCO that the material procured bears all the identification marks as described above.

VII) Committee comprising **SE (E) IESCO concerned & Manager (MM) IESCO** in association with representative of sponsor / consultant shall examine the documents to ensure that legitimate material has been utilized before energization of the scheme.

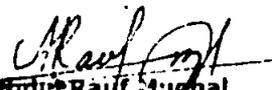
6. The construction of Grid Station for Phase VIII-IX shall be carried out by sponsor in accordance with WAPDA/IESCO standard design specifications, International standards and practices after design vetting from the relevant office.
7. The work of construction of Grid Station as well as external electrification shall be started after receipt of NOC, approved layout plan from concerned administrative office.
8. The Grid Station will be built on minimum 32 Kanals of land by sponsor after approval of site by Siting & Layout Board IESCO. However in case sponsor decides to build a Grid station other than a conventional type (GIS/outdoor or indoor etc) then the limit of 32 Kanals can be reduced/revised with the approval of IESCO.
9. Grid station will be constructed according to the design drawings issued by Chief Engineer Design (NTDC) WAPDA House Lahore. All the material/equipment to be purchased shall be in accordance with WAPDA specification and shall be inspected by representative of IESCO at manufacturer's premises at the expense of the sponsor (for abroad only one person at one time) as per WAPDA rules before installation at site.
10. The draft for contract documents for purchase of material/equipment for Grid Station shall be got vetted from Design (NTDC) WAPDA House Lahore. The copies of purchase orders of material / equipment and work orders shall be endorsed to Design (NTDC) WAPDA House Lahore and Chief Executive Officer IESCO for mentioning there in the inspection clause clearly stating that all material/equipment shall be accepted subject to clearance by WAPDA / IESCO.
11. The Grid Station will be constructed with space and provision of 3 No. 132/11KV Power Transformers, Carrier Telecommunication System, associated control room, offices and residential colony as per WAPDA standards/specification. Bahria Town management will however install material and equipment for this Grid Station to cater for the ultimate demand of 17.206MW. One No. power transformer shall be installed by IESCO for its future load requirement as and when required. However, all cabling (HT/LT) through Bahria Town territory shall be done underground. Bahria Town shall be allowed to use IESCO transformer if and when required i.e. due to fault etc. in Bahria transformer.
12. WAPDA will construct 32KV Double circuit Transmission Line with Rail Conductor to connect Bahria Town Phase-VIII Grid Station at the expense of Sponsor.
13. The Grid Station will be constructed under the supervision of Design (NTDC) WAPDA/Chief Executive Officer IESCO who or his representative will carry out regular stage inspection during the course of construction.
14. Maintenance and operation of the Grid Station as well as distribution system shall be done by Bahria Town management after getting Distribution License by the sponsor from NEPRA.
15. Complete Right of Way (RoW) facility will be provided by the sponsor for the electrical network to be constructed for providing the electricity to the sponsor. The sponsor will also provide Right of Way for extension of 132KV System for IESCO.



16. Bahria Town (Pvt.) Ltd Islamabad will construct Grid Station within 24 months period falling which interim supply arrangement under tariff C-2 will be disconnected and they will not challenge this action at any forum, legal or otherwise. Time period will start w.e.f. the day MOU is signed.
17. The sponsor shall apply for initial load of 10MW under Tariff C-3 on proper A&A form alongwith relevant documents for Phase-VIII & IX and subsequently for extension/ultimate load as and when required.
18. The sponsor shall pay the security amount for the demanded load at the prevailing rate as and when demanded by IESCO.
19. After signing of the MOU IESCO will provide supply under Tariff C-2 through construction of independent 11KV feeders from 132KV Sowan Grid Station for 1.25 MW load for Phase-VIII & IX on cost deposit basis/expenses of Bahria Town (Pvt.) Ltd Islamabad as interim arrangement till completion of Grid Station to be constructed by Bahria Town management. However the sponsor shall not resale the electricity till issuance of Distribution License from NEPRA.
20. Watch and ward would be the responsibility of the sponsor of the scheme.
21. Any dispute arising out of the implementation / interpretation of terms of agreement will be referred to Arbitration consisting of two Arbitrators, each appointed by both parties. In case of inability to come to a constructive conclusion between the Arbitrators the matter will be referred to Chief Executive Officer IESCO and his decision would be final.
22. If the sponsor is found and acting in contravention of Agreement or any of his acts adjudged or liable to be adjudged prejudicial to any of the clauses contained herein or any other instructions issued from time to time, IESCO reserve the right to revoke this agreement and is also authorized to impose penalty as deemed fit.

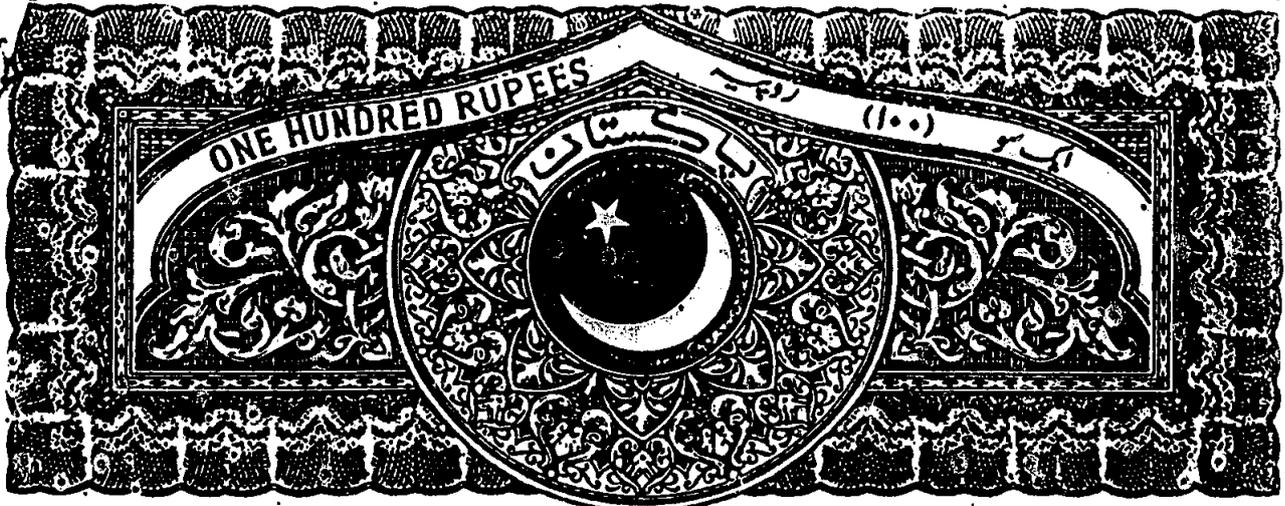

 Brig (R) Abdul Rauf Raja
 Assistant Chief Executive (Services)
 Bahria Town (Pvt.) Ltd
 Islamabad


 Cdr (R) Mahmood Hussain
 Senior Manager Electrical
 Bahria Town (Pvt.) Ltd
 Islamabad


 Abdul Rauf Mughal
 Manager (P&E)
 IESCO, Islamabad


 Amjad Zaman Khan
 Manager (L&L)
 IESCO, Islamabad


 Raja Abdul Ghafoor
 Technical Director
 IESCO, Islamabad

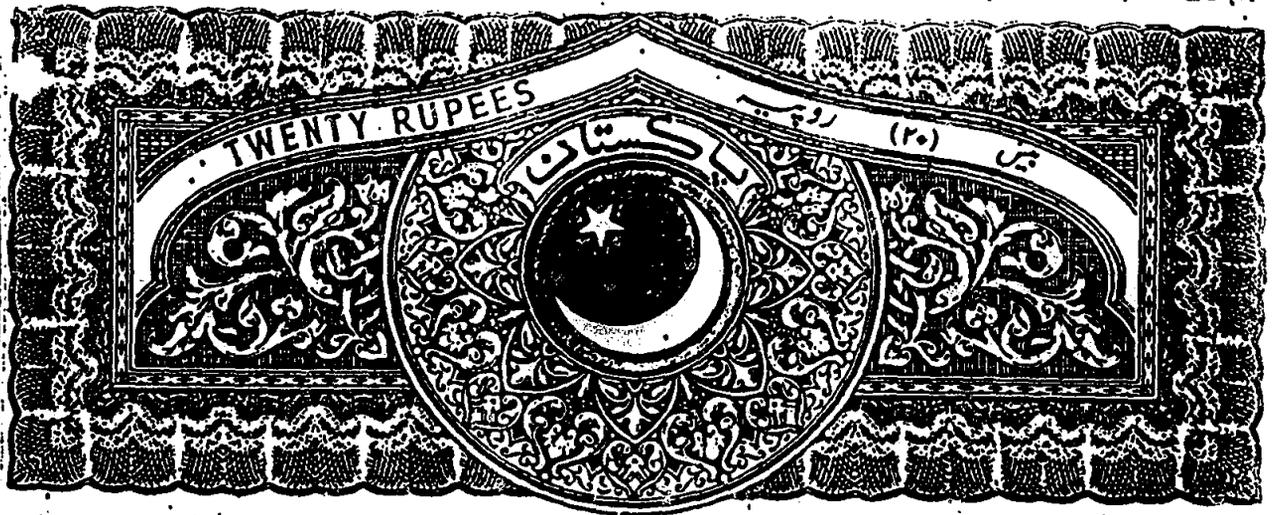


**MEMORANDUM OF UNDERSTANDING (MOU) FOR
BAHRIA GOLF CITY MURREE EXPRESS WAY SILKHETER**

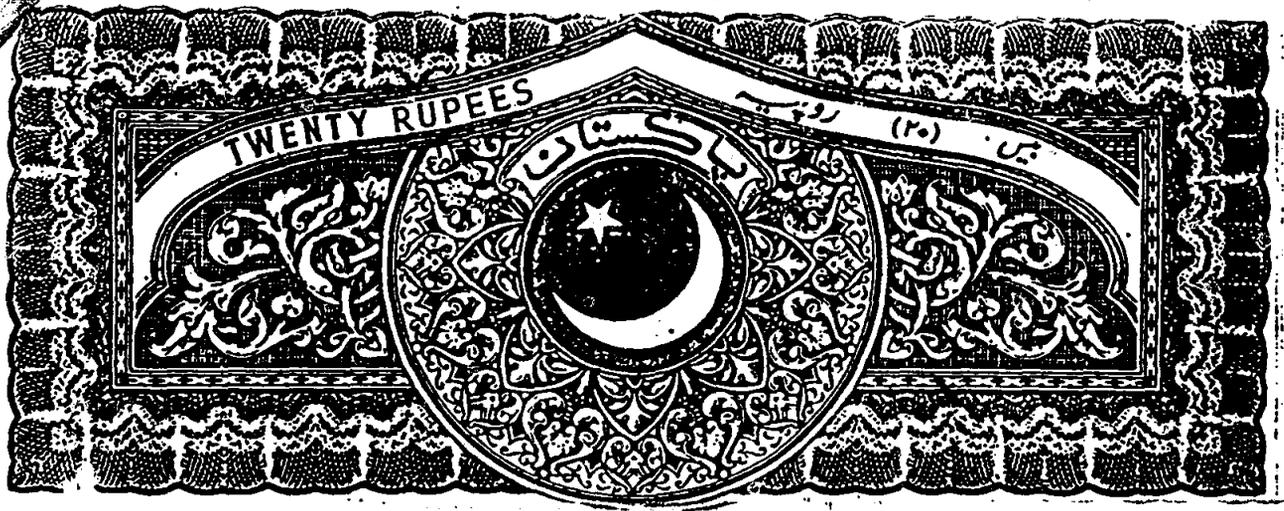
The Memorandum of Understanding (MOU) is entered into at Islamabad on 29 November, 2007 by and between Islamabad Electricity Supply Company Limited (Here in after called as IESCO/WAPDA) and Bahria Town (Pvt.) Ltd Islamabad (Here in after called Sponsor). This MOU will cater for supply of power to all Projects launched by Bahria Golf City Murree Express Way Silkheter.

The terms and conditions of MOU are as follows:

1. The initial load of Golf City Murree Express Way Silkheter of Bahria Town (Pvt.) Ltd Islamabad will be 10MW and ultimate load will be 30.425 MW as per detail provided by the sponsor.
2. The sponsor shall construct 132/11KV Grid Station according to WAPDA design and specification to be approved by Chief Engineer Design (NTDC) WAPDA House Lahore for Bahria Town Golf City Silkheter for one point supply under Tariff C-3, through metering on 132KV side at Grid Station.
3. The sponsor shall pay all the design, vetting and inspection charges regarding proposed 132KV Grid Station and its connecting lines, as and when demanded by IESCO.
4. The sponsor shall fulfill all the WAPDA, IESCO and NEPRA prerequisites necessary / described for bulk supply connection under Tariff C-3. The sponsor will provide NOC and Distribution License from NEPRA for Bahria Golf City Silkheter and all subsequent Projects lying therein under IESCO jurisdiction before the energization of subject Grid Station.
5. The system inside the housing scheme will be laid down by the sponsor at his own cost as per criteria given below.
 - i) The Sponsor will be fully responsible for the procurement & installation of quality material according to WAPDA's approved specifications from the manufacturers approved by WAPDA. The colour code of such material shall be different from that of WAPDA (e.g. transformer to be of blue colour). In case WAPDA's/IESCO's material is found installed, IESCO reserve the right to lodge FIR.
 - ii) The Sponsor will not purchase / use any material bearing WAPDA / IESCO monogram or WAPDA's / IESCO's colour scheme or identification.
 - iii) The procurement of material will be done by the sponsor from WAPDA's approved manufacturers. Alternatively, contractors appointed by the Sponsors may also purchase the material after getting the purchase order vetted by the sponsors before it is submitted to the IESCO for further vetting. However responsibility for purchase made by the contractor will rest with the sponsors.
 - iv) The name of the housing scheme, purchase order No. with year of manufacturing and serial No. of the transformer shall be clearly punched / embossed / engraved on the body of the transformer and name plate with other relevant information.
 - v) The manufacturer will engrave the name of housing scheme, purchase order No. with date, year of manufacturing on each Reel of Conductor / Cable. The Reel shall have a different colour than the colour of the Reel supplied to WAPDA. Furthermore the subject information also to be provided on the cable on every 10th meter.

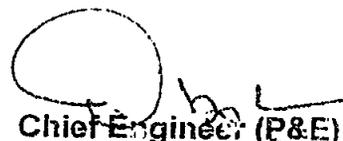


- VI) After procuring the material you / sponsor will give information to IESCO that the material procured bears all the identification marks as described above.
- VII) Committee comprising SE (E) IESCO concerned & Manager (MM) IESCO in association with representative of sponsor / consultant shall examine the documents to ensure that legitimate material has been utilized before energization of the scheme.
6. The construction of Grid Station for Bahria Golf City Silkheter shall be carried out by sponsor in accordance with WAPDA/IESCO standard design specifications, International standards and practices after design vetting from the relevant office.
 7. The work of construction of Grid Station as well as external electrification shall be started after receipt of NOC, approved layout plan from concerned administrative office.
 8. The Grid Station will be built on minimum 32 Kanals of land by sponsor after approval of site by Siting & Layout Board IESCO. However in case sponsor decides to build a Grid station other than a conventional type (GIS/outdoor or indoor etc) then the limit of 32 Kanals can be reduced/ revised with the approval of IESCO.
 9. Grid station will be constructed according to the design drawings issued by Chief Engineer Design (NTDC) WAPDA House, Lahore. All the material/equipment to be purchased shall be in accordance with WAPDA specification and shall be inspected by representative of IESCO at manufacture's premises at the expenses of the sponsor (for abroad only one person at one time) as per WAPDA rules before installation at site.
 10. The draft for contract documents for purchase of material equipment for Grid Station shall be got vetted from Design (NTDC) WAPDA House Lahore. The copies of purchase orders of material / equipment and work orders shall be endorsed to Design (NTDC) WAPDA House Lahore and Chief Executive Officer IESCO for mentioning there in the inspection clause clearly stating that all material equipment shall be accepted subject to clearance by WAPDA / IESCO.
 11. The Grid Station will be constructed with space and provision of 3 No. 132/11KV Power Transformers, Carrier Telecommunication System, associated control room, offices and residential colony as per WAPDA standards/specification. Bahria Town management will install material and equipment for this Grid Station (2 No. Power Transformers) to cater for the ultimate demand of 30.425 MW. One No. Power Transformer shall be installed by IESCO for its future load requirement as and when required. However, all cabling (HT/LT) through Bahria Town territory shall be done underground. Bahria Town shall be allowed to use IESCO transformer if and when required i.e. due to fault etc. in Bahria transformer.
 12. WAPDA will construct 132KV Double circuit Transmission Line with Rail Conductor to connect Bahria Golf City Silkheter Grid Station at the expense of Sponsor.
 - The Grid Station will be constructed under the supervision of Design (NTDC) WAPDA/Chief Executive Officer IESCO who or his representative will carry out regular stage inspection during the course of construction.
 14. Maintenance and operation of the Grid Station as well as distribution system shall be done by Bahria Town management after getting Distribution License by the sponsor from NEPRA.
 15. Complete Right of Way (RoW) facility will be provided by the sponsor for the electrical network to be constructed for providing the electricity to the sponsor. The sponsor will also provide Right of Way for extension of 132KV System for IESCO.

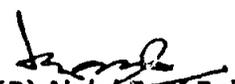


16. "Bahria Town (Pvt) Ltd. Islamabad will construct the Grid station within 24 months period falling which interim supply arrangement under Tariff C-2 will be disconnected and they will not challenge this action at any forum, legal or otherwise. The time period will start after finalization of matters regarding construction of 132 KV transmission line for said Grid station".

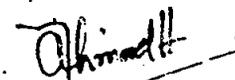
Amended vid. LH No 371-26/CEO/IESCO/CE(P&E)/NS-124 of 13 Apr 2013

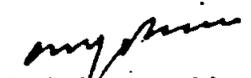

Chief Engineer (P&E)
IESCO Islamabad

20. Watch and ward would be the responsibility of the sponsor of the scheme.
21. Any dispute arising out of the implementation / Interpretation of terms of agreement will be referred to Arbitration consisting of two Arbitrators, each appointed by both parties. In case of inability to come to a constructive conclusion between the Arbitrators the matter will be referred to Chief Executive Officer IESCO and his decision would be final.
22. If the sponsor is found and acting in contravention of Agreement or any of his acts adjudged or liable to be adjudged prejudicial to any of the clauses contained herein or any other instructions issued from time to time, IESCO reserve the right to revoke this agreement and is also authorized to impose penalty as deemed fit.

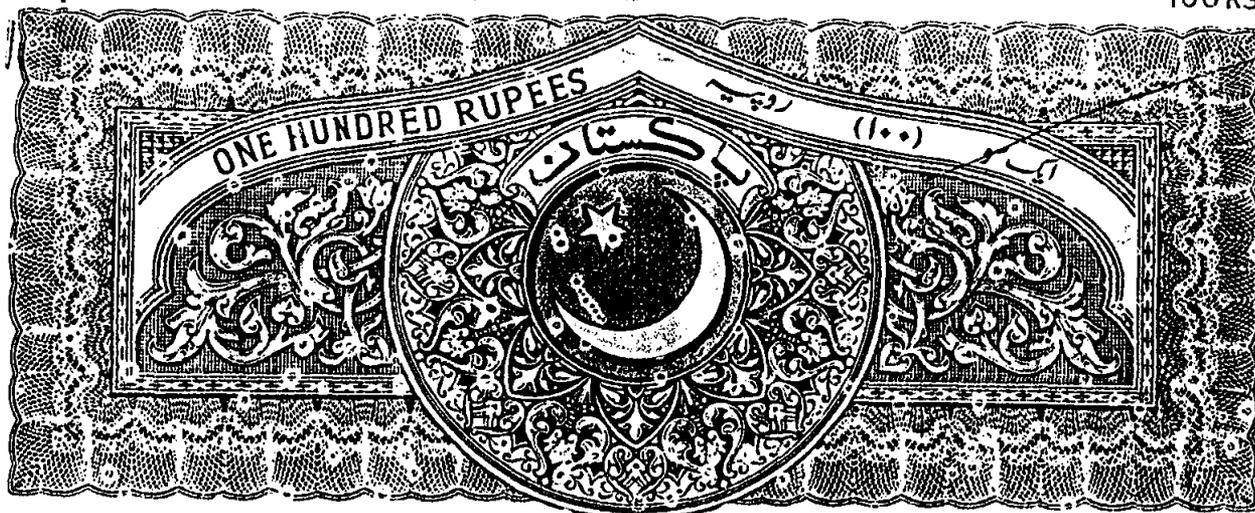

Brig (R) Abdul Rauf Raja
Assistant Chief Executive (Services)
Bahria Town (Pvt.) Ltd
Islamabad


Abdul Rauf Mughal
Manager (P&E)
IESCO, Islamabad


Cdr (R) Mahmood Hussain
Senior Manager Electrical
Bahria Town (Pvt.) Ltd
Islamabad


Amjad Zaman Khan
Manager (L&L)
IESCO, Islamabad


Raja Abdul Ghafoor
Technical Director
IESCO, Islamabad

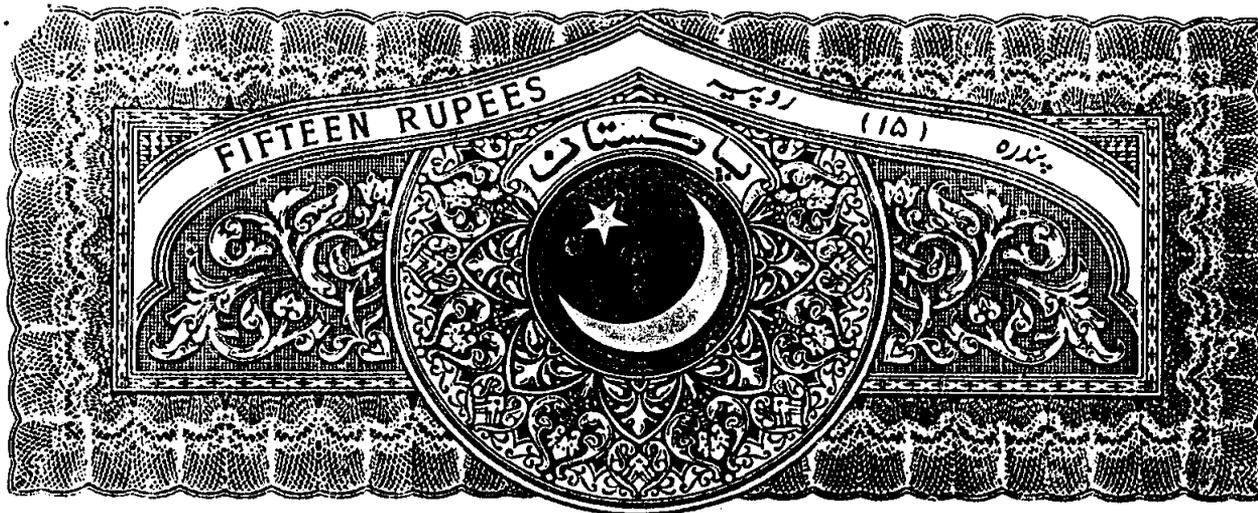


MEMORANDUM OF UNDERSTANDING

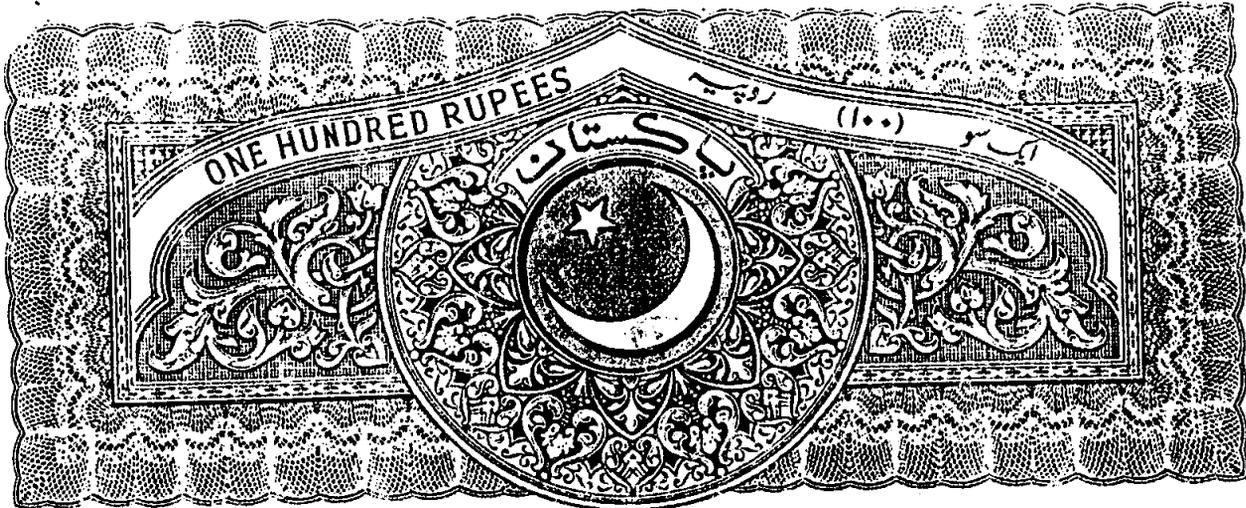
The Memorandum of Understanding (MOU) is entered into at Islamabad on 19th September 2011 by and between Islamabad Electricity Supply Company Limited (Here in after called as IESCO) and Bahria Enclave (Here in after called Sponsor). This MOU will cater for supply of power to Bahria Enclave projects Islamabad.

The terms & conditions of MOU are as follows:-

1. The initial load of Bahria Enclave Islamabad will be 10 MW and enhance upto 60 MW.
2. The sponsor shall construct 132/11KV Grid Station according to PEPCO design and specification to be approved by Chief Engineer Design (NTDC) PEPCO Lahore for initial load requirement of Bahria Enclave Islamabad.
3. The sponsor shall pay all the approval charges for design / drawings, vetting and inspection of Grid Station and their connecting lines to IESCO/NTDC on demand.
4. The construction of Grid Station, Bahria Enclave Islamabad for initial load requirement shall be carried out by sponsor in accordance with NTDC/PEPCO/IESCO standard design specifications, International standards and practices after design vetting approval from the relevant office.
5. The Grid Station will be built on minimum 32 Kanals of land by sponsor after approval of site by Siting & Layout Board IESCO. However in case sponsor decides to build a Grid station other than a conventional type (GIS/outdoor or indoor etc) then the limit of 32 Kanals can be reduced/revised with the approval of IESCO.
6. Grid station will be constructed according to the design drawings issued by Chief Engineer (TSW) IESCO. All the material/equipment to be purchased shall be in accordance with PEPCO/NTDC specification and shall be inspected by representatives of IESCO at manufacturer's premises at the expenses of the sponsor as per PEPCO/NTDC rules before installation at site.
7. A copy of contract agreement for the construction of Grid station clearly mentioning WAPDA specifications under which the equipment is purchased shall be provided to IESCO to prove that only PEPCO / NTDC approved material is procured.
8. The Grid Station will be constructed with space and provision of minimum 3 No. 132/11KV Power Transformers, Carrier Telecommunication System, associated control room, office and residential colony as per PEPCO standards/specification. Bahria Enclave management will install material and equipment for this Grid Station to cater for the ultimate demand of 60 MW. All cabling (HT/LT) through Bahria Enclave territory shall be done underground.
9. IESCO will construct 132KV single circuit Transmission Line with Rail Conductor with IN and OUT arrangement from nearest feasible Circuit / line to connect Bahria Enclave Grid Station at the expense of Sponsor.
10. The Grid Station will be constructed under the supervision of Chief Engineer (Dev)/Chief Engineer (TSW) IESCO or his representative will carry out regular stage inspection during the course of construction.
11. Operation and maintenance of the Grid station shall be the responsibility of the Sponsors subject to issuance of NOC from NEPRA / PEPCO.
12. Complete Right of Way (RoW) facility will be provided by the sponsor for the electrical network to be constructed for providing the electricity to the sponsor. The sponsor will also provide RoW for provision of power outside the project. However, it would be taken under ground.
13. After signing of the MOU IESCO will provide supply provisionally under Tariff C-2 through construction of 01 No. independent 11KV feeder from any nearest Grid Station for required load i.e. of 02 MW on cost deposit basis at the expense of Bahria Enclave as interim arrangement till completion of Grid Station to be constructed by Bahria Enclave. The Sponsor shall not re-sell the electricity to the allottees / residents of the society without NOC / Distribution License from the NEPRA. An undertaking to this effect will be submitted by the Sponsor on a stamp paper duly attested by a first class Magistrate as per instructions issued by the NEPRA vide No. NEPRA / R/TCD.10/5666-67 dated 22.07.2011. If at any time the Sponsor is found to be involved in resale, the IESCO will have right to disconnect the interim supply with report to NEPRA and revoke the MOU unilaterally.



14. Bahria Enclave Islamabad will construct Grid Station within 24 months period failing which interim supply arrangement under tariff C-2 will be disconnected and they will not challenge this action at any forum. Time period will start from approval of design of the Grid station from PEPCO /NEPRA. Design shall be submitted to IESCO within 02 months of the signing of MOU.
15. The sponsor shall apply for initial load of 10 MW on proper A&A form alongwith relevant documents for Bahria Enclave and subsequently for extension/ultimate load as and when required.
16. The sponsor shall pay the security amount for the demanded load at the prevailing rates and when demanded by IESCO.
17. The sponsor shall fulfill all the PEPCO, IESCO and NEPRA prerequisites necessary / described for bulk supply connection under Tariff C-3 as per their request. The sponsor will provide NOC and Distribution License from NEPRA for Bahria Enclave Islamabad, before the energization of above said Grid Station. Otherwise the sponsor will submit the external electrification design of the said projects duly prepared by the consultant registered with Pakistan Engineering Council (PEC) for electrification works & shall be dealt accordingly.
18. The system inside the housing scheme will be laid by the sponsor at his own cost as per criteria given below.
 - I) The Sponsor will be fully responsible for the procurement & installation of quality material according to PEPCO's approved specifications from the manufacturers approved by PEPCO. The colour code of such material shall be different from that of DISCO,s (e.g. transformer to be of blue colour). In case PEPCO's/IESCO's material is found installed, IESCO reserve the right to lodge FIR.
 - II) The Sponsor will not purchase / use any material bearing DISCO,s / IESCO monogram or DISCO's / IESCO's colour scheme or identification.
 - III) The procurement of material will be done by the sponsor from PEPCO's approved manufacturers. Alternatively, contractors appointed by the Sponsors may also purchase the material after getting the purchase order approved by the sponsors before it is submitted to the IESCO for further approval. However responsibility for purchase made by the contractor will rest with the sponsors.
 - IV) All purchase orders shall be sent to IESCO for information of Chief Engineer P&E IESCO.
 - V) The name of the housing scheme, purchase order No. with year of manufacturing and serial No. of the transformer shall be clearly punched / embossed / engraved on the body of the transformer and name plate with other relevant information.
 - VI) The manufacturer will engrave the name of housing scheme, purchase order No. with date, year of manufacturing on each Reel of Conductor / Cable. The Reel shall have a different colour than the colour of the Reel supplied to DISCO,s/IESCO. Furthermore the subject information also to be provided on the cable on every 10th meter.
 - VII) After procuring the material sponsor will give information to IESCO that the material procured bears all the identification marks as described above.
 - VIII) Committee comprising SE (E) IESCO concerned & Manager (MM) IESCO in association with representative of sponsor / consultant shall examine the documents to ensure that legitimate material has been utilized before energization of the scheme.
19. Watch and ward would be the responsibility of the sponsor of the scheme. The sponsor of the housing scheme will remain IESCO's consumers and will abide by the rules and regulations of PEPCO/IESCO.
20. Any dispute arising out of the implementation / interpretation of terms of agreement will be referred to Arbitration consisting of two Arbitrators, each appointed by both parties. In case of inability to come to a constructive conclusion between the Arbitrators the matter will be referred to Chief Executive Officer IESCO and his decision would be final.



21. If the sponsor is found acting in contravention of Agreement or any of his acts adjudged or liable to be adjudged prejudicial to any of the clauses contained herein or any other instructions issued from time to time, IESCO reserve the right to revoke this agreement and is also authorized to impose penalty as deemed fit.

[Signature]
 Brig © Abrar Rauf Raja
 Assistant Chief Executive
 Bahria town (PVT) Ltd
 Rawalpindi / Islamabad

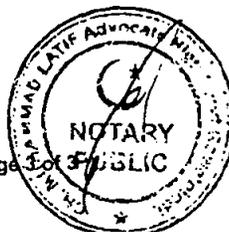
[Signature]
 Amjad Zaman Khan
 Addl: D.G (L&L)
 IESCO, Islamabad

[Signature]
 Crd © Mahmood Hussain
 General Manager Coordination
 Bahria Town (PVT) Ltd
 Rawalpindi / Islamabad

[Signature]
 Farmanullah
 IESCO, Islamabad

[Signature]
 Javed Pervez
 Chief Executive Officer
 IESCO, Islamabad

ATTESTED



DISTRIBUTION SYSTEM

- **Type:** Underground Power Distribution System.
- **Technology:** Ring main with open loop system.

Equipment Make

- 11KV 3 Way /4 Way Switches Siemens/Schneider/ABB
- Termination and Straight Joints Reychem

- Cables

- HT XLPE/PVC 120mm² 3-Core & 500mm² /240mm² Single Core Newage/H.M Cables
- LT PVC/PVO 120mm² 4-Core Newage/H.M Cables
- Pad Mounted Translormer 100KVA, 200KVA, 40KVA, 630KVA, 1250 KVA Pel, Climax, Transfo Power
- Distribution Boxes General Switchgear/R.s Electric
- Street Lighting.
 - M/s Steel Poles with paint Jamal Pepe/Bashir Sons
 - Fixtures
 - Cables
 - Fancy Lights
 - Control Panels Street Light

TECHNICAL DETAILS OF DISTRIBUTION SYSTEM EQUIPMENT:

1. 11-KV PAD MOUNTED 3-WAY AND 4-WAY SWITCHES:-

The pad mounted switches shall be compact Load Break switches and shall be suitable for installation in 3-phase 11 KV underground distribution system of the following characteristics:

The switches shall have the following ratings:-

- | | |
|---|-------------------|
| - Rated Voltage | 11 kV |
| - Maximum design voltage | 12 kV |
| - Frequency | 50 Hz |
| - Rated normal current | 400 Amps |
| - Rated short time current (r.m.s) | 10 kA |
| - Rated short circuit making capacity peak | 25 kA/21 KA 3 Sec |
| - Rated transformer off-load breaking capacity (r.m.s) | 6.3 A |
| - Rated cable charging breaking capacity (r.m.s) | 2.5 A |
| - Impulse withstand voltage | 95 kV |
| - Rated short circuit making capacity and rated short time current for integral earthing device shall be the same as for main contacts. | |
| - The maximum temperature rise shall not exceed 40C when the switch is in clean condition and is carrying its rated normal current continuously | |

The material and manufacturing of the equipment alongwith specification and testing shall be in accordance with the WAPDA Specifications No. DD-S-46:90 and to the approval of the Consultant/Engineer.

2. Pad Mounted Transformers 630KVA, 400KVA, 100KVA and 200KVA ("KIOSKS"):-

The mechanical and electrical characteristics of 3-Phase Pad Mounted 1000/415 Volts Transformers shall be in accordance with WAPDA.

Specifications No. P-41:81 (UDC 621, 314, 212). Updated

Transformers

- Voltage 11/0.415 KV
- Vector Group Dyn 11
- Capacity 200 KVA & 100 KVA
- Tap Changer Off Load
- Frequency 50 Hz

H.T Compartment

- HRC Fuses
- Arc Stranglers

L.T Compartment

- L. T MCCBs of following rating for the protection of transformer and to feed the outgoing L.T Circuits.
 - a) 100 KVA
 - 250 Amp – 50 Ka Main Breaker
 - 100 Amp (Adj) – 25 KA all outgoing feeders
 - b) 200 KVA
 - 500 Amp - 50 KA Main Breaker
 - 200 Amp – 25 KA all outgoing feeders
 - c) 400 KVA
 - 1000A-50 KA Main Breaker
 - 250 A 35 KA Main Breaker
 - d) 630 KVA
 - 1600 A – 50 KA Main Breaker
 - 250 – 35 KA Main Breaker

- Frequency 50 Hz
- Maximum short circuit rating 25 KA

Indoor terminations shall be made in pad mounted steel enclosures and switchgear panels where dust and severe condensation is liable to occur.

The termination kits shall conform to WAPDA specifications P-184:86.

b) 11-KV Power Cable Splices

The joint and termination kits shall be suitable for cable of following description:-

- Single Core Cable
- Three Core Cable

The splices and terminations shall be suitable for operation at Ambient temperature of 50°C maximum and suitable for three phase underground 11-KV distribution system of the following Characteristics:-

- Nominal System Voltage 11 kV
- System Highest Voltage 12 kV
- Frequency 50 Hz
- Maximum short circuit rating 250 KA
- Tensile strength min 17-5 kg/sq cm
- Elongation at break 500%
- Dielectric strength min 20 kV/mm
- Volume resistivity 10^{15} ohm-cm
- Ozone resistance No effect when expected to 0.04% ozone by volume for 3 hours.

The material shall be according to WAPDA specifications P-86:80(UDC 621,315, 61) (amended to-date).

5. L.T Power Cables:-

All LT Cables from transformer to LT L.T. Distribution boxes are 185/120 mm PVC/PVC insulated aluminum, cables. The cable are suitable for operation in a 415/ 240 Volts, 50 Hz three phase multiple neutrally earthed distributed system. The cable shall be 4-core PVC/PVC cable suitable for direct burial or for installation in air or running in the ducts. The duct and soil conditions varying from dry to wet. The maximum Ambient Temperature shall be 50°C and the relative humidity may range upto 100%. The cable shall be suitable for conductor operating temperature as follows:-

- Continuous Operation 70 °C
- Short circuit (5 sec. maximum duration) 160 °C

The street light cables shall be of sizes:-

- The cables are as per WAPDA's Specifications No. Volts DD-S-8:84, 600/1000 (SID Cables), PVC insulated, PVC sheathed.
- BS Specifications shall be followed for those sizes where WAPDA Specifications are not applicable.

6. L.T Distribution Boxes (Service Boxes):-

The LT three phase distribution/metering boxes (feeder pillars) are used for making connection of underground services to underground LT mains. The distribution boxes shall be suitable for installation and operation in 3-Phase – 4 wire distribution system of the following characteristics:-

- Nominal System Voltage 415/240 Volts
- System Highest Voltage 460/260 Volts
- Frequency 50 Hz

The maximum Ambient Temperature may be 55°C and may range upto 100%.

The bus bars shall be of aluminum of 99.5% purity having 61% AC conductivity and minimum tensile strength of 8.4 kg/mm. The bus bars shall be extruded or hard drawn. The size of bus bars shall be 50 X 10 mm. These shall have a smooth finish, free from sharp edges, holes and cavities etc.

7. Street Light Fittings & Fixtures:-

Street Light Poles

- 12, 10, 8 and 6 meter high single arm and double arm poles hot dip Galvanized or painted.

Street Light Fixtures

- On Main Roads light fixtures are HRC 511 with 250Watt light with power factor correction capacitor, ballast, ignitor (for SON) etc.
- On Small Roads & steel fixtures are HSPQ with 125Watt HPL light

Lighting Fixture Control Gear

- Ballast
- Ignitor
- Holder
- Capacitor

8. Street Light Control Panel:-

The Street light control panels are comprise of the control device and A. C. contactor for correct and reliable opening and closing of the contacts. The control device is photoelectric timer. The equipment are installed within a weather proof, dust proof and moisture proof cabinet. The MCB shall control a group of lights and MCCB is be rated to their total current.

The photoelectric cell timer and actuating relay shall have the features mentioned below:-

Photo Electric Cell

The photoelectric cell have the following

ratings:-

- Operating Voltage Range 210 to 250 Volt AC
- Load Current Capacity 10 Amps

Relay (Magnetic Contractor)

It shall be of triple pole, single throw and of electromagnetic type. Pole magnet shall be dimensionally stable. Performance shall be chatter free. Contacts shall be of long life at rated load. Some arrangements shall be provided with the armature to counter-act the effect of high inrush current.

The A. C. contactor for closing and opening of electrical street lighting circuits shall have the following features:-

- Maximum Ambient Temp. 50 °C
- Relevant Humidity 100%
- Operating Voltage 415 Volt A.c
- Control Supply Voltage 215 Volt Single Phase
- Frequency 50 Hz

9. Earthing System:-

Earthing for Out Door Pad Mounted Equipment:

The earth electrode shall consist of M.S. Galvanized rods 5/8"x 10' feet long thoroughly hammered into the ground. The rod shall be connected to the earth conductor by means of a connector clamps which shall be tightened properly. After tightening, the connector shall be covered with Bitumen to prevent ingress of moistured soil. The rod shall be hammered to a level 10/20ft below ground level.

The number of rods forming on Earthing point shall depend upon the Earth resistance. The earth resistance at any point in the system shall not exceed 05 ohms and it may be necessary to use more than one rod to achieve the specified Earth resistance.

Phase I - VI



SAFARI VILLAS I

SAFARI PARK

P.W.D. HOUSING SCHEME

P.W.D. HOUSING SCHEME

Gulraiz

JOURNALIST COLONY

POLICE FOUNDATION HOUSING SCHEME

POLICE FOUNDATION HOUSING SCHEME

Islamabad Highway

C.B.R. HOUSING SCHEME

Safari III

Korang River

Phase III

Phase V

Phase VI

E-RODGES

Phase IV

Soan River

Soan River

BAHRIA PARADISE

TO GRAND TRUNCK ROAD

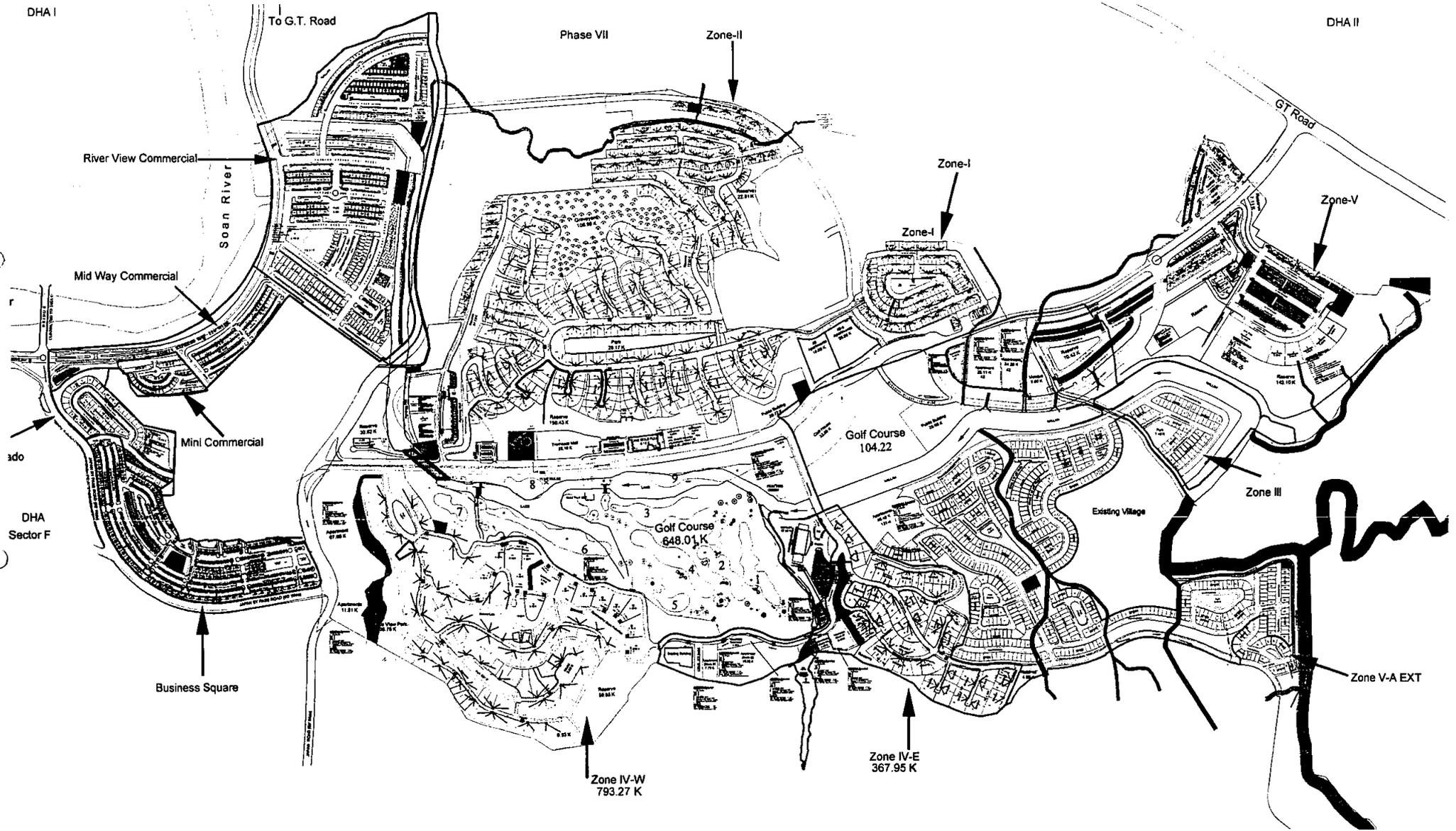
Kahuta Triangle

N

ZERO POINT

SCALE 1:5000

Bahria Garden City



Safari Valley

HOLD AREA IN SAFARI VALLEY

Hold Area = 109.09 
 Clear Area = 17.07 
 Remaining Area = 91.02

TYOLOGY OF PLOTS

ALI BLOCK	25' X 45'	30' X 55'	TOTAL
HOLD PLOTS	147	8	155
CLEARED PLOTS	57	2	59
TOTAL	204	10	214

NOTE 1

In all the four blocks at certain locations Plot No.s are not in sequence. This is due to certain changes in the layout/landuse plan. So the plot no.s should be allotted from the Town Plan and not by sequence of plots.

NOTE 2

The Plots which are hatched with red colour are not ready for possession. 

NOTE 3

All Plots (commercial/residential) will be chamfered as mentioned in the Bye- Laws of Bahria Town.

RAFI BLOCK

SAFARI/BAHRIA HOMES

Awami Villas/Safari/Bahria Homes

SAFARI/BAHRIA HOMES

Abu-Bakr Block

PHASE VIII

Ali Block

BAHRIA HAMLETS

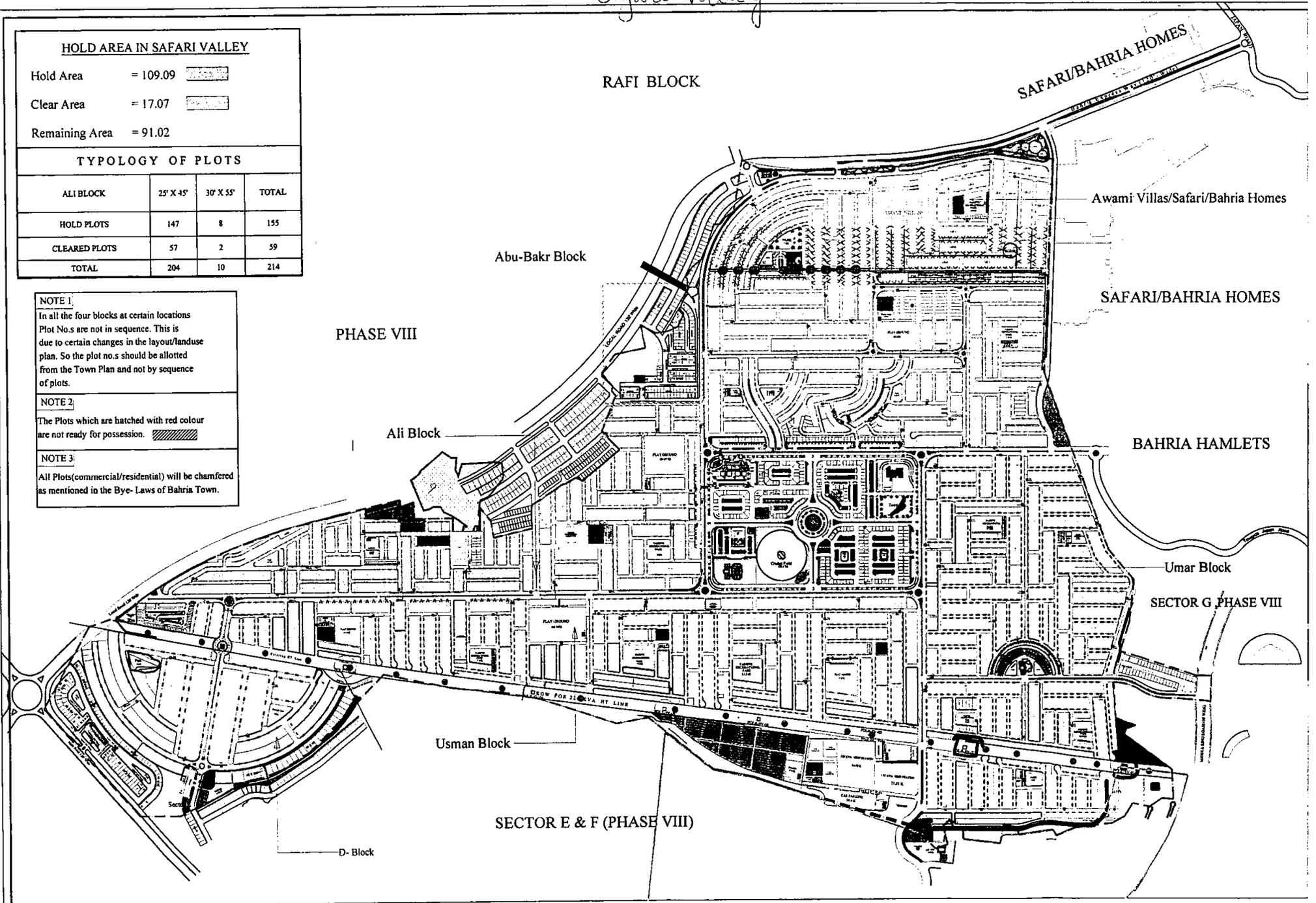
Umar Block

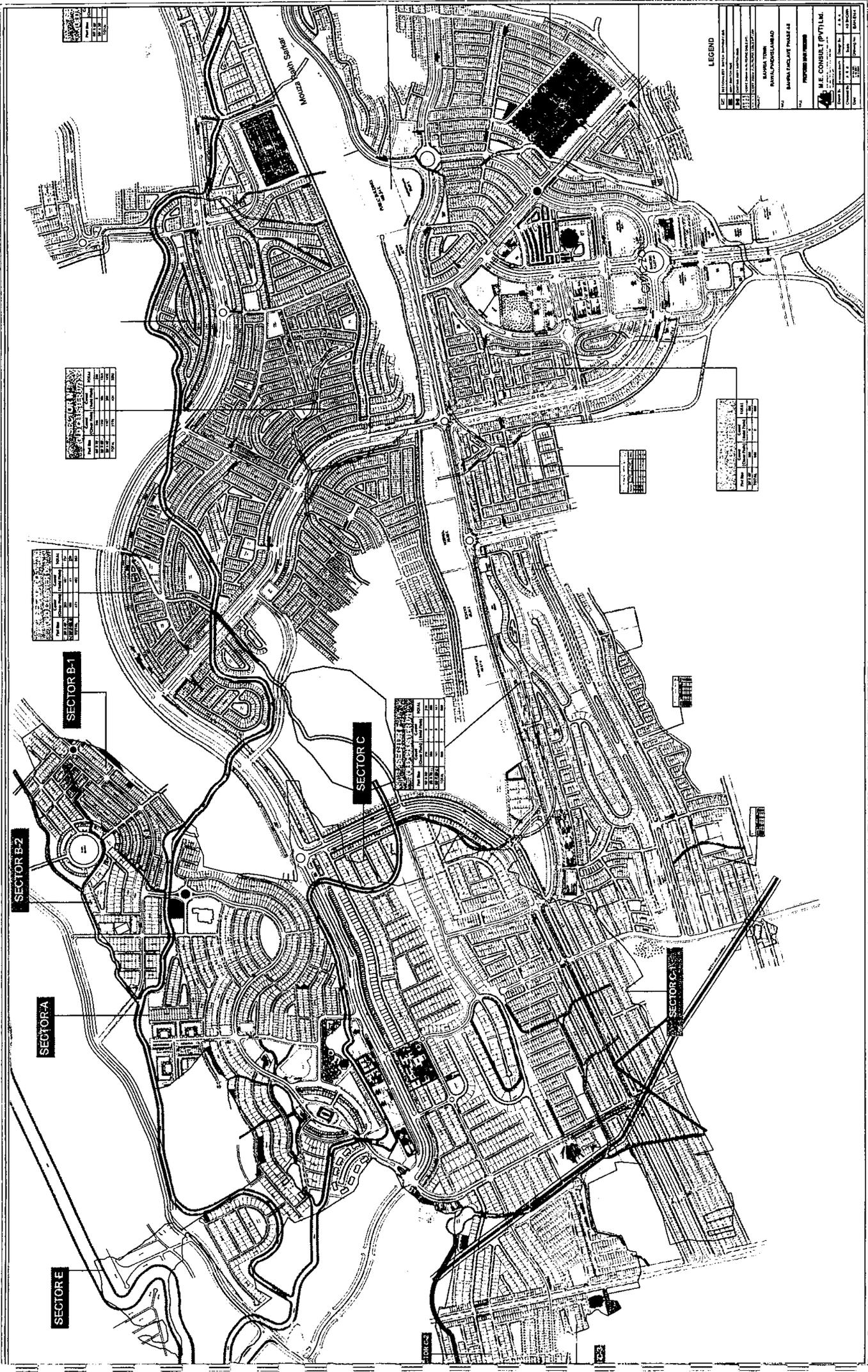
SECTOR G, PHASE VIII

Usman Block

SECTOR E & F (PHASE VIII)

D-Block





LEGEND

1	Proposed Main Road
2	Proposed Sub Road
3	Proposed Footpath
4	Proposed Drainage Channel
5	Proposed Sewer Line
6	Proposed Water Main
7	Proposed Gas Line
8	Proposed Telephone Line
9	Proposed Cable TV Line
10	Proposed Electric Line
11	Proposed Fire Hydrant
12	Proposed Street Light
13	Proposed Bench
14	Proposed Tree
15	Proposed Building Footprint
16	Proposed Lot Boundary
17	Proposed Easement
18	Proposed Right-of-Way
19	Proposed Utility Pole
20	Proposed Manhole
21	Proposed Valve
22	Proposed Fire Alarm
23	Proposed Security Camera
24	Proposed Access Point
25	Proposed Sign

DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]
 PROJECT NO: [Number]
 SHEET NO: [Number]

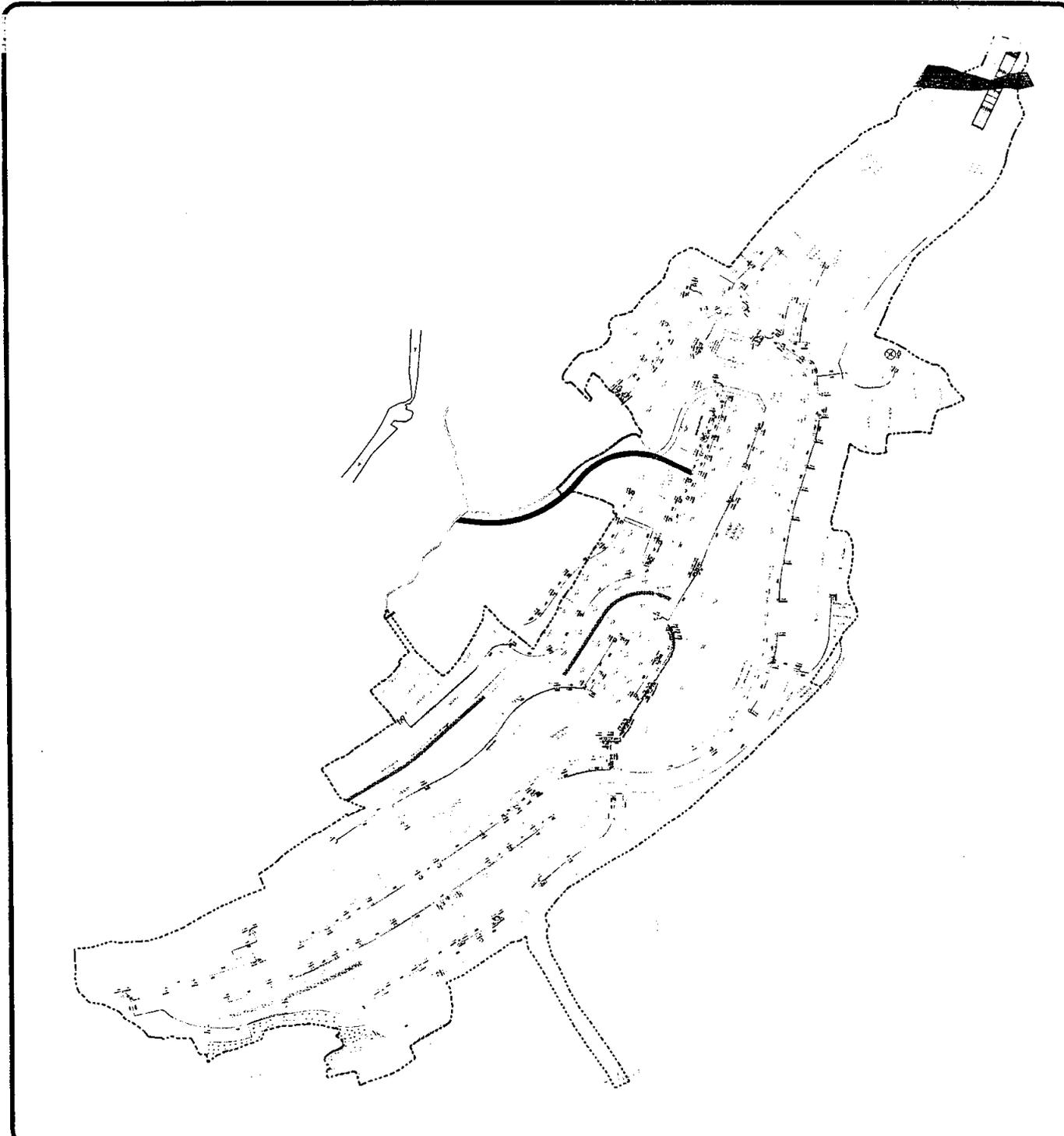
Area	Area (sq. m)	Area (sq. ft)
SECTORE	1000	10764
SECTOR A	2000	21528
SECTOR B-1	3000	32292
SECTOR B-2	4000	43056
SECTOR C	5000	53820
SECTOR C-1	6000	64584

Area	Area (sq. m)	Area (sq. ft)
SECTORE	1000	10764
SECTOR A	2000	21528
SECTOR B-1	3000	32292
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SECTOR B-1	3000	32292
SECTOR B-2	4000	43056
SECTOR C	5000	53820
SECTOR C-1	6000	64584



**ANGORI ROAD, ZONE IV-B
ISLAMABAD**



A PROJECT OF
BAHRIA TOWN (PVT.) LTD.



KEY PLAN

Landuse Matrix (Overall)

Sr. No.	Landuse	Area (Sqrft)	Area (Sqrft)	Area (Sqrft)	Area (Sqrft)
1	Residential Plot	85.11	284	7	34
2	Open Space	182.26	12.24		
3	Open Utility	274.26	13.71		
4	Commercial	73.36	4.90		
5	Public Building	77.82	3.80		
6	Open Area	7.24	0.71		
7	Total	507.05	25.16		
	Total	1746.96	108.88		

Plots Typology Residential

Sr. No.	Plot Size	Count
1	25 x 75	18
2	25 x 75	25
3	25 x 75	75
4	25 x 75	34
5	25 x 75	211
	Total	361

Plots Typology Commercial

Sr. No.	Plot Size	Count
1	25 x 75	3
2	25 x 75	1
3	25 x 75	1
4	25 x 75	1
5	25 x 75	1
6	25 x 75	1
7	25 x 75	1
8	25 x 75	1
9	25 x 75	1
10	25 x 75	1
	Total	13

MASTER LAYOUT

PLANNING & DESIGN OFFICE
PLOT # 45 MAR ROAD, M-COMMERCIAL
PHASE VIII BAHRIA TOWN RWP/ISLD.
Ph. # 051-2709420

DESIGNED BY
T. Mansoor
AS PLANNING & DESIGN

CLIENT
BAHRIA TOWN (PVT.) LTD. BAHRIA TOWN
ISLAMABAD

SHEET #

DATE
09.08.2022



**ANGORI ROAD, ZONE IV-B
ISLAMABAD**

N

A PROJECT OF
BAHRIA TOWN (PVT.) LTD.



KEY PLAN

Landuse Matrix (Overall)

S. No.	Landuse	Area (Sqrads)	Ratio	Percentage
1	Residential Plots	140.18	24	11.79
2	Asphalt Roads	48.78	8	3.72
3	Public Open Space	18.36	3	1.45
4	Open Service Reservoirs	17.38	3	1.39
5	Commercial	17.38	3	1.39
6	Public Building	17.38	3	1.39
7	Green Space	2.21	0.4	0.17
8	Water	29.27	5	2.28
Total		1144.78	100.00	100.00

Plot Typology Residential

S. No.	Plot Size	Count
1	20' x 20'	48
2	20' x 30'	20
3	20' x 40'	28
4	20' x 50'	34
Total		130

Plot Typology Commercial

S. No.	Plot Size	Count
1	20' x 20'	2
2	20' x 30'	1
3	20' x 40'	1
4	20' x 50'	1
5	20' x 60'	1
6	20' x 70'	1
7	20' x 80'	1
8	20' x 90'	1
9	20' x 100'	1
Total		11

MASTER LAYOUT

PLANNING & DESIGN OFFICE
PLOT # 65 M-R ROAD, M-COMMERCIAL
PHASE VIII, BAHRIA TOWN RWP/ISLD.
Ph. # 051-2709620

ISSUED BY:
S. HANIF KHAN
PLANNING & DESIGN

CLIENT:
BAHRIA TOWN (PVT.) LTD. ISLAMABAD
ISLAMABAD

SCALE:
1:15

DATE:
19 Oct 2022

A PROJECT OF
BAHRIA TOWN (PVT.) LTD.



LEGEND

Plot No.	Area (Sq. Ft.)	Area (Sq. M.)
1	1000	92.9
2	1000	92.9
3	1000	92.9
4	1000	92.9
5	1000	92.9
6	1000	92.9
7	1000	92.9
8	1000	92.9
9	1000	92.9
10	1000	92.9
11	1000	92.9
12	1000	92.9
13	1000	92.9
14	1000	92.9
15	1000	92.9
16	1000	92.9
17	1000	92.9
18	1000	92.9
19	1000	92.9
20	1000	92.9
21	1000	92.9
22	1000	92.9
23	1000	92.9
24	1000	92.9
25	1000	92.9
26	1000	92.9
27	1000	92.9
28	1000	92.9
29	1000	92.9
30	1000	92.9
31	1000	92.9
32	1000	92.9
33	1000	92.9
34	1000	92.9
35	1000	92.9
36	1000	92.9
37	1000	92.9
38	1000	92.9
39	1000	92.9
40	1000	92.9
41	1000	92.9
42	1000	92.9
43	1000	92.9
44	1000	92.9
45	1000	92.9
46	1000	92.9
47	1000	92.9
48	1000	92.9
49	1000	92.9
50	1000	92.9
51	1000	92.9
52	1000	92.9
53	1000	92.9
54	1000	92.9
55	1000	92.9
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57	1000	92.9
58	1000	92.9
59	1000	92.9
60	1000	92.9
61	1000	92.9
62	1000	92.9
63	1000	92.9
64	1000	92.9
65	1000	92.9
66	1000	92.9
67	1000	92.9
68	1000	92.9
69	1000	92.9
70	1000	92.9
71	1000	92.9
72	1000	92.9
73	1000	92.9
74	1000	92.9
75	1000	92.9
76	1000	92.9
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89	1000	92.9
90	1000	92.9
91	1000	92.9
92	1000	92.9
93	1000	92.9
94	1000	92.9
95	1000	92.9
96	1000	92.9
97	1000	92.9
98	1000	92.9
99	1000	92.9
100	1000	92.9

Plots Typology (Ago Farms)

Sl. No.	From Size	To Size	Total
1	1000	1000	100
2	1000	1000	100
3	1000	1000	100
4	1000	1000	100
5	1000	1000	100
6	1000	1000	100
7	1000	1000	100
8	1000	1000	100
9	1000	1000	100
10	1000	1000	100
11	1000	1000	100
12	1000	1000	100
13	1000	1000	100
14	1000	1000	100
15	1000	1000	100
16	1000	1000	100
17	1000	1000	100
18	1000	1000	100
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20	1000	1000	100
21	1000	1000	100
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30	1000	1000	100
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34	1000	1000	100
35	1000	1000	100
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40	1000	1000	100
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76	1000	1000	100
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83	1000	1000	100
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85	1000	1000	100
86	1000	1000	100
87	1000	1000	100
88	1000	1000	100
89	1000	1000	100
90	1000	1000	100
91	1000	1000	100
92	1000	1000	100
93	1000	1000	100
94	1000	1000	100
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96	1000	1000	100
97	1000	1000	100
98	1000	1000	100
99	1000	1000	100
100	1000	1000	100

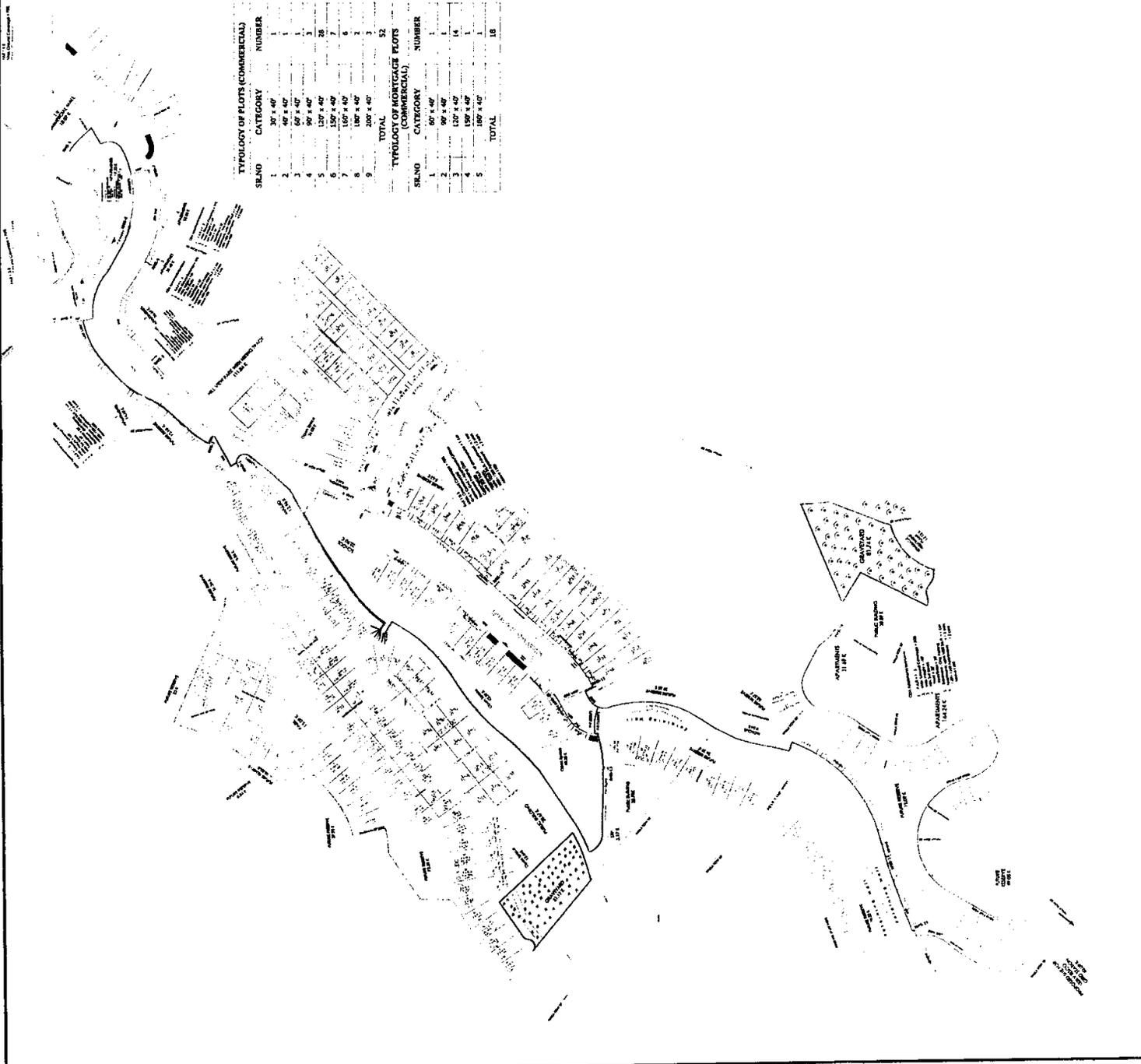
Plots Merged

DATE: _____
SECTION NO: _____

LAYOUT PLAN

PLANNING & DESIGN OFFICE
PLOT # 5, M.R. ROAD, NON-COMMERCIAL
PHASE VII, BAHRIA TOWN BWP/FIELD
P.O. # 151-270650

Scale: _____
Date: _____
Sheet No: _____

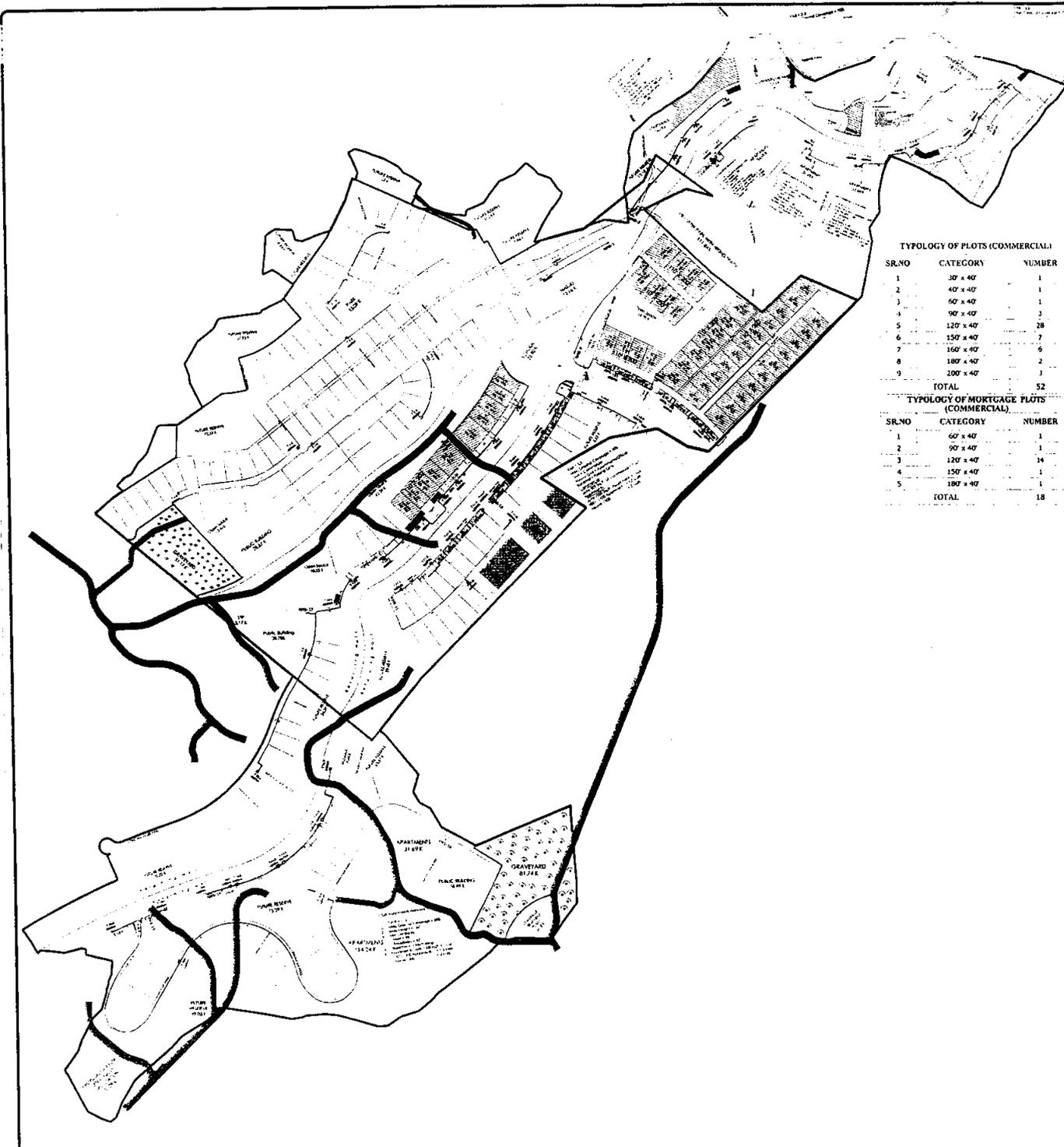


TYPOLOGY OF PLOTS (COMMERCIAL)

SLAND	CATEGORY	NUMBER
1	30' x 40'	1
2	40' x 40'	1
3	50' x 40'	1
4	60' x 40'	1
5	120' x 40'	20
6	150' x 40'	7
7	180' x 40'	5
8	200' x 40'	3
9	250' x 40'	2
TOTAL		52

TYPOLOGY OF PLOTS (RESIDENTIAL)

SLAND	CATEGORY	NUMBER
1	30' x 40'	1
2	40' x 40'	1
3	50' x 40'	1
4	60' x 40'	1
5	120' x 40'	20
6	150' x 40'	7
7	180' x 40'	5
8	200' x 40'	3
9	250' x 40'	2
TOTAL		52



TYPOLGY OF PLOTS (COMMERCIAL)

SR.NO	CATEGORY	NUMBER
1	30' x 40'	1
2	40' x 40'	1
3	50' x 40'	1
4	50' x 40'	3
5	120' x 40'	28
6	150' x 40'	7
7	150' x 40'	5
8	180' x 40'	2
9	200' x 40'	1
TOTAL		52

TYPOLGY OF MORTGAGE PLOTS (COMMERCIAL)

SR.NO	CATEGORY	NUMBER
1	60' x 40'	1
2	90' x 40'	1
3	120' x 40'	14
4	150' x 40'	1
5	180' x 40'	1
TOTAL		18

BAHRIA ENCLAVE II

A PROJECT OF
BAHRIA TOWN (PVT.) LTD.

Langvise Matrix

SR.No	Langvise	Matrix	Value	Production
1	Langvise	Matrix	1.00	1.00
2	Langvise	Matrix	1.00	1.00
3	Langvise	Matrix	1.00	1.00
4	Langvise	Matrix	1.00	1.00
5	Langvise	Matrix	1.00	1.00
6	Langvise	Matrix	1.00	1.00
7	Langvise	Matrix	1.00	1.00
8	Langvise	Matrix	1.00	1.00
9	Langvise	Matrix	1.00	1.00
Total		4621.41	190.00	

Plots Typology (Agra Farm)

SR.No	Farm Size	Total
1	110' x 300'	256
Total		256

Plots Typology (Agra Farm)

SR.No	Farm Size	Total
1	110' x 300'	30
2	110' x 300'	5
Total		55

Remaining Total: 201

Plots Mortgaged [Hatched Pattern]

Disclaimer: All plans, specifications and drawings are prepared by the Planning & Design Office of Bahria Town (Pvt.) Ltd. and are subject to change without notice. The client shall be responsible for the accuracy of the data provided. The client shall be responsible for the accuracy of the data provided. The client shall be responsible for the accuracy of the data provided.

DATE: _____ RECORDING: _____

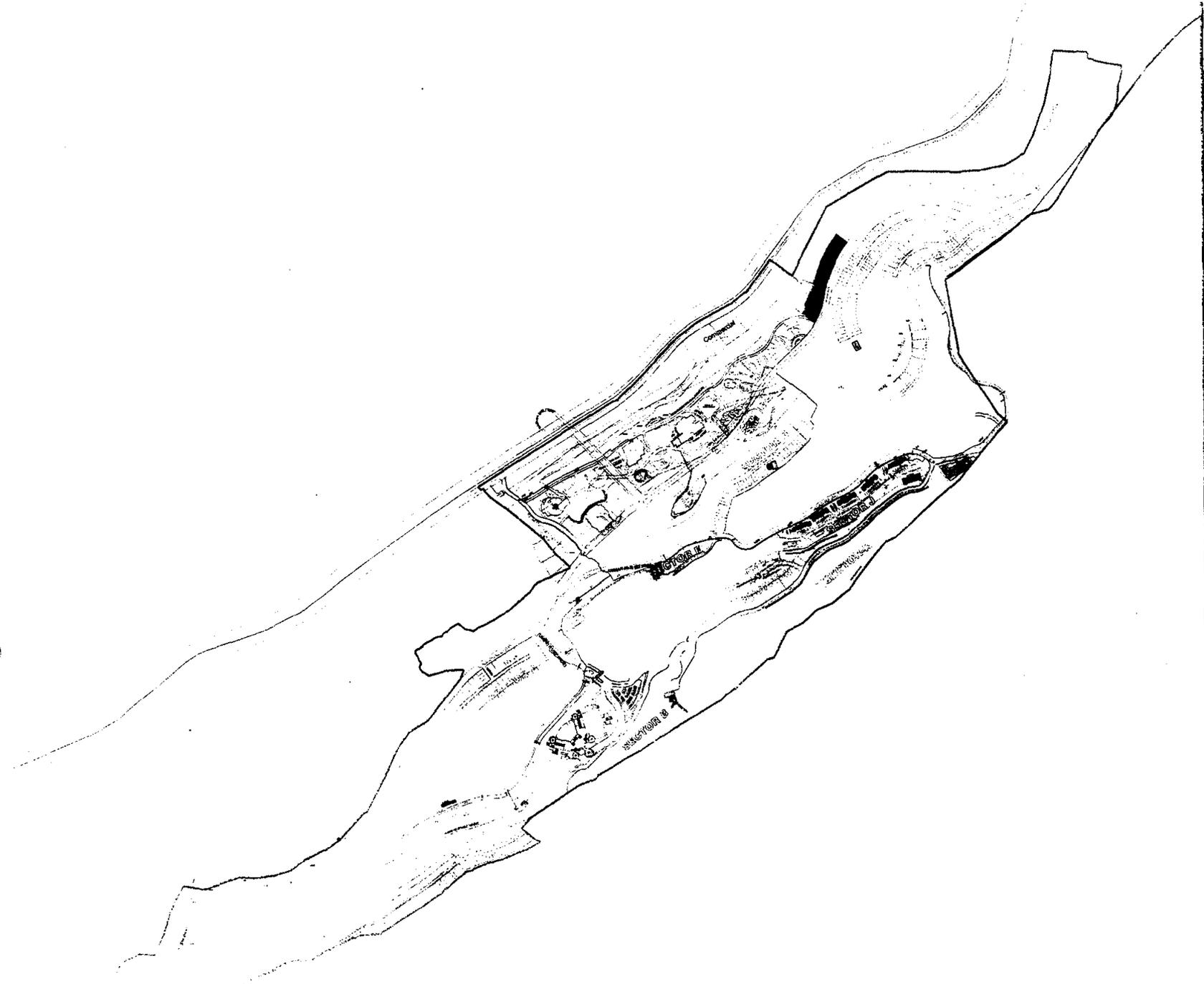
LAYOUT PLAN

PLANNING & DESIGN OFFICE
PLOT # 55, I.P. ROAD, MACHHBERPORA
PHASE VIB BAHRIA TOWN RWP/ISLD.
PH. # 051-2709620

Prepared By: _____ Date: _____
Checked By: _____ Date: _____

BAHRIA GOLF CITY MURREE
A PROJECT OF BAHRIA TOWN PVT LTD

NORTH



(MASTER PLAN)

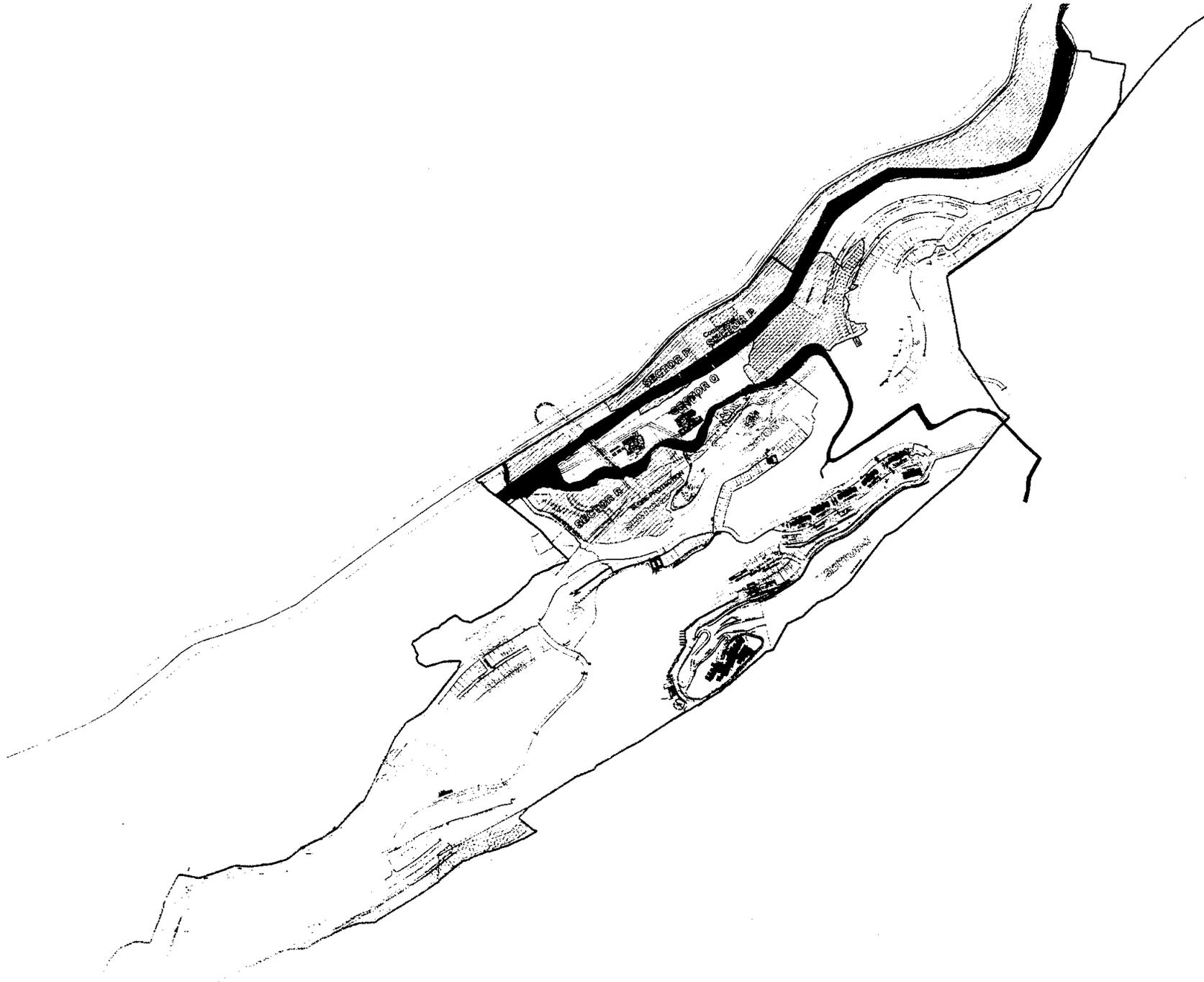
PLANNING DESIGN WING
BAHRIA TOWN PVT LTD
D-11

REVISED: 15/05/2005

SCALE: 1:5000

BAHRIA GOLF CITY MURREE
A PROJECT OF BAHRIA TOWN (PVT) LTD

NORTH

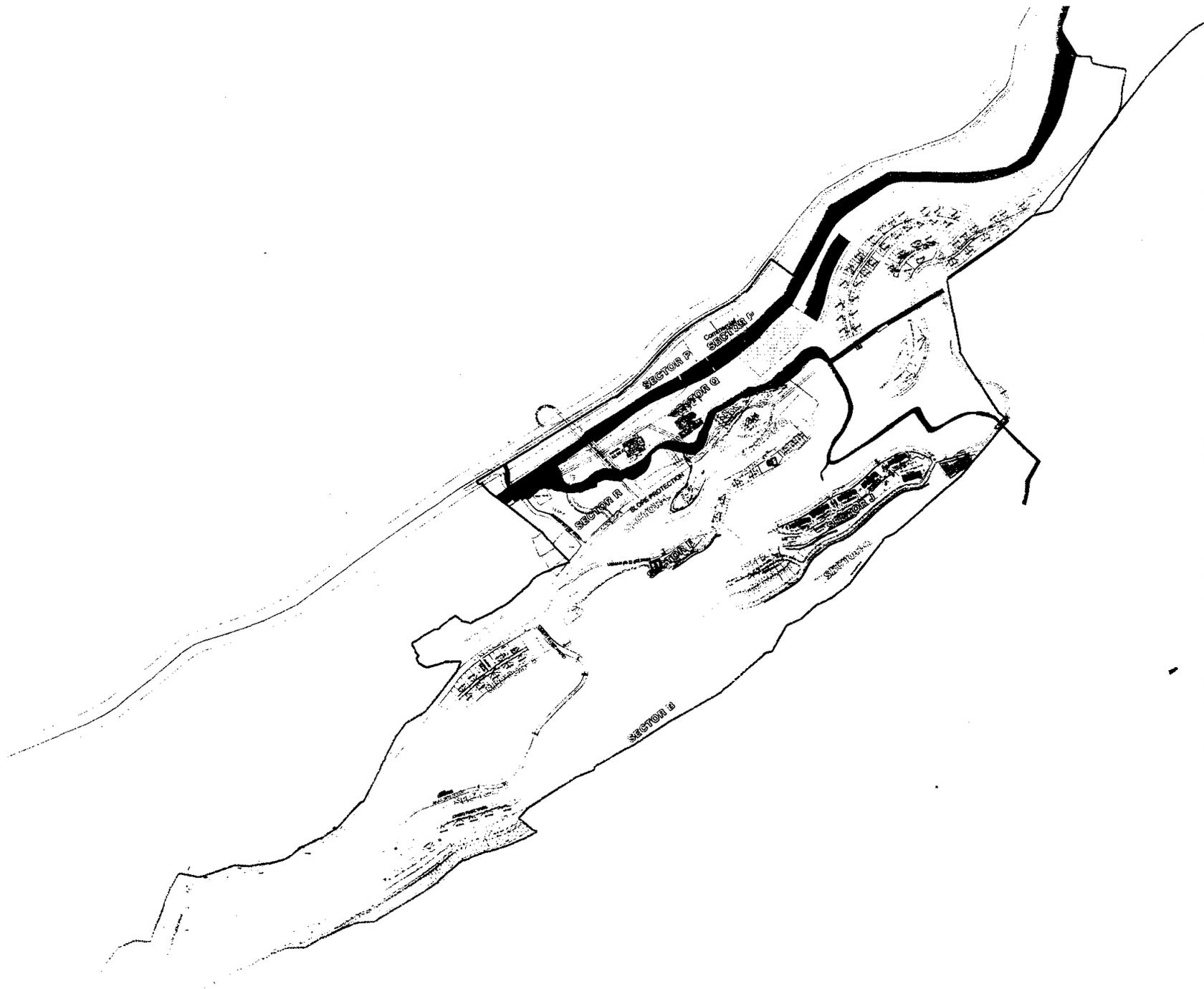


(MASTER PLAN)

PLANNING DESIGN WING
BAHRIA TOWN RWD/ISLD
TEL #

Prepared by: _____ Date: _____

Asst. Engr. Abbas



BAHRIA GOLF CITY MURREE
 A PROJECT OF BAHRIA TOWN (PVT) LTD

NORTH



(MASTER PLAN)

PLANNING DESIGN WING
 BAHRIA TOWN (PVT) LTD

TEL: 373-1111

Project No. 1000000000 Client: Bahria Town (Pvt) Ltd

Scale: 1:10000 Date: 10/2008

Schedule III (C) Distribution

S/No	Description of Documents	Annex /Enclosure
1	Distribution system configuration service territory, right of way, feeder maps	Annex (O), (P), (R) & (S)
2	Voltage levels, regulation	Annex (O), (P), (R) & (S)
3	Type of distribution system	Annex (O), (P), (R) & (S)
4	Line equipment characteristics	Annex (O), (P), (R) & (S)
5	Power quality control	Grid Station Regulation
6	Back-up/ express feeder provision	As per RMU system
7	Accident protection/ prevention procedures	Accident prevention procedures available at Grid Station
8	Maintenance plan procedure	Under maintenance contract with IESCO.
9	Fault location/ trouble- shooting procedure	Maintenance by Bahria Town - maintenance staff
10	Emergency provision	Maintenance by Bahria Town - maintenance staff
11	Patrolling and Inspection Procedure	Maintenance by Bahria Town - maintenance staff
12	Customer service data/ Manual	Bahria Town complaint center
13	Billing and collection procedures	Meter reading/ billing is carried out by Bahria Town Staff.
14	Protection, control and measuring instruments	Installed in Grid Station
15	Meeting and testing facilities	Installed in Grid Station
16	Communication system	PTCL/ Mobile communication
17	Training and Development	Conduct training & development sessions regularly

SCHEDULE III (C) DISTRIBUTION.

1. Underground External Electrification System with 11KV Feeders and L.T. and L.T. Feeders interconnected with loops having Ring Main System in open ends. 132/11KV Grid Stations are constructed in Bahria Town and the feeders are passing with in the vicinity of Bahria Town in the provided corridors. The feeders maps are attached.
2. Voltage level 415 VLV and 11 KV HV with standards DDS-71 2004 and P-13:66 with regulation + 2.5%, - 7.5%.
3. Underground Ring Main Distribution System in open ends.
4. 11kV Al XLPE cables 500 mm², 240mm² and 120 mm², LT PVC cables, 3 Way 4 Way 11KV Ring Main Switches for connecting feeder & Transformer in ring. Pad Mounted Transformers of capacity 100 KVA, 200 KVA, 630KVA & 1250 KVA based on load requirements.
5. Power availability from IESCO Transmission System.
6. The Distribution system consists 92 Nos. 11KV feeders, feeders feeding system in open ring. The Distribution System is being fed from Bahria Town's Own, 3x 132/11KV Grid Stations, with IN & OUT arrangements and 11KV out going feeders are interconnected through loops and 3 / 4 Way Ring Main Switches as back up arrangement to cater for any emergency. 3 x Power Houses consisting of total capacity of 26 MW are installed in the system.
7. All equipment is installed in enclosed insets to avoid accident system. System is operated through a central operation room when all open points of feeders & day to day change in position is marked. No work on any equipment is allowed without proper shut down earthing of equipment and issuance of PTW (Permit to Work).
8. Routine maintenance of equipment is being carried out as per manufacturers recommendations charts for each equipment is maintained & updated on regular basis The maintenance plans and maintenance procedures are adopted as per international standard practice/procedures. .

9. Earth fault indicators are installed to held in quick isolation of faulty portion. Fault localization equipment is procured to localizing the fault and help in early repair. The Troubleshooting procedures are developed as per international standards.
10. To cater for emergency sufficient spares and Line Material is kept in inventory.
11. The operators patrol the area & carry out visual inspection of equipment for any physical damage and /or fault.
12. Separate customer services section is taking care of these requirements at the time of customer application.
13. Meter readers are recording the meter reading on the date fixed by Bahria Town (Pvt) Ltd, Bills are deposited in Bank assigned for this purpose.
14. Sensitive earth fault and overload Protection are provided on 11KV Feeder at Grid where all individual Transformers are fuse protected.
15. Meter are being provided by Bahria Town (Pvt) Ltd, & are test certified by manufacturer for accuracy. However, in case of any challenge the same is tested at site with testing equipment. In case of dispute, out source facility for testing is utilized.
16. Communication System at site is carried out through radio controlled vehicles and Walki Taki Sets.
17. Bahria Town (Pvt) Ltd; has hired well trained staff for fault localization, operation & maintenance of system. However, adequate training is provided on as and when required basis.