



NATIONAL TRANSMISSION & DESPATCH COMPANY Ltd.

MANAGING DIRECTOR NTDC

No. MD/NTDC/ 3044

Dated 21-12-2022

Registrar

National Electric Power Regulatory Authority
NEPRA Tower, G-5/2, Islamabad.

Subject: APPLICATION FOR PROPOSED MODIFICATION OF NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED (NTDC) LICENSE NO. TL/01/2002 DATED 31ST DECEMBER 2002 UNDER REGULATION 10(2) OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY LICENSING (APPLICATION, MODIFICATION, EXTENSION AND CANCELLATION) PROCEDURE REGULATIONS 2021 AS AMENDED UP TO DATE (THE "LPM APPLICATION")

Dear Sir,

This submission is being made by undersigned, **Dr. Rana Abdul Jabbar Khan**, bearing CNIC No. **34101-4940598-9** as Managing Director ("MD"), National Transmission & Despatch Company Limited ("NTDC"), a company duly established and existing under the laws of Pakistan with its Registered Office at WAPDA House, Lahore, being the duly authorized officer of NTDC in terms of the authority and powers vested in and conferred on MD vide the Resolution No. NTDC/CS/2372-75 dated 15.12.2022 passed by the Board of Directors of NTDC.

I hereby certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 as amended (the "Regulations"), and undertake to abide by the terms and provisions of the Regulations. I further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of my knowledge and no material omission has been made.

This LPM Application is accompanied with the pay order bearing No.17515011 of PKR 1,240,834 (Pakistani Rupees: One Million Two Hundred Forty Thousand Eight Hundred and Thirty-Four Only) net of taxes being the applicable license application fee of PKR 1,348,733 (Pakistani Rupees One Million Three Hundred Forty-Eight Thousand Seven Hundred and Thirty-Three Only), in favour of the Authority calculated in accordance with Schedule II of the Regulations.

Encl.:

1. LPM Application and Text of Proposed Modifications (Annexure – I & I/A)
2. NTDC Board Resolution approving the proposed modifications to the License and authorization to file before NEPRA, for and on behalf of NTDC (Annexure – II)
3. Authorized Officer's Affidavit supporting the LPM Application (Annexure – III)
4. Pay Order of PKR 1,240,834 (Pakistani Rupees: One Million Two Hundred Forty Thousand Eight Hundred and Thirty-Four Only) as fee for License Proposed Modification (Annexure – IV)

Dr. Rana Abdul Jabbar Khan
Managing Director NTDC
CNIC: 34101-4940598-9

Dr. Rana Abdul Jabbar Khan
Managing Director NTDC

License Proposed Modification Application

A. Background

1. National Transmission and Despatch Company Limited (“**NTDC**”) is a Public Limited Company incorporated on 6th November, 1998 under the Companies Ordinance 1984 (now Companies Act 2017) having Corporate Universal Identification No. L09689 of 1998-99 issued on 31st December 2002 till 30th December 2032 and with its Registered Office at Wapda House, Lahore. NTDC started its commercial operations on 1st March, 1999.
2. Pursuant to Section 17 of Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the NEPRA Act) and subject to Section 7 thereof, the Authority granted a Transmission License No. TL/01/2002, dated December 31, 2002, as amended, (the “**License**”) to NTDC.
3. Under the terms and conditions of the License and Section 17(2) of the NEPRA Act, NTDC has an **exclusive right** as a National Grid Company of Pakistan for providing transmission services in whole of the country for the Term of the License i.e. a period of thirty (30) years, except for the area served by K-Electric Limited, previously KESC.

Also under the terms of the License, NTDC is required to provide System Operation, Economic Dispatch and Ancillary Services.

5. Vide Letter No. MD/NTDC/3029/ dated 24th August 2022, NTDC filed an application before the Authority for grant of System Operator License as a separate functional activity within NTDC along with revised draft Grid Code for its approval.
6. As per Section 23G of the amended NEPRA Act, the provisions governing SO Licensing as a separate activity will only become effective upon lifting of the moratorium in Section (1)(3) of the NEPRA Act. This provision is consistent with the License terms which envisage functional separation of *System Operation and Dispatch* to perform independently in accounting and management terms.



7. Under Section 18(e), the NEPRA Act stipulates that the National Grid shall perform the function of the System Operator. Further, only one such license shall be granted at any one time.
8. Once SO is granted a separate license within NTDC which will come into effect at a date as per legal framework mentioned above and to ensure there is no duplication of activities between NTDC's existing License and license granted to SO for functional separation of its activities within NTDC, this LPM Application.

B. Impact on Tariff, Quality of Service and Performance

1. The modification does not envisage any net impact on the retail tariff; and in fact, make financial as well as operational management of the power sector more efficient. Tariff Petition will be filed by NTDC through its Finance team in due course.

It is anticipated that the modification will help enhance performance and operational capabilities of NTDC.

3. Through this application, NTDC also submits its request for approval of re-organization of its business structure under Section 33 of the NEPRA Act which has already been made available along with application for grant of SO license by NTDC and approval of revised Grid Code prepared by NTDC as per applicable legal framework for the purposes of NTDC to carry out its function under separate License of System Operator for safe & reliable operation, control, switching and dispatch of transmission.

C. Submission

1. In lieu of the above, NTDC hereby submits this application for LPM of its License to ensure functional separation of Transmission function and SO function within NTDC as per procedural requirements of Section 23G *upon the same coming into effect once moratorium under Section 1(3) of the Amended NEPRA Act is lifted and the same becoming effective upon the System Operator Rules being notified.*
2. Upon SO License being issued and becoming effective at such future date as mentioned in para (C)(1) above, the sections pertaining to the system operations in the License Modification as per attached text in Annexure 1-A shall be deemed



to have been deleted or modified as advised, and to that extent the License shall stand modified and novated.

3. All other terms and conditions of the License, except as mentioned in the LPM, shall continue to remain in effect and full force without any change whatsoever until the completion of the License Term. NTDC reserves its rights.



Dr. Rana Abdul Jabbar Khan
Managing Director NTDC
CNIC: 34101-4940598-9

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Managing Director NTDC



Proposed text for NTDC License Proposed Modification			
Sr. No.	Current License Section/Articles/Clauses	Proposed Modification	Remarks
1.	<p>Article 1, Clause (c)</p> <p>“ancillary services” means the services ancillary or incidental to the safe, reliable, stable and efficient availability and utilization of electrical energy and net capacity and include with-out limitation, the following namely:-</p> <ul style="list-style-type: none"> (i) Energy imbalance service; (ii) Spinning reserve service; (iii) Supplemental reserve service; (iv) Reactive supply and voltage control service; and (v) Regulation and frequency response service; 	Deleted	Deleted.
2.	<p>Article 1, Clause (h)</p> <p>“balancing services means services to be rendered under a balancing arrangement for the purposes bilateral contracts for dispatching plants, access to additional generation for system needs and establish a price for each operating time period at which differences between contractual and real time positions are settled;</p>	Deleted	Deleted.




3.	<p>Article 1, Clause (n)</p> <p>“economic dispatch” means system of establishing economic precedence of electric power from available generating units or tie-line transfers directed by the Licensee or any other entity established under competitive trading arrangements</p>	Deleted	Deleted.
4	<p>Article 1, Clause (z)</p> <p>“Transmission Business” means the business of transmission of electric power carried on or to be carried on by the Licensee pursuant to and in accordance with the terms of this Licence in planning, development, construction and maintenance of the Licensee’s transmission system and operation of such system for the transmission and dispatch of electric power including the balancing services and interconnection services;</p>	<p>“Transmission Business” means the business of transmission of electric power carried on or to be carried on by the Licensee pursuant to and in accordance with the terms of this License in planning, development, construction and maintenance of the Licensee’s transmission system and interconnection services;</p>	<p>Please advise suitability of definition</p> <p>“operation of such system for the transmission and dispatch of electric power including the balancing services and interconnection services” -Should be deleted.</p> <p>Should read - “maintenance of the Licensee’s transmission system and interconnection services”</p>



5	<p>Article 7, Clause (7.2), Procurement of Electric Power</p> <p>Subject to Article 7.1, the Licensee shall ensure that neither the Licensee nor any of its affiliates or related undertakings on its own or in concert with others purchase or acquire electric power for the purpose of sale to a third party, save for the purposes of balancing and ancillary services for provision of a safe and reliable system, as may be established in competitive trading arrangement approved by the Authority.</p>	<p>Subject to Article 7.1, the Licensee shall ensure that neither the Licensee nor any of its affiliates or related undertakings on its own or in concert with others purchase or acquire electric power for the purpose of sale to a third party.</p>	<p>Highlighted portion is deleted.</p>
6	<p>Article 9, Open Access</p> <p>The Licensee shall ensure a fair, non-discriminatory, and effective management, operation and planning of the transmission congestion, in order to optimize the transportation costs attributable to transmission congestion within the transmission system of the License. The Licensee shall also ensure that the resultant financial impact of transmission congestion is equitably distributed among the parties connected to or intending to be connected to its transmission system.</p>	<p>The licensee shall ensure a fair, non-discriminatory, and effective management, operation and planning of the transmission congestion, in order to facilitate the Users connected / intended to connect its system by eliminating / minimizing the transmission congestion within the transmission system of the license.</p>	<p>Highlighted portion is deleted.</p>
7	<p>Article 14, Transfer Price</p>	<p>Deleted</p>	<p>Deleted.</p>

<p>14.1 Subject to the provision of Article 7 and Article 19 of the License, the Licensee shall specify transfer price for the users of its transmission system or the methodology on the basis of which such price is established on a monthly, daily, part of the day, hourly or such other periods as the Authority may specify.</p> <p>14.2 Prior to CMOD, the total transfer price for the authorized electricity operators receiving electric power through the transmission system of the Licensee shall comprise:-</p> <p>(a) an element of generation component worked out by the Licensee following the principles laid down in Article 20, save to the extent that Article 14.2 clause (a) shall not be applicable to a BPC or a distribution licensee for that part of power which they are purchasing directly from generation licensee(s). Provided that the Licensee may include an element in respect of power purchased by the Licensee on behalf of the BPC or distribution licensee to meet its obligations under balancing services;</p> <p>(b) an element of transmission tariff determined by the Authority for the Licensee in respect of its transmission business pursuant to Article 13;</p> <p>(c) an element of tariff on account of connection charges to the extent applicable.</p>		
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	<p>14.3 Provided that the Authority may in absence of the elements stated in Article 14.2 clauses (a) and (c) above, allow the Licensee to specify its total tariff corresponding to Article 14.2(b).</p> <p>14.4 Subsequent to CMOD, charges for the authorized electricity operators receiving electric power through Licensee's transmission system shall be subject to the terms and conditions of CTBCM.</p>		
8.	<p>Article 19 – Transmission System Operation, Central Despatch</p> <p>19.1 The Licensee shall carry out the dispatch of:</p> <p>(a). all generation facilities that shall make their generation facilities available to the Licensee pursuant to Section 15(4) of the Act, except those which have been allowed to operate as Small Power Producers;</p> <p>(b). available transfers on tie lines.</p> <p>19.2 While carrying out the dispatch function the Licensee shall have due regard to information provided to it by authorised electricity operators regarding: -</p> <p>(a). forecast levels of electric power available to be transferred across any tie-line; and</p> <p>(b). the requirements of the approved transmission system security standards referred to in Article 27.</p> <p>19.3 The Licensee shall undertake operational planning:-</p>	Deleted	Deleted.



<p>(a). for matching generation output (including a reserve of generation to provide a security margin of generation availability) with forecast demand after taking into account inter alia:</p> <p>(i). non-availability of generation sets and/or tie-line transfers;</p> <p>(ii). constraints from time to time imposed by technical limitations on the total system or any part of it; and (iii). electricity delivered to the total system from generation sets not subject to central dispatch; and</p> <p>(b). in accordance with the Grid Code and subject to Article 15.4 of this Licence, for the release of portions of the transmission system of the Licensee for maintenance, repair, extension or reinforcement.</p> <p>19.4 The Licensee shall carry out an economic dispatch for all generating units and for transfers on tie lines in accordance with the Grid Code save if any other dispatch mode is required pursuant to CTBCM.</p> <p>19.5 The Licensee shall schedule and issue instructions for the dispatch of generating units and of tie-line transfers taking account of the following factors:-</p> <p>(a). forecast demand, including transmission losses; (b). economic and technical constraints that are imposed on the total system or any part of it from time to time; (c). constraints in the availability of hydro power and of gas;</p> <p>(d). dynamic operating characteristics of available generating units and inter-connector transfers;</p>		
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<p>(e). forecast transfer of electricity across any tie-line; and (f). other matters provided for in the Grid Code.</p> <p>19.6 The Licensee shall schedule and issue instructions for dispatch of generating units and transfer across tie-lines:-</p> <p>(a). in ascending order of costs per unit of energy for the generation and delivery or transfer into the total system; and</p> <p>(b). to match adequately at all times, the aggregate demand forecast taking account of information provided by licensees and authorised electricity operators, together with an appropriate margin of reserve.</p> <p>19.7 The cost per unit of energy referred to in Article 19.6 (a) will be calculated for each generating unit. An independent assessor, if required by the Authority shall be engaged by the Licensee to verify such calculations. The cost per unit of energy shall be approved by the Authority and will be subject to an annual review. Any revision shall take into consideration improvement in efficiency and changes pursuant to automatic fuel cost adjustment mechanism.</p> <p>19.8 The Licensee shall establish and operate with the approval of the Authority, systems for balancing services and ancillary services to be paid or received by licensees and authorised electricity operators in accordance with the commercial code in operation.</p>		
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	<p>19.9 The Licensee shall maintain records for a period of five (5) years. Such record shall consist of the following information:</p> <p>(a). generating units and transfers across tie-lines available or declared as available;</p> <p>(b). cost per unit of energy of generating units and tie-line transfers declared as available;</p> <p>(c). generating units and transfers across tie-lines facilities scheduled for dispatch or dispatched;</p> <p>(d). ancillary services called for by the Licensee and provided;</p> <p>(e). kilo watt-hours of electric power taken from the total system by any purchaser of electric power.</p> <p>19.10 The Licensee shall furnish to the Authority any information required in respect of the economic dispatch system or any aspect of its operation.</p>		
<p>9.</p>	<p>Article 20 – Purchase of Ancillary Services</p> <p>20.1 Upon such notification of the date by the Authority in the Official Gazette, the Licensee shall have the right to purchase and offer, provide and charge for ancillary services apart from electrical energy and electrical capacity made available or provided pursuant to this Licence.</p> <p>20.2 In contracting for the provision of ancillary services pursuant to Article 20.1, the Licensee shall purchase or otherwise acquire ancillary services from the most economical sources available to it having regard to the</p>	<p>Deleted</p>	<p>Deleted.</p>



	<p>quantity and nature of the services required to enable it to discharge its obligation under Article 19 and to the diversity, number and reliability of the services available at the time of purchase.</p> <p>20.3 Prior to the date referred to in Article 20.1, nothing contained in this Licence shall be construed so as to: -</p> <p>(a). regard ancillary services independent of or separate from electric power save to the extent of bilateral contracts pursuant to SBP arrangement; or</p> <p>(b). confer a right on the Licensee to offer, provide or charge for ancillary services as services independent of or separate from the availability of electrical capacity or electrical energy and all obligations of Licensee in this respect shall mean and include ancillary services. Provided that, this Article shall cease to apply on the competitive market operation date.</p>		
<p>10.</p>	<p>Article 23 – System Planning</p> <p>23.1 The Licensee shall develop short term and long-term plans of the transmission system of the Licensee in accordance with the Grid Code and such other standard of planning as the Licensee may propose following consultation with any licensee and authorized electricity operator and approved by the Authority.</p> <p>23.2 The Licensee shall develop or modify its transmission system according to plan approved by the Authority.</p>	<p>Article 23 – Transmission System Development Planning</p> <p>23.1 Transmission system planning activities shall be performed in accordance with the Grid Code and such other standard of planning as the Licensee may propose following consultation with any other licensee and authorized System Operator and approved by the Authority.</p> <p>23.2 The Licensee shall develop Transmission System Expansion Plan</p>	<p>Amendment as below.</p> <p>Amendments proposed based on revised Grid Code. This is in-line with the draft Grid Code Sections (Planning Code) PC 4.3 and PC 4.4.</p>

		<p>(TSEP), for the next ten years, within its defined territory, in coordination with other Transmission Network Operators (TNOs).</p> <p>23.3 The Licensee shall support System Operator in assessing long term transmission system requirements as part of developing an Integrated System Plan (ISP).</p> <p>23.4 Each year, the Licensee shall develop a five-year Transmission Investment Plan (TIP) and submit it to the Authority for approval.</p> <p>23.5 The Licensee shall develop its transmission system facilities according to the TIP approved by the Authority.</p>	
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