National Electric Power Regulatory Authority
Islamic Republic of Pakistan
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Registrar

No. NEPRA/TRF-169/ZEPL-2011/11175-11177
December 13, 2011

Subject: **Decision of the Authority on Motion for Leave for Review filed by Zorlu Enerji Pakistan Ltd. in response to Determination of the Authority dated July 19, 2011 (Case No. NEPRA/TRF-169/ZEPL-2011)** Intimation of Decision of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997)

Dear Sir,

In continuation of this office letter No. NEPRA/R/TRF-169/ZEPL-2011/5525-5527 dated July 19, 2011 whereby determination of the Authority in the matter of tariff petition filed by Zorlu Enerji Pakistan Ltd. was sent. Please find enclosed herewith the decision of the Authority (09 pages) in the matter of Motion for Leave for Review filed by Zorlu Enerji Pakistan Ltd. on August 2, 2011 against NEPRA's determination dated 19.07.2011 in Case No. NEPRA/TRF-169/ZEPL-2011.

2. The Decision of the Authority is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) read with Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

3. Please be informed that the Order of the Authority earlier intimated vide para 18 of the Authority's determination dated July 19, 2011, stands modified/amended to the extent as detailed in para 17 of the subject decision of the Authority. Please note that Order of the Authority at para 17 is required to be notified in the official Gazette.

Enclosure: As above

(Syed Safeer Hussain)

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
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Secretary
Ministry of Water & Power,
'A' Block, Pak Secretariat
Islamabad.

CC:

1. Secretary, Cabinet Division, Cabinet Block, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(NEPRA)
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No. NEPRA/TRF-169/ZEPL-2011

Decision

of

the Authority

in the matter of

Motion For Leave For Review

filed by

Zorlu Enerji Pakistan Limited (ZEPL)

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Decision of the Authority on Motion For Leave For Review filed by Zorlu Enerji Pakistan Ltd. (ZEPL) In response to determination of the Authority (Case No. NEPRA/TRF-169/ZEPL-2011)

1. Zorlu Enerji Pakistan Limited (ZEPL) filed Motion for Leave for Review (hereinafter "the review petition") on August 2, 2011, in response to tariff determination of the Authority dated July 19, 2011 regarding determination of tariff for its 56.4 MW Wind Power Plant located at Jhampir district Thatta in the Province of Sindh.

2. ZEPL through its review petition sought reconsideration of the Authority in respect of the following cost components of tariff.

- i) EPC Cost for Phase-I
- ii) Project Development Cost
- iii) Insurance during Construction
- iv) Other Project costs
- v) Financial charges
- vi) Interest During Construction
- vii) O&M cost
- viii) Insurance expense
- ix) Provision of L/C cost for DSRA top up.
- x) O&M indexation based on Eurozone Harmonized Index of Consumer Price.
- xi) Adjustment of custom duty and other taxes on actual basis at COD.

3. The Authority admitted ZEPL's review petition pursuant to the pre-admission hearing held on August 25, 2011. The Authority also held hearing of the review petition on October 3, 2011 as required under the NEPRA Tariff (Standards and Procedure) Rules 1998 for providing an opportunity to the Petitioner to present its case based on the grounds and any further evidence in support of its review petition for consideration of the Authority.

4. Based on the information provided by ZEPL in its review petition the above mentioned issues have been discussed as hereunder.

5. **EPC Cost for Phase-I**

5.1 The Petitioner through its review petition, while disagreeing with the Authority's decision of "pro rata" allocation of the EPC cost for Phase-I based on the previous approved EPC cost of Zorlu for its 49.5 MW wind power plant as per Authority's determination dated May 23, 2008, has requested that the approved Phase-I EPC cost of US$ 13.889 million be revised and increased to US$ 19.450 million by giving the effect of 'economies of scale'.

5.2 The Petitioner has argued that the rationale/principle of "pro rata" allocation is not valid for infrastructure projects; rather the concept of economies of scale may be applied for any meaningful calculation for Phase-I EPC cost. In support of argument the Petitioner has compared the total cost per MW of various hydel power projects ranging in capacity from 4.8 MW-Sahiwal Hydropower Project to 840 MW Suki Kinari hydropower project and has demanded 40% increase on this basis in the Phase-I EPC Cost from approved cost of US$ 13.889 million to US$ 19.450 million i.e. by applying the principle of economies of scale.

5.3 It is to be noted that the Authority in its previous determination for ZEPL dated May 23, 2008 had approved total EPC cost of US$ 112.205 million for its 49.5 MW wind power

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plant. The total EPC cost included US$ 11.809 million and US$ 75.462 million for the cost of energy equipment for Phase-I and Phase-II respectively. ZEPL was allowed the cost of energy equipment based on Energy Equipment Supply Contract with Goldwind Science and Creation Windpower Equipment Company China submitted to the Authority along with its previous tariff petition dated April 8, 2008.

5.4 The Authority through its latest tariff determination for ZEPL dated July 19, 2011 has approved US$ 11.809 million on account of cost of energy equipment for its Phase-I which is the main component of EPC cost and contributes about 85% of its approved EPC of Phase-I in accordance with equipment supply contract with Goldwind China. For other Phase-I EPC costs such as transportation, civil and electrical works etc. the Authority allowed US$ 2.080 million on per turbine cost basis while relying on its previous determination. The Authority has, therefore, approved US$ 13.889 million for its Phase-I EPC cost, which is US$ 2.315 million per MW and already higher on per MW basis as compared to US$ 2.267 million/MW on account of total EPC cost allowed to ZEPL as per previous determination of the Authority dated May 23, 2008.

5.5 The Authority observed that the rationale of the Petitioner to seek increase in its Phase-I EPC cost based on the principle of 'economies of scale' does not apply in the instant case. The Authority has considered and thus approved ZEPL's tariff combined for its Phase-I and Phase-II, in view of its revised LOI and feasibility study for its enhanced project capacity of 56.4 MW duly endorsed by AEDB. The principle of economies of scale come under consideration for cost assessment of independent projects and, therefore, is not applicable in the case of ZEPL.

5.6 The Authority observed that the Petitioner has ignored the 'principle of prudency of costs' while requesting increase in the Phase-I EPC cost on actual cost basis. The Authority considers that mere submission of actual expenditure along with supporting invoices/documents does not justify its claim rather it has to prove that such expenditure has been incurred prudently by the project sponsors on comparable basis. The cost over runs due to delay in project completion cannot be considered prudent costs of the Petitioner.

5.7 ZEPL has delayed completion of its wind power project by more than two years from the committed schedule by mid of year 2009 as mentioned in the previous determination of the Authority dated May 23, 2008. It has been able to install only 6 MW (5 turbines of 1.2 MW each) out of its total approved project capacity of 49.5 MW, which is also not fully operational. ZEPL has been allowed Phase-I EPC cost of US$ 13.889 million, while relying on previous determination of the Authority dated May 23, 2008, which was in the field at the time of development and completion of Phase-I. The Authority in its determination of July 19, 2011 has already allowed adjustment of Phase-I and Phase-II approved EPC cost on the basis of actual exchange rate variation (Euro/US$ and PKR/US$) at the time of COD. The Authority, therefore, considers that the Petitioner's request to allow Phase-I EPC cost on actual cost basis is neither maintainable nor justified in view of the aforementioned facts.

5.8 In view of the position explained above, the Authority declines to the Petitioner's request for increase in Phase-I EPC cost to US$ 19.450 million, while maintaining the previous decision of its determination dated July 19, 2011.

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6. Project Development Cost

6.1 ZEPL has requested for approval of US$ 5.183 million on account of project development cost as against US$ 4.088 million already allowed to it in the Authority's determination. The petitioner's request is based on the following breakup:

Consultants costs	US$ 3.456 million
Administration during construction	US$ 1.150 million
Licenses & Other fees	US$ 0.152 million
Operating Fixed Assets	US$ 0.425 million
Total	US$ 5.183 million

6.2 The Petitioner has submitted that its project development cost covers expenditure already incurred by the project sponsors for various project developmental activities as well as to be spent by it in future till COD of the project. ZEPL has argued that the Authority determined its Project Development Cost while relying on cost allowed to other similar projects whose investors and lenders are local and therefore, comparison of its costs with local investors and lenders is not justified.

6.3 The breakup of project development cost now provided by ZEPL revealed that out of US$ 3.456 million for the claimed cost of consultants, it is required to pay US$ 2.50 million to its technical consultant (Ipek Energy GmbH Germany) for preparation of feasibility study, technical coordination and other services, which is exceptionally high considering its project size. Another similar project was allowed US$ 1.005 million based on verifiable documentary evidence for preparation of feasibility report to its foreign consultant (Lahmeyer International Germany).

6.4 The total revised project development cost of US$ 5.183 million now claimed by the Petitioner comprising cost of consultants, administration overheads,, licensing & other fees and Operating fixed Assets, is exorbitantly high as it is inclusive of costs already spent and to be spent by the Petitioner owing to delay in timely completion and commissioning of its wind power project, which therefore, cannot be considered as prudent cost. The already approved project development cost of US$ 4.088 million for ZEPL against its revised demand of US$ 5.183 million, is quite reasonable and, in fact, higher as compared to US$ 3.873 million allowed to another similar wind power project.

7. Insurance During Construction:

7.1 The petitioner has submitted that it requested Insurance during construction based on 1.35% of EPC cost without segregating Phase-I and Phase-II. The Authority has allowed US$ 1.737 million on this account, including US$ 0.172 million assessed on pro-rata basis for Phase-I and US$ 1.565 million assessed at 1.35% of approved EPC cost for Phase-II. ZEPL submitted that Phase-I Insurance cost allowed by the Authority based on its previous determination is about 1.24% of the approved EPC cost of Phase-I. It has, therefore, requested to allow Insurance cost for its both Phase-I and Phase-II at 1.35% of the EPC cost to avoid any confusion which may arise at the time of adjustment on COD.

7.2 The para 11.7 of the determination referred to by ZEPL is very clear on the matter which states that "ZEPL will be entitled for adjustment of Insurance during Construction period at the time of COD based on actual subject to the maximum of 1.35% of the adjusted aggregate EPC cost i.e. both for Phase-I and Phase-II on provision of authentic documentary evidence to the satisfaction of the Authority". The aforementioned decision of the Authority on the issue raised by ZEPL is quite clear and therefore does not warrant further consideration of the Authority.

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8. Other Project Costs:

8.1 The petitioner has requested to allow US$ 1.210 million for Other Project Costs as against US$ 0.500 million allowed in the Authority's determination. The petitioner's request is based on the following breakup:

Other Project Costs	US$ Million
Already incurred general expenses	0.450
Future General Expenses	0.674
LoC on Financial Closing	0.086
Total	**1.210**

8.2 The Authority in its determination has already allowed an amount of US$ 0.500 million on account of Petitioner's general expenses such as construction of site office, Letter of Credit (LoC) cost and future general expenses of ZEPL for its head office and at site as mentioned at para 11.11 of the Authority's determination.

8.3 The Authority did not consider ZEPL's request for approval of general expenses already incurred by it till to date since start of its wind power complex in 2007 for development of 49.5 MW capacity wind power plant and therefore did not allow US$ 5.762 million as requested by ZEPL in the original petition under the head of other project costs. The Petitioner has revised its demand for approval of US$ 1.210 million in the light of reservations of the Authority regarding inordinate delay in developing and completing its project. However it has not provided any further explanation or basis for its revised claim of US$ 1.210 million under the head of other project costs.

8.4 The Authority considers that ZEPL has already been allowed sufficient amount under various heads relating to sponsors' expenses for the execution and development of its wind power project in comparison to other such IPPs after due diligence of its costs at the time of determination of the Authority, hence any further increase sought by ZEPL under other project costs on one pretext or the other, without any plausible explanation, is not justified and therefore, not accepted by the Authority.

9. Financial Charges:

9.1 The petitioner, in review petition, has reiterated its request for approval of US$ 3.759 million as per its initial demand made in the original tariff petition. ZEPL has been allowed US$ 2.859 million on account of financial charges in determination of th e Authority on the basis of 3% of total approved amount of debt excluding the impact of interest during construction and financial charges in line with the benchmark set by the Authority. The amount of financial charges will be adjusted on the basis of actual at COD as already mentioned at Para 18 sub-Para (I) (f) of the determination of the Authority.

9.2 The Authority has considered ZEPL's request for increase in cost of financial charges as requested by it in the review petition and does not find any justification for allowing further cost over and above its aforementioned benchmark, which is applicable for other IPPs as well. The Authority also observed that except a typographical error at para 11.14 of its determination, as referred to by the Petitioner, the Order of the Authority at Para 18 sub-Para (I)(f) in its determination dated July 19, 2011, however, clearly mentions for the adjustment of financial charges at COD and, therefore, does not require further clarification in the matter.

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10. Interest During Construction:

10.1 The petitioner has requested that the words in brackets *"(not exceeding the amount)"* at para 11.15 of the determination, are ambiguous/discriminatory and therefore may be removed.

10.2 The Authority has approved an estimated amount of US$ 4.743 million on account of interest during construction for ZEPL, which is adjustable at COD on the basis of actual as laid down at Para 18(I)(b) of its determination dated July 19, 2011 which is stated hereunder.

> "Interest During Construction (IDC) will be adjusted at COD on the basis of actual debt composition, debt drawdown (not exceeding the amount allowed by the Authority), PKR/US$ exchange rate variation for foreign loan denominated in US$ and LIBOR/KIBOR interest rates, during the project construction period".

10.3 The Authority in its determination for ZEPL has clarified the mechanism for adjustment of Interest during construction for the purpose of clarity in line with decision of the Authority in the case of COD adjustments already allowed to other IPPs and, therefore, does not warrant any further consideration as requested by the Petitioner.

11. O&M Cost:

11.1 The petitioner has submitted that the Authority approved its per annum O&M cost on the basis of O&M cost allowed to a similar project (FFCEL). ZEPL argued that its O&M arrangement with its O& M contractors is different from that of FFCEL and therefore direct comparison of its O&M cost with others is not justified. ZEPL submitted that its O&M cost in the first two years of operation, that will be paid to the O&M contractor i.e. Vestas for the cost of services is US$ 1.444 million per annum. The Petitioner has submitted that in addition to the Vestas, it would also be required to pay its other O&M contractor (Zorlu O&M Pakistan) for operation and maintenance of the Phase-I. ZEPL has therefore, requested the Authority to reconsider its determination in terms of its per annum O&M cost.

11.2 The Petitioner in support of its request for higher O&M cost has submitted that it is not appropriate to say that cost of operation for European manufactured (high quality) equipment will be lower in any case.

11.3 The Authority observed that the aforementioned Petitioner's argument in support of its requested higher O&M cost is self contradictory to its earlier submissions at para 4.3.3 of its tariff petition whereby the Petitioner while explaining the selection criteria for its energy equipment , inter alia, stated that " Vestas provided the lowest cost per kWh due to its superior production numbers at the same wind speed"

11.4 The Authority has already approved US$ 1.2457 million and US$ 2.1265 million on account of per annum O&M expense for first two years and year 3-20 respectively while giving due consideration to its project size of 56.4 MW comprising 6 MW Phase-I and 50.4 MW Phase-II. In the opinion of the Authority, the per annum O&M cost allowed to ZEPL is quite reasonable as compared to US$ 1.087 million and US$ 1.938 million approved in the case of 49.5 MW wind power project of FFCEL, as well as other such wind power IPPs. The Authority, therefore, does not find any justification to reconsider per annum O&M cost of the Petitioner at this stage.

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12. Insurance Expense:

12.1 The petitioner has requested that it should be allowed Insurance expense at 1 % of total EPC cost without segregating Phase-I and Phase-II. The petitioner has claimed that the insurance expense allowed by the Authority for Phase-I corresponds to less than 1% of EPC cost.

12.2 The Authority approved US$ 1.249 million on account of annual insurance expense for ZEPL. The annual insurance expense for Phase-I was allocated from the total approved insurance expense of US$ 0.738 million for its 49.5 MW wind power project based on ZEPL's earlier submissions and approved by the Authority in its determination of May 23, 2008. ZEPL, however, has been allowed per annum insurance expense for its Phase-II at 1% of its approved EPC cost for Phase-II by the Authority in its determination dated July 19, 2011.

12.3 The Authority has considered ZEPL's request for Phase-I per annum insurance expense to be based at 1% of its approved Phase-I EPC cost and finds it to be justified on the ground that it has already been provided adjustment of insurance cost component of tariff on actual basis subject to the maximum of 1.35% of the EPC cost at COD as per previous determination of the Authority dated May 23, 2008. The Authority has, therefore, decided to allow adjustment of the insurance cost component of tariff on the basis of actual subject to the maximum of 1% of the approved aggregate EPC cost of Phase-I and Phase-II, on production of verifiable documentary evidence at COD.

13. Provision of L/C cost for DSRA top up

13.1 The petitioner has requested the Authority to reconsider its decision for disallowing the cost of L/C charges for top up of Debt Service Maintenance Reserve Account (DSRA). The petitioner has claimed that DSRA has already been allowed to another power project i.e. Uch-II in the Authority's determination dated 16th October 2009.

13.2 The Authority in its determination at Para 13.4 has rejected petitioner's request by stating that the risk of payment default is already amply covered under the provisions of Implementation (IA) and the Power Purchase Agreement (PPA) to be signed by ZEPL with the Power Purchaser/GoP and therefore any additional financial burden on this account to be passed on to the power purchaser is not justified.

13.3 The Authority has not allowed DSRA to any other IPP including Uch-II as it was rightly stated in the determination. The condition of maintaining Debt Service Reserve Account (DSRA) or L/C cost in lieu of DSRA has different financial implications. The cost of maintaining DSRA is quite expensive as it requires maintenance of funds/reserve in DSRA either through equity or additional financing equivalent to six monthly or annual debt servicing as per requirement of lenders and therefore, has substantial impact on the tariff.

13.4 The Petitioner in its tariff petition had sought approval of L/C cost of Rs.23.562 million per annum based on 3.5% of the six monthly debt servicing and requested Rs. 0.1405/kWh in its tariff as a separate component. ZEPL's request for allowing cost of L/C was not supported by the Term Sheet agreed with its lenders where in the petitioner was required to maintain DSRA. The issue was also discussed in the hearing of the Petition held on October 3, 2011.

13.5 The Petitioner through its letter dated October 13, 2011 has provided a fresh documentary evidence whereby its agent for the lenders (Shearman & Sterling) have agreed to accept Letter of Credit towards satisfying the obligation of DSRA.

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13.6 The Authority has considered the Petitioner's request based on fresh documentary evidence and decided to allow the cost of Letter of Credit in lieu of DSRA on comparable basis as allowed by the Authority to another project.

13.7 The Authority in the case of Uch-II has allowed cost of L/C charges based on actual, subject to the maximum of US$ 500,000 per annum to be adjusted at COD which works out to be approximately 2% of its semi-annual debt. On similar basis the per annum cost of L/C charges for ZEPL works out to be US$ 0.1406 million and therefore will be adjusted in tariff at actual subject to the maximum of 2% of semi-annual debt servicing based on documentary evidence to be provided by the Petitioner at the time of COD.

14. <u>O&M Indexation based on Eurozone Harmonized Index of Consumer Price</u>

14.1 ZEPL has requested the Authority to reconsider its decision for not allowing indexation of its O&M cost component based on Eurozone Harmonized Index of Consumer Price (HICF). The Petitioner has stated that applying US inflation index to the inflation in Europe does not make sense.

14.2 The Authority in its determination had not considered ZEPL's request for adjustment of O&M to be based on HICF due to the reason that the Authority in all other IPPs has consistently based O&M indexation on US CPI in accordance with the Policy/Tariff Guidelines of the GoP and therefore, considers it to be applicable in the instant case as well. Accordingly no change in its earlier decision dated July 19, 2011 on this issue is required.

15. <u>Adjustment of Custom Duty & Other Taxes</u>

15.1 ZEPL has requested the Authority to add the following clause in its Determination:

"Custom duty and other taxes shall be adjusted as per actual at COD based on verifiable documentary evidence."

15.2 The Petitioner at Para 4.3.2.5 of its petition had clearly stated that the cost of custom clearance of all plant and equipment including WTGs is covered under the fixed price Balance of Plant Contract. The Petitioner at Para 4.3.6 had further submitted that" Government of Pakistan has given tax concessions to IPPs generating electricity through renewable sources as per SRO 575 (I)/2006. Therefore no custom duty is considered for this tariff".

15.3 As per terms of the Balance of Plant Contract of ZEPL, the contractor is responsible for payment of all taxes and duty and therefore, covered under the total agreed contract price. However, the custom duty payable on cost of basic energy equipment as per its Turbine Supply Agreement with Vestas, is responsibility of ZEPL.

15.4 The Authority considers that custom duty and taxes are pass through costs for the IPPs as stipulated in the Government of Pakistan Policy for Development of Renewable Energy Projects 2006 and therefore if an IPP is required to pay custom duty and other applicable taxes at any stage, it should be duly compensated through adjustment in tariff. Since, the Petitioner has assumed 0% custom duty in light of the above mentioned provision of SRO 575 (I)/2006, the Authority has therefore decided to make provision in its earlier determination that in case ZEPL is required to pay custom duty and other applicable taxes on its imported plant & equipment, it shall be allowed adjustment in tariff based on actual documentary evidence at the time of COD.

16. In view of the foregoing, the Authority has decided to modify its earlier decision to the extent as indicated in the order of the Authority for notification by the government of Pakistan in the official gazette as stipulated hereunder.

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Order

17. Pursuant to Rule 16(11) of the NEPRA Tariff (Standards & Procedures) Rules, 1998, the Authority has modified its earlier determination dated July 19, 2011 for Zorlu Enerji Pakistan Limited (ZEPL) in Case No. NEPRA/TRF-169/ZEPL-2011 to the extent as indicated herein below.

The order of the Authority at Para 18, sub-para (I) under the heading "One Time Adjustment" may be modified to include the following provisions after item (g).

h. In case, custom duty and taxes are imposed on ZEPL for importing plant and equipment, the actual amount of custom duty and other applicable taxes paid by the Petitioner will be adjusted in tariff based on verifiable documentary evidence at COD.

i. The cost of Letter of Credit for fulfilling lenders requirement of DSRA will be adjusted in tariff at actual subject to the maximum of 2% per annum of the adjusted amount of semi-annual debt service on production of verifiable documentary evidence at COD.

j. The reference Insurance cost component of tariff will be adjusted on the basis of actual per annum insurance expense, subject to the maximum of 1% of the total approved aggregate EPC cost of Phase-I and Phase-II, on production of verifiable documentary evidence at COD.

The existing provision at item 'h' may be read as item 'k'.

Authority

Ghiasuddin Ahmed 1/12.
Member

Shaukat Ali Kundi 12.12.2011
Member

(*)

Maqbool Ahmad Khawaja
Vice Chairman

Khalid Saeed
Chairman

(*) I have already dissented main determination of Authority i.e. 19/7/2011 as such I maintain my opinion as per the dissenting note.
3/12
(MA KHAWAJA)
VC(?)

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