



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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Registrar

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February 07, 2024

Subject: **DETERMINATION OF THE AUTHORITY IN THE MATTER OF DECISION OF APPELLATE TRIBUNAL REGARDING MODIFICATION OF FUEL PRICE MECHANISM OF BAGASSE BASED POWER PROJECTS.**

Dear Sir,

Enclosed please find herewith the Determination of the Authority in the matter of Decision of Appellate Tribunal regarding Modification of Fuel Price Mechanism of Bagasse Based Power Projects (total 16 pages).

2. The Determination is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Determination. In the event the Federal Government fails to notify the subject Determination or refer the matter to the Authority for reconsideration, within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha)

Secretary,
Ministry of Energy (Power Division),
'A' Block, Pak Secretariat,
Islamabad.

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, Plot No. 73-West, Faza-e-Haq Road, Blue Area, Islamabad.
4. Chief Executive Officer, Alternative Energy Development Board (AEDB), 2nd Floor, OPF Building, Sector G-5/2, Shahrah-e-Jamhuriat, Islamabad.



Determination of the Authority in the matter of Decision of Appellate Tribunal regarding Modification of Fuel Price Mechanism of Bagasse Based Power Projects

DETERMINATION OF THE AUTHORITY IN THE MATTER OF DECISION OF APPELLATE TRIBUNAL REGARDING MODIFICATION OF FUEL PRICE MECHANISM OF BAGASSE BASED POWER PROJECTS

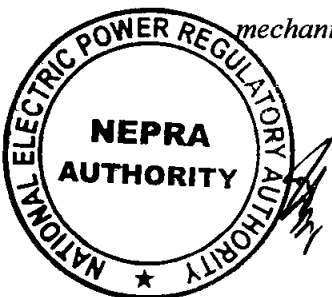
Preamble:

Eight operational Bagasse Independent Power Producers (“**Bagasse IPPs**”) filed writ petition before honorable Islamabad High Court (“**IHC**”) against Authority’s decision dated July 16, 2019 (“**impugned decision**”) in the matter of Suo Moto review proceedings for modification in the bagasse pricing and adjustment mechanism for bagasse based power projects on numerous factual and legal grounds including violation of principles of natural justice. The honorable court suspended the impugned decision and referred it to Appellate Tribunal (“**AT**”) for appropriate decision in the matter. The AT vide decision dated November 18, 2022 set aside the subject decision of NEPRA and remanded the matter to NEPRA for *afresh* decision in accordance with law, after affording the right of hearing to all the concerned. The matter was set aside on the ground that out of 03 signatories of the subject decision, 02 members were not part of the Authority who attended the hearing in the matter.

Background:

2. In March, 2013, Economic Coordination Committee (“**ECC**”) approved Framework for Power Cogeneration 2013 for Bagasse and Biomass (“**Framework, 2013**”). The Authority in pursuance of Framework, 2013 issued **Upfront Tariff, 2013** on May 29, 2013 for new bagasse based IPPs wherein the bagasse price and corresponding FCC was worked out based on the prices of the imported coal (South African) using heating value of both fuels. The yearly indexation (to be indexed each year from October 01) of the FCC was also linked with the variation in international price of the imported coal, while keeping the floor coal price at **USD 100.67 per ton**. A levelized tariff of **Rs. 10.41/kWh** was approved for bagasse IPPs comprising of FCC of **Rs. 5.7702/kWh**. Further, the Decision of the Authority dated August 28, 2013 in the matter of Suo Moto Proceedings for Modification of Existing Terms and Conditions of Upfront Tariff for New Bagasse Based Cogeneration Power Projects provided following:

xvii) To safeguard interest of consumers, the Authority may review the fuel pricing mechanism stipulated above in accordance with NEPRA applicable law, after due consultation



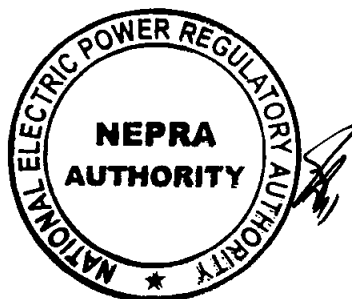
with the affected/interested parties, if it is deemed that there is exorbitant/unreasonable increase in international coal prices. Similarly, to mitigate risk to the power producer and to encourage the investors to put up bagasse based(indigenous fuel) cogeneration projects, the reference CIF coal price of US\$ 100.67/ton used at the time of this determination shall be considered the floor/minimum price for the purpose of the Fuel cost Component.

3. In the impugned decision, the Authority approved the bagasse price of Rs. 2,750/ton similar to the one approved in Upfront Tariff 2017 with 2% indexation after every two years. Being aggrieved with the aforesaid decision of the Authority, **bagasse IPPs** filed writ petition(s) before IHC. The IHC suspended the impugned decision. Resultantly, the payment of FCC to Bagasse IPPs was made on the basis of reference applicable FCC of Rs. 5.9822/kWh for the year 2015. Later, the case was forwarded by IHC to AT which decided the matter on November 18, 2022.
4. In addition to above, it is also pertinent to highlight here that the Negotiation Committee, notified by the Government of Pakistan (“**GOP**”) through Notification number F.No.IPPs-1(12)/2019-20 dated June 03, 2020, and the Bagasse IPPs signed a Memorandum of Understanding (“**MOU**”) on August 28, 2020 that inter-alia provides that “the Committee shall recommend to GOP to support the co-generation IPPs in rationalization of bagasse prices by NEPRA on merit...”. In pursuance of that the Ministry of Energy vide letter dated December 18, 2020, requested NEPRA to initiate proceedings, inter alia, for rationalization of fuel price for bagasse cogeneration projects. NEPRA vide letter dated January 13, 2020 informed MOE that the matter is sub-judice and the proceedings can only be initiated upon withdrawal of the aforesaid case and subsequent filing of review motion by bagasse cogeneration projects.

Fresh Proceedings:

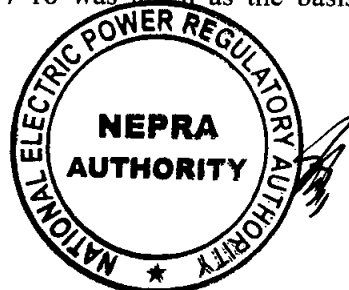
5. After remanding back the case by AT, the Authority decided to initiate fresh proceedings in the matter. The hearing in the matter was scheduled for March 7, 2023 and notices of hearing containing issues framed for hearing were sent to the relevant stakeholder on February 20, 2023. Subsequently, the hearing was postponed and rescheduled for March 15, 2023. The hearing in the matter was held on March 15, 2023 which was attended by the representatives of bagasse IPPs and CPPA-G.
6. Following issues were framed for hearing:

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- i. Why the pricing and adjustment mechanism of bagasse fuel as approved by the Authority vide decision dated July 16, 2019 is not rationale?
 - ii. Propose alternate pricing and adjustment mechanism of bagasse, keeping in view the indigenous nature of fuel?
7. Subsequent to the hearing, Cornelius, Lane & Mufti Advocates and Solicitors vide letter dated March 31, 2023 made written submissions on the above framed issues on behalf of Almoiz Industries Limited (AIL), Chanar Energy Limited (CEL), Chiniot Power Limited (CPL), RYK Mills Limited (RYKML), and Thal Industries Corporation Limited (TICL) and Mohmand and Sherpao vide letter dated March 27, 2023 made following written submissions on behalf of JDW Unit II & Unit III (JDW-II & JDW-II) and Hamza Sugar Mills Limited (HSML):
- i. NEPRA unlawfully and unreasonably changed the basis of FCC determination through the 2019 FCC Modification, and withdrew and replaced the incentive, assurance, and protection given by NEPRA in Clause IV (xvii) of 2013 Upfront Tariff Determination.
 - ii. The fuel pricing mechanism in the Upfront Tariff can only be reviewed after due consultation with the affected/interested party only if it was deemed that there is an exorbitant/unreasonable increase in the international coal price. Whereas, there was no exorbitant/unreasonable increase in the price of international coal in the year 2016-17 when the prices were reviewed, however, the landed cost of South African coal increased in the year 2022-23, which may be considered an exorbitant/unreasonable increase, therefore NEPRA can review formula and mechanism from that point onwards. For the period up to 2021-22, the sugar mills are entitled to bagasse prices as per the fuel price mechanism as laid down in the Upfront Tariff Determination.
 - iii. The escalation of 2% on the determined Bagasse price of Rs. 2,750/ton was allowed after every two years, whereas escalation was on an annual basis as per 2013 Upfront Tariff.
 - iv. The impugned decision is irrational because it was based on the pricing of sugar for 2016-2017, when there was a bumper crop of sugar cane, resulting in a low price for bagasse. The IPPs also highlighted that there was a nominal increase in the year 2017-18 which was well within range of a normal increase either due to inflation or high demand and cannot be considered an exorbitant increase.
 - v. Even otherwise if the price in the year 2017-18 was taken as the basis for the Suo Moto

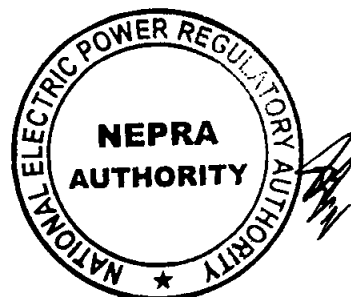
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Proceedings, then the proceedings had to be initiated in the year 2019 as the Authority can only review the fuel pricing mechanism based on the price of coal in the preceding year.

- vi. Clause 10 of the Upfront Tariff Determination states that the Upfront Tariff is applicable for 30 years and binding upon both parties. Regulation 10 of the Upfront Tariff Regulations states that the tariff cannot be changed unless adjustments were allowed at the time of determination. Additionally, Regulation 3(1) of the Review Regulations stipulates that the Authority cannot review the determined Upfront Tariff unless there is an exorbitant or unreasonable increase in the price of international coal, as specified in sub-clause (xvi) of the Amended Terms and Conditions. Therefore, the Authority has no suo moto power of review.
 - vii. Furthermore, the Bagasse IPPs submitted that the current tariff allowed to sugar mills violates Rule 17 (3) (iii) of NEPRA Tariff Rules that requires tariff to allow a rate of return that encourages investment in efficient facilities and Sub-clause (v) that requires tariff to reflect marginal cost principles while ensuring financial stability of the sector. In addition to that the tariff does not provide reasonable/market based compensation for the power producer's own asset being consumed. Rather the current tariff for sugar mills is promoting shutdown of facilities due to zero profits and running finance.
 - viii. In addition to the above, Bagasse IPPs also suggested following options for the determination of Bagasse price and FCC for the year 2022-23 and onwards:
 - i. Indexation on the Basis of actual International Coal Price (CIF Basis).
 - ii. Indexation to be linked with CPI.
 - iii. Indexation to be linked with the Sugarcane prices.
 - iv. Indexation on the Basis of Minimum International Coal Price (CIF Basis).
8. Later, the Authority decided to hold a fresh hearing in the matter which was scheduled for September 06, 2023. Accordingly, the notices of hearing on approved issues were sent to the relevant stakeholders on August 30, 2023. The hearing was attended by the representatives of Bagasse IPPs and CPPAGL. The Authority during the 2nd hearing directed bagasse IPPs and CPPAGL to resubmit their written comments. Accordingly, Bagasse IPPs through their legal counsels i.e. Mohmand and Sherpao and Cornelius, Lane & Mufti Advocates and Solicitors made following written submissions vide letter dated September 18, 2023 and September 19, 2023:

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- i. In the 2013 Upfront Tariff, NEPRA linked the bagasse price with imported coal using the BTU value of each fuel, considering the fact that the published bagasse price and no index for future adjustments was available.
- ii. According to the 2013 Upfront Tariff, as amended by the Review Decision, NEPRA is authorized to review the fuel pricing mechanism only in the event of an exorbitant/unreasonable increase in international coal prices, and such review can only be done after due consultation with the affected interested parties;
- iii. Any review by NEPRA of the fuel pricing mechanism cannot relegate bagasse IPPs to a position that would be less advantageous than their entitlement of FCC calculated at the minimum reference CIF coal price of US\$100.67 per ton. Furthermore, NEPRA cannot conduct such a review of fuel pricing mechanism for reasons other than an exorbitant/unreasonable increase in international coal prices including variations due to Pak Rupee depreciation since no right of review on account of variation in Pak Rupee / US Dollar was retained by NEPRA in the Review Decision even though this was identified as an independent factor in addition to variation of CIF price of coal.
- iv. The Suo Moto Review Proceedings initiated by NEPRA in February 2018 to modify the workings and indexation mechanism of FCC for projects under the 2013 Upfront Tariff, supposedly due to newly determined upfront tariff dated November 10, 2017 for bagasse-based co-generation power projects (the "2017 Upfront Tariff"), lacked lawful cause or justification.
- v. The earlier Decision of NEPRA dated July 16, 2019 ("2019 Decision") was suspended by the Honorable IHC shortly thereafter writ petitions were filed by all our Clients on July 26, 2019. Subsequently, the 2019 Decision was set-aside by the AT vide order dated November 18, 2022 and the matter was remanded to NEPRA for decision afresh.
- vi. As stated above, at all material times, the 2019 Decision remained ineffective, rendering bagasse IPPs entitled to receive FCC based on their notified tariff in the 2013 Upfront Tariff, without consideration of the suspended 2019 decision. As a result, bagasse IPPs are eligible for arrears from October 2018 until any future NEPRA decision, reflecting the difference between the FCC determined under the 2013 Upfront Tariff and the actual (lesser) FCC paid to them.

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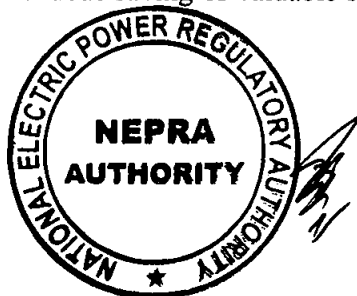


- vii. Issue No. 1 in the Notice is inaccurately framed, as reference to the set-aside 2019 Decision is inappropriate. In fact, NEPRA is required to decide the matter afresh, without being influenced by, and reference to 2019 Decision, and determine whether circumstances justify a review of the fuel pricing mechanism in accordance with sub-clause (xvii) of Para IV (Terms and Conditions) of the 2013 Upfront Tariff, as amended by the decision on Amended Terms and Conditions, mentioned at Para 17 of the amended decision.
- viii. Bagasse IPPs' response to the above (modified) issue is that there was no justification to review the fuel pricing mechanism until September 2022 since there was no exorbitant/unreasonable increase in international coal prices during that period. However, acknowledging a significant increase in international coal prices since October 2022, they concede that NEPRA can now consider a prospective review of the fuel pricing mechanism, contingent upon consultation with relevant parties and in alignment with their stance outlined in sub-para (iii) above. Bagasse IPPs further added that any such review decision on the fuel pricing mechanism would be prospective in nature and would not affect the vested rights of bagasse IPPs under the 2013 Upfront Tariff till the (future) date of such review decision.
- ix. In addition to the above, the Bagasse IPPs presented following table indicating that the international coal price had not increased exorbitantly except in the year 2022-23:

Applicable Year	Yearly Average Price (FOB)	Yearly Average Price (CIF)
2013-14	84.564	103.836
2014-15	77.314	96.226
2015-16	64.708	83.619
2016-17	52.909	71.821
2017-18	77.265	96.176
2018-19	93.418	112.329
2019-20	86.607	105.518
2020-21	67.528	86.439
2021-22	80.879	99.791
2022-23	200.763	219.674
2023-24	178.571	197.482

- x. With respect to Issue No. 2 in the Notice, as an indigenous fuel, no foreign exchange is deployed for purchase of bagasse. Therefore, there is tremendous saving of valuable foreign exchange of

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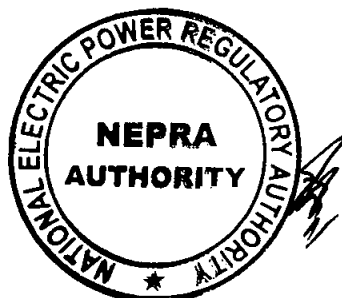


the country which is the primary benefit of an indigenous fuel. However, this does not necessarily mean that indigenous fuels will be cheaper than imported fuels or that they will not be indexed to foreign currencies.

- xi. Since the circumstances mentioned in para 8.1 of the 2013 Upfront Tariff still exist (i.e. non-availability of published price of bagasse), it is our Clients' proposal that linkage of bagasse price with price of imported fuel, i.e. imported coal should continue. However, rather than retaining the reference CIF coal price of US \$ 100.67 per ton as a floor, the FCC may hereafter be calculated at a fixed rate of CIF coal price of US \$ 100.67 per ton. Consequently, the only variation/indexation in future would be on account of Pak Rupee and US Dollar exchange rate variation, which is clearly envisaged in both the original 2013 Upfront Tariff as also the Review Decision. This would also be consistent with the intent and purpose demonstrated from Paras 15 to 17 of the Review Decision.

9. CPPAGL also submitted following their written comments vide letter dated September 08, 2023:

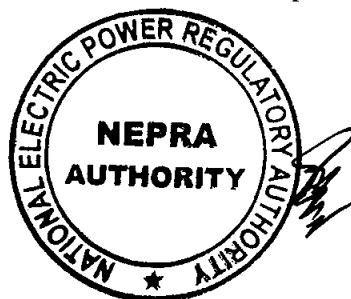
- i. Bagasse is an indigenous renewable resource for which payment is made in local currency. As such, USD-based price indexation (directly or indirectly) is not relevant for these projects. Therefore, the Authority may opt for any price mechanism which is transparent using local indexation parameters (like Bagasse price, sugarcane price, Local CPI or alternate fuel like Thar coal, etc., or any combination thereof). Further, the pricing of bagasse should remain independent of imported fuel costs since the associated risks related to imported fuel price fluctuations do not apply equally to indigenous resources.
- ii. Dollar-based indexation for indigenous resources would unjustifiably increase profits for Independent Power Producers (IPPs) whereas the Authority has already ensured lucrative returns for bagasse-based projects.
- iii. There is a need to develop a system for monitoring the bagasse energy market and adjusting bagasse prices based on supply and demand dynamics to keep the pricing mechanism responsive to market conditions. It's crucial to closely monitor and understand the relationship between the price of sugarcane per ton and the price of bagasse per ton. It seems counterintuitive that sugarcane is priced at approximately PKR 10,000 per ton, while bagasse, a byproduct, priced at approximately PKR 6,000-8,000 per ton. This becomes even more striking when considering that



sugarcane also produces sugar as its main product, which is a very lucrative business, along with other byproducts. Nevertheless, considering the above, the price of bagasse appears disproportionately high.

- iv. Bagasse-based projects fall under the "Must-Run" category, and it is proposed that the FCC indexation should be capped to ensure that the net electrical output from these projects remains economically competitive with dispatchable power projects like Imported Coal and RLNG plants. However, setting a price ceiling for FCC should be balanced to avoid depriving consumers of cheaper electricity.
 - v. Any changes in FCC should be prospective to protect consumers from adverse tariff increases.
10. The above stated comments were forwarded to Bagasse IPPs for their response on September 25, 2023. Accordingly, Cornelius, Lane & Mufti Advocates and Solicitors vide letter dated October 12, 2023 on behalf of JDW, HSML, AIL, CEL, CPL, RYKML and TICL submitted following response with the disclaimer that the same shall be read in conjunction with the earlier written submissions in the matter:
- i. NEPRA cannot review the fuel price mechanism for any reason (including on account of any increase in FCC due to depreciation of PKR since this right was not retained by NEPRA) other than exorbitant increase in international coal price. Furthermore, in terms of Review Decision any such review cannot relegate the Bagasse IPPs to a position that would be less advantageous than their entitlement of FCC calculated at floor minimum price of USD 100.67/ton. Furthermore, as an indigenous fuel no foreign exchange is deployed for purchase of Bagasse therefore there is a tremendous saving of valuable foreign exchange of the country. However, this does not necessarily mean that indigenous fuel will be cheaper than imported fuel or it will not be indexed to foreign currency. In view of the foregoing there is no substance in CPPAGL's comment that USD based indexation is not relevant and the same is liable to be rejected.
 - ii. The objections raised by CPPAGL lack both legal and factual foundation and should be dismissed. A thorough examination of the proposed options for the year 2022-23, including indexing the bagasse price to the minimum international coal price, CPI, and the percentage increase in sugarcane support price, indicates that the bagasse price would range from Rs. 6,317/ton to Rs. 6,713/ton. For the year 2023-24, indexing the bagasse price based on the percentage increase in sugarcane support price would result in a price of Rs. 8,931/ton, compared to Rs. 8,829/ton if

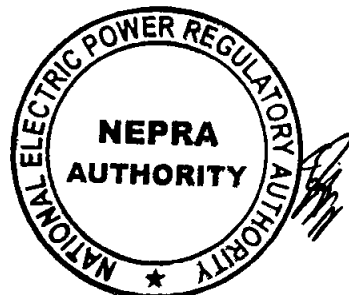
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linked to the minimum international coal price at USD 100.67/ton. Consequently, there is no merit in CPPAGL's claim that implementing dollar-based indexation for bagasse would lead to unjustified profit increases or undue enrichment for Bagasse IPPs.

- iii. The above comments of CPPAGL are devoid of any legal or factual basis in terms of which some incorrect and bold assertion regarding sugarcane and bagasse price have been made without any supporting evidence. It is important to highlight here that Bagasse IPPs have made significant investments for the purpose of generation of electricity from indigenous fuel which is saving valuable foreign exchange for the country. However, it appears that CPPAGL wants to discourage investors from investing in indigenous fuels. It is further highlighted here due to illegal action of the CPPAGL for making payments of the FCC of the upfront tariff on the basis of indexation of bagasse price Rs. 2,966/ton which was for the year 2014-15, the Bagasse IPPs have suffered huge losses. Therefore, the discriminatory and biased attitude of CPPAGL needs to be repelled, which has resulted in discouragement of local investment in power production from indigenous fuels.
 - iv. Bagasse IPPs reiterated that any review of the fuel price mechanism can only be done in terms of 2013 Upfront Tariff determination read with the Review Decision not on the whim and wishes of CPPAGL.
 - v. Bagasse IPPs agreed that any change in the FCC can only be prospective with effect from 2022-23 when there was exorbitant increase in the landed cost of South African Coal. Bagasse IPPs reiterated that NEPRA may only lawfully review the fuel pricing formula and mechanism as stipulated in sub clause (xvii) for the Review Decision with effect from 2022-23 prospectively and not for the earlier period.
11. The Authority considered the submissions made by the Bagasse IPPs and CPPAGL and decided to conduct a **“Consultative Session”** of relevant parties i.e. Bagasse IPPs (who filed appeals in AT), CPPAGL and Ministry of Energy on December 13, 2023 (Wednesday) at 2:00 pm since consultation with the affected/interested parties is one of the conditions to review the bagasse price under Upfront Tariff 2013. Accordingly, the notices of the consultative session to the relevant parties were issued on December 08, 2023, wherein the following options as per the submissions made by Bagasse IPPs (except to allow coal linked indexation mechanism based on earlier approved mechanism under Upfront Tariff 2013) and other options explored by the Authority were communicated for discussion during the session:

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- i. Whether to maintain the mechanism provided in the upfront bagasse tariff for adjustment of bagasse price and FCC for the year 2018-19 to 2021-22 or otherwise?
- ii. Whether to approve bagasse price for the year 2022-23 based on:
 - i. Indexation to be linked with CPI?
 - ii. Indexation to be linked with the Sugarcane prices?
 - iii. Actual PKR/USD indexation on floor price of coal i.e. USD 100.67/ton?
 - iv. Data of sales tax as available with FBR?
 - v. 5% indexation as allowed in comparable regional Regulator?
- iii. Whether re-determination of CV adjustment is required or otherwise?

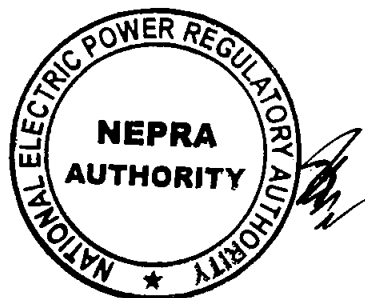
Bagasse price and FCC for the year 2018-19 to 2021-22:

12. The Authority has noted that the impugned decision was issued subsequent to the proceedings initiated in view of the following provisions of the Upfront Tariff 2013:

IV (xi) To safeguard interest of consumers, the Authority may review the fuel pricing mechanism stipulated above in accordance with NEPRA applicable law, after due consultation with the affected/interested parties, if it is deemed that there is exorbitant/unreasonable increase in international coal prices. Similarly, to mitigate risk to the power producer and to encourage the investors to put up bagasse based (indigenous fuel) cogeneration projects, the reference CIF coal price of US\$ 100.67/ton used at the time of this determination shall be considered the floor/minimum price for the purpose of the Fuel Cost Component.

13. The subject matter has been remanded back to NEPRA for a fresh determination. The pertinent clause of the upfront tariff of 2013 prescribes two prerequisites for the reconsideration of the fuel price mechanism, namely: i) consultation with affected parties and ii) an exorbitant increase in international coal prices.
14. The first condition has been met through hearings held on March 15, 2023, and September 06, 2023. Furthermore, a consultative session involving interested and affected parties to explore various options took place on December 13, 2023. Addressing the second condition, the Authority has meticulously considered the submissions presented by the bagasse IPPs and the legal position and has concluded that the exorbitant / unreasonable increase prices occurred in 2023 as notably, the 2013 Upfront tariff

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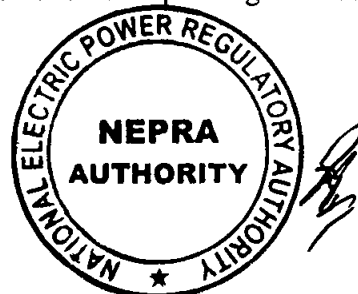
allows review of bagasse prices in case of exorbitant/unreasonable increases in international coal prices. Accordingly, the Authority has decided to maintain the existing mechanism in accordance with the upfront tariff of 2013 until the year 2021-22 and decided to review the bagasse prices from 2023 onwards in the most suitable way on the basis of available information.

15. Additionally, the Authority has decided that for the adjustment of the FCC for the period spanning from 2018 to 2022, bagasse IPPs are required to submit their requests, accompanied by relevant indices, including international coal prices and bunker index data for the respective years from October to September, in adherence to the upfront tariff of 2013. Since the exorbitant increase in the international coal price has occurred in year 2022-23 for which the second issues was framed and therefore the matter has been discussed under relevant issue.

Bagasse price for the year 2022-23 and beyond:

- i. Indexation to be linked with CPI?**
 - ii. Indexation to be linked with the Sugarcane prices?**
 - iii. Actual PKR/USD indexation on floor price of coal i.e. USD 100.67/ton?**
 - iv. Data of sales tax as available with FBR?**
 - v. 5% indexation as allowed in comparable regional Regulator?**
- i. **Indexation with CPI:** The Bagasse IPPs in this proposal stated that one of the option could be to link the Bagasse price with the Consumer Purchase Index (CPI) taking base price for the year 2021-22. The FCC based on this mechanism as per the Bagasse IPPs turn out to be Rs 6,317/ton and corresponding FCC as Rs 12.74/kWh for year 2023.
- ii. **Adoption of %age increase in Sugarcane price:** As per Bagasse based IPPs, the bagasse price can also be determined by linking it with % increase in Sugarcane Support Price. With this assumption, the price of Bagasse for year 2023 would be Rs 6,325/ton and corresponding FCC as Rs 12.76/kWh.
- iii. **Indexation on the Basis of Minimum International Coal Price (CIF Basis):** Under this proposal the bagasse based IPPs have stated that the price of USD 100.67/ton approved as a floor in the Upfront Tariff 2013 can be assumed as a ceiling and based on which only exchange rate variations can be allowed. Under this proposal the bagasse price for the year 2023 would works out as Rs 6,713/ton and corresponding FCC as Rs 13.54/kWh. It is

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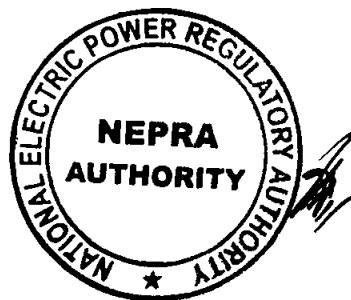


important to state here that among all the options shared with the bagasse based IPPs, they have agreed to determine the bagasse price using this option. Chanar Energy Limited however stated to align bagasse prices with sugarcane support prices to safeguard sponsors' interests, preserve the indigenous energy resource, and acknowledges significant investments in energy efficiency by the parent sugar mill.

iv. **Data of sales tax as available with FBR:** This proposal was communicated by the Authority for discussion during the consultative session which involves determining the bagasse price using the value declared by all sugar mills for sales tax purposes. As per the data shared under the title “residues of starch manufacture, similar residues beet-pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste” the average price was Rs 2,768/ton. The Bagasse-based IPPs have raised objections to this methodology, emphasizing the need for a review of the methodology relying on the Federal Board of Revenue ("FBR"). In support they have presented various legal and technical arguments which includes the following:

1. In terms of, Section 56B of the Sales Tax Act 1990 read with Section 216 of the Income Tax Ordinance, 2001, tax authorities are not permitted to share the data in the tax returns filed by registered persons with any person. It follows from that NEPRA is not permitted to request for or rely on such data which is confidential;
2. Even otherwise, there is no separate reporting category for only bagasse in the sales tax returns. Hence, in the absence of specific data for bagasse only, reliance on mixed data including many other items/residues seems misconceived;
3. Veracity of data reported in the sales tax returns remains subject to audit and adjudication by FBR. How would NEPRA take this into account, if for example any data set relied upon is subsequently modified in audit/adjudication proceedings by FBR?
4. The above FBR data was also likely to have been available at time of the original and review tariff decisions of 2013 yet was obviously not considered relevant/appropriate by NEPRA for fixing price of bagasse for the purpose of the

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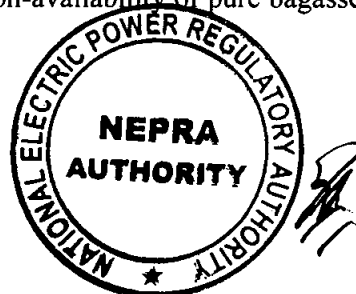
FCC of the 2013 Upfront Tariff. Hence, there does not seem to be any logic or rationale to now consider it;

5. Without prejudice to the preceding submission, if such data from FBR is in fact to be used, since monthly sales tax returns are filed by registered persons, there is no rationale to just fix the price on basis of one (or a set of) return(s) and then apply indexation at some agreed annual percentage, in such a scenario then the price of bagasse could be adjusted monthly based on the preceding months sales tax returns;

v. **5% indexation as allowed in comparable regional Regulator:** The Authority has noted that regional regulator has allowed 5% annual indexation. If the same indexation is considered on the base price of 2022, the bagasse price would works out to be approximately Rs 5,200/ton and FCC as Rs 10.6/kWh.

16. The Authority carefully considered the submissions presented by Bagasse IPPs, the comments from CPPAGL, and the responses from Bagasse IPPs. Regarding the 1st option (linking bagasse price with CPI), the Authority noted that CPI values are derived from a basket of different commodities, and may not accurately reflect the determinants of the bagasse price. Concerning the 2nd option (linked with a percentage increase in Sugarcane price), the Authority holds the view that since bagasse is a by-product of sugarcane, the sugarcane price may not genuinely represent the true market price of bagasse.
17. In reference to the 3rd option (minimum coal price of USD 100.67/ton with only PKR/USD exchange rate variations), the Authority deems it unjustified to persist in allowing the pricing of local indigenous fuel in dollar terms, a concern also raised by CPPAGL. Notably, in a single year, from 2022 to 2023, the PKR depreciated against USD by around 35%. Accordingly, the Authority considers this proposal imprudent.
18. With regard to the 4th option, i.e., the use of sales tax data from FBR, the Bagasse IPPs argued that FBR under Sales Tax Act 1990 read with Section 216 of the Income Tax Ordinance, 2001, is not permitted to disclose the data with any person. The other argument set forth by Bagasse IPPs is the non-availability of pure bagasse data. The Authority observed that the FBR bagasse data relates to "residues of starch manufacture, similar residues beet-pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste." The Authority considers that the apprehension in using FBR information at this point of time is the non-availability of pure bagasse data as the shared

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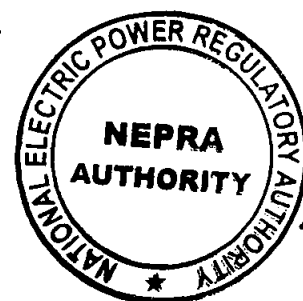
information also include other residuals of sugar processing with this information. Another limitation is the continued and assured availability of Bagasse specific price data each year for assessing the annual adjustment. Consequently, determining the bagasse price based on FBR data may introduce an element of perpetual uncertainty.

19. In addition to the limitations of the FBR data discussed above, it was also considered that reliance on data of any sugar mill might lead to a probability that certain sugar mills, engaged in selling power to the grid, could artificially inflate the bagasse value, resulting in an abnormal increase in the overall average bagasse price and aim at gains from sale of electricity at higher prices. Therefore, the Authority opines that utilizing FBR data or data from any sugar mill for the adjustment of FCC may not be a prudent approach.
20. The Authority also examined the bagasse pricing and adjustment mechanism allowed in comparable regional Regulator. Out of all the other options discussed above, indexation following regional Regulator is considered the most cost-effective and consumer-friendly option. It is also a straightforward and predictable mechanism, aligning with section 31(3)(i) of the NEPRA Act, which emphasizes providing stability and predictability of tariffs for customers.
21. In view of the above considerations and the fact that at the moment no regulated price is available, the Authority has decided to approve a 5% annual indexation from 2022-23 and onward, on the basis of bagasse price of 2021-22 obtained from the coal-linked mechanism under the Upfront Tariff 2013, as from amongst all the options for further indexations of bagasse price from year 2022-23 onwards this indexation leads to minimum increase and will provide predictability and certainty in bagasse prices to attract future investment in bagasse based power generation which is stalled at the moment. Without prejudice to the foregoing the Bagasse IPPs during the consultative session as required under xvi of the modified order of the Authority dated August 28, 2013 also tendered their consent to the annual indexation of 5% w.e.f. 1st October 2022.

Whether re-determination of CV adjustment is required or otherwise?

22. On this issue, the representatives of bagasse IPPs cited Para 19III(a) of the decision of the Authority dated May 29, 2013 in the matter of bagasse Upfront Tariff which states that the constant such as 6,905 representing LHV value of bagasse in btu/kg is a fixed value. The representatives of bagasse IPPs submitted that in the light of decision of the Authority, the CV cannot be re-determined. The Authority considered submissions made by Bagasse IPPs and noted that in the instant matter, 2013 upfront tariff does not provide for any legal opener regarding redetermination of CV.

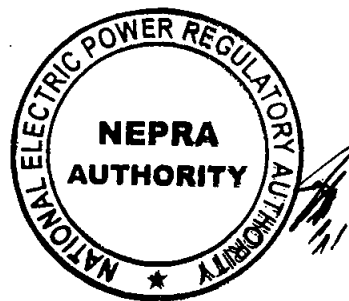
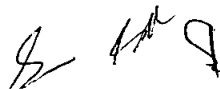
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23. The potential of Bagasse as indigenous fuel for power generation is indeed significant, estimated at 2,000MW. The Authority noted with concern that due to long uncertainty and failure to timely announce suitable price of this indigenous fuel has discouraged investment in bagasse based power plants. This has added to burden of imported fuel in the power generation and expenditure in foreign exchange. In this background it is concerning that only 900MW LOI holders had opted for upfront Tariff 2013, and the current installed capacity of bagasse is only 253MW indicating substantial untapped potential in utilizing this indigenous energy source. Harnessing indigenous fuels like Bagasse not only promotes energy independence and sustainability but also reduces reliance on imported fuels, thereby supporting energy security and reducing external economic dependencies.
24. Furthermore, ensuring investor confidence in the renewable energy sector is paramount, particularly regarding the predictability of tariff structures. Stability in tariffs facilitates informed decision-making and long-term investment planning. Conversely, any alterations in tariff mechanisms can discourage investment and hamper sector growth. Therefore, maintaining a consistent and transparent tariff, along with a stable Bagasse price mechanism, is imperative for attracting and retaining investors in renewable energy ventures.

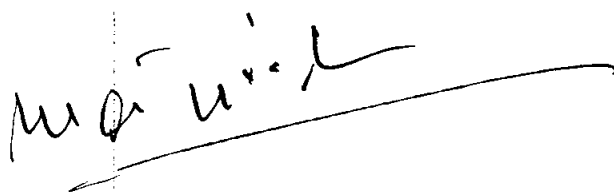
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25. The Authority in pursuance of Section 7 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 read with Regulation 3(1) of the NEPRA (Review Procedure) Regulations, 2009 hereby reviews the bagasse pricing and adjustment mechanism of bagasse IPPs under Upfront Tariff, 2013. The Authority in its collective and joint wisdom considering from all aspects and discussion in the matter decided with consensus as under which will be hereafter called the decision of the Authority in the case and modifies Authority's decision dated July 16, 2019 as under:
- i. The Authority has decided to allow fuel cost component ("FCC") from October 2018 till September 2022 pursuant to the FCC adjustment mechanism as provided in section 19 (III) (a) of the determination of the Authority dated May 29, 2013 in the matter of Suo-Moto Proceedings for Development of Upfront Tariff for New Bagasse Based Co-Generation Power Projects ("Upfront Tariff 2013"). For the said adjustment in FCC for the applicable year, the Bagasse IPPs shall be required to submit their requests in line with the said mechanism under Upfront Tariff 2013 along with the relevant indices including International Coal Price and Bunker Index for the relevant year from September till October.



- ii. With effect from October 2022 onward, the Authority has decided to allow 5% annual indexation on the applicable bagasse price for the previous year. The reference price for the year 2022-23 indexation shall be the base bagasse price of 2021-22 as obtained from coal linked mechanism under Upfront Tariff 2013.
26. The decision is to be notified in the official Gazette in accordance with the provision of Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

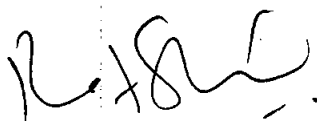
AUTHORITY



(Mathar Niaz Rana (nsc))
Member



(Engr. Maqsood Anwar Khan)
Member



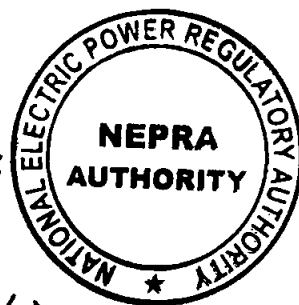
(Rafique Ahmed Shaikh)
Member



(Amina Ahmed)
Member



(Waseem Mukhtar)
Chairman



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