

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

**Coram:
Shri P.K. Pujari, Chairperson
Dr. M.K. Iyer, Member
Shri I.S. Jha, Member**

Suo Motu Petition No. 11/SM/2019

Date of Order: 15th January, 2020

In the matter of

Methodology for Computing the Escalation Rate for Transportation of Imported Coal/Gas on account of Implementation of MARPOL Regulation with effect from 1.1.2020

ORDER

In accordance with the “Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees”, dated 19.01.2005 issued by Ministry of Power under Section 63 of the Electricity Act, 2003, the Commission has been notifying various escalation rates including the escalation rate for transportation of imported coal/gas every six months, for the purpose of payment. The price used for computing the escalation rate for transportation of imported coal/gas for payment has been specified in the methodology/explanation published alongwith the notification dated 22.11.2006. As per the methodology, Singapore 380cst Bunker Price is being used for computing the escalation rate for transportation of imported coal/gas for payment. The latest twelve months data for the period from March to February is being used for computing the escalation rate applicable for the period from April to September. The latest twelve months data

for the period from September to August is being used for computing the escalation rate applicable for the period from October to March.

2. International Maritime Organization (IMO) is the United Nations specialized agency responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Convention) of IMO was first entered into force on 19th May 2005. Further, it was revised and adopted in October, 2008. Regulation 14 of MARPOL Annex VI (MARPOL Regulation) states that “the sulphur content of any fuel oil used on board ships shall not exceed 0.5% m/m on and after 1st January, 2020”. After assessment of 0.5% Sulphur fuel oil availability, in 2016, IMO decided to go ahead with the 2020 deadline for enforcement of revised sulphur norms. India, as a member of IMO council, ratified the MARPOL Regulation. In this regard, Directorate General of Shipping, Ministry of Shipping, Government of India issued a Circular, dated 14th December, 2018, on “0.5% max limit of the sulphur content in fuel oil-Compliance with the provisions of MARPOL Annex VI Regulation 14”. The circular is applicable to: (a) All seagoing Indian ships registered under Merchant Shipping Act, 1958 and (b) All bunker suppliers registered with GOI in accordance with Regulation 18 MARPOL Annex VI. Para 4 of the Circular provides as under:-

“4. Requirement:

Regulation 14 states that “The sulphur content of any fuel oil used on board ships shall not exceed 0.50% m/m on and after 1 January, 2020”. The interpretation of “fuel oil used on board” includes use in main and auxiliary engines and boilers. This Regulation prohibits carriage of fuel with sulphur content more than 0.5% on board ships on/after 1st March, 2020 and it applies to all ships.

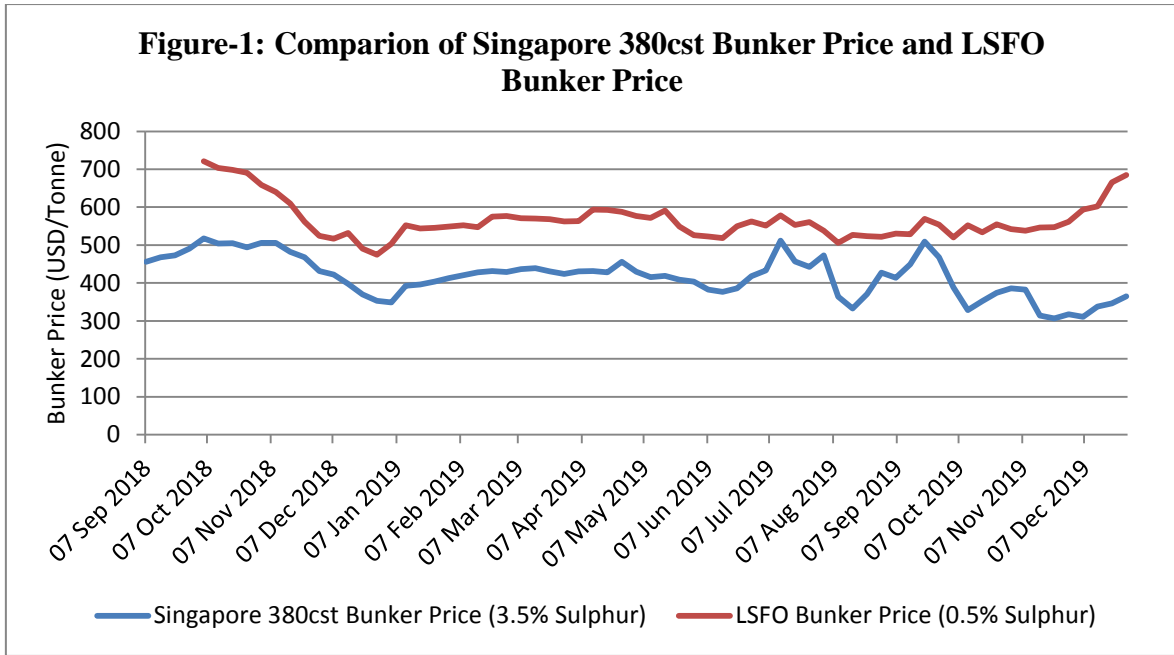
Further as on date, it should be noted that though carriage of more than 0.5% Sulphur Fuel oil is allowed till 1st March, 2020, same cannot be used on ships on/after 1st January, 2020.

The 'equivalent' compliance mechanism is permitted by MARPOL Annex VI, Regulation 4 and includes exhaust gas cleaning systems. EGCS will allow higher sulphur fuels (>0.50% m/m) to be burnt, with the excess sulphur 'scrubbed' out of the uptake exhaust gas. The prohibition on the carriage of non-compliant fuel oil is not applicable to ships fitted with such 'equivalent' means of compliance.

In the event a compliant fuel oil cannot be obtained, Regulation 18 of MARPOL Annex VI currently provides that a Party to MARPOL Annex VI can request evidence outlining the attempts made to obtain the compliant fuel, including attempts made to locate alternative sources. When a ship is visiting a port where the operator cannot purchase compliant fuel oil due to non-availability, the operator is to notify the ship's Administration and the next destination port authority."

3. The Directorate General of Shipping, Ministry of Shipping, Government of India also issued a Circular, dated 28th August, 2019 which supersedes the earlier Circular dated 14, December 2018. The aim of this circular is to provide guidance to stakeholders for a consistent and smooth implementation towards compliance with the Global sulphur Cap effective from 1st January, 2020. This circular confirms the mandate of MARPOL Regulation.

4. The MARPOL Regulation is applicable to all ships transporting imported fuel (coal/gas) from all international ports for use in India. This Regulation mandates the ships to use 0.5% sulphur fuel oil i.e. Low Sulphur Fuel Oil (LSFO), in place of 3.5% sulphur fuel oil which is currently used like Singapore 380cst Bunker Fuel. The LSFO is more expensive than the currently used Singapore 380cst Bunker Fuel. A comparison of prices of these two fuels for the period from September 2018 to December 2019 is given below in Figure-1.



5. As the MARPOL Regulation is mandatory from the date of its implementation of 1.1.2020, all the ships are required to use LSFO for the purpose of transportation. Change in the fuel used by ships for transportation would impact transportation charges of imported coal/gas. Therefore, there is a need to incorporate the changed fuel prices in the methodology for computing the escalation rate for transportation of imported coal/gas. Accordingly, the Commission, in its order on Suo Motu Petition No. 11/SM/2019, dated 8.11.2019, had proposed a new methodology for computing the escalation rate for transportation of imported coal/gas as under:-

“

(i) *The price of fuel used for computing the escalation rate for transportation shall be changed from Singapore 380cst Bunker Price to LSFO Price. The LSFO prices are published by many index developers. Currently, the available sources of LSFO prices are as follows:*

(a) *Low Sulphur Fuel Oil (LSFO) (0.5% Sulphur) Singapore, USD/t: Argus Media Ltd has started publishing the LSFO price since May 2018.*

(b) *Low Sulphur Fuel Oil (LSFO) (0.5% Sulphur) Singapore, USD/t: Platts has started publishing the LSFO price since July 2019.*

Based on the availability of historical data on the price of fuel used in shipping, it is proposed to use LSFO price published by Argus Media Ltd for computing the escalation rate for transportation of imported coal/gas.

(ii) The Commission has already notified the escalation rate for transportation of imported coal for payment applicable for the period from October to December 2019 through its notification dated 30.10.2019. The Commission is required to notify the escalation rate for the period from January to March 2020. It is proposed to compute the escalation rate as under:

(a) Escalation rate applicable for the period from January to March 2020 shall be computed based on the LSFO price for the period from September 2018 to August 2019.

(b) The percentage variation of LSFO price over Singapore 380cst Bunker Price for December 2019 (average of daily prices) shall be the escalation rate applicable for the switchover to LSFO as on 1.1.2020.

(iii) Payment shall be made as per the sample calculation provided in Annexure-I to the order."

6. The Commission, through its Order in Suo Motu Petition No. 11/SM/2019 dated 8.11.2019, invited Comments and suggestions of the stakeholders and other interested persons on the proposed methodology. In response to the order, comments and suggestions on the proposed methodology have been received from the following stakeholders:

(i) The Tata Power Company Ltd (TPCL)

(ii) Adani Power Ltd (APL)

(iii) Association of Power Producers (APP)

7. The Commission conducted a public hearing on 10.12.2019 on the proposed methodology for wider public consultation. The representatives from

TPCL and APL attended the public hearing. The representative of TPCL made oral submissions before the Commission.

8. The comments and suggestions of the above stakeholders have been discussed in brief in the succeeding paragraphs.

9. On the data to be used for computing the escalation rate for transportation of imported coal/gas, TPCL has submitted that the Platts index is a mature index compared to the Argus index. Shipping Industry and charter agreements always follow Platts index for bunker adjustment. Hence, it is appropriate to use Platts marine fuel oil (0.5% S) index available from 1st July, 2019. APL has proposed to continue using LSFO price published by Clarksons or Platts Bunkerwire for three reasons: (i) In the absence of actual trade, Argus index is based on assumptions and not based on actual assessment of delivered prices; (ii) Clarksons index should be used since it is being used by CERC and it is a commonly accepted publication; (iii) Platts Bunkerwire is also used globally as reference for bunker adjustment calculations. APP has submitted that: (i) LSFO price as early as September, 2018 may not be representative as shipping industry is required to use LSFO w.e.f.1.1.2020; (ii) It may be more appropriate to use Platts marine fuel oil (0.5% S) index available from 1st July, 2019 or Clarksons VLSFO index available from September, 2019 onwards.

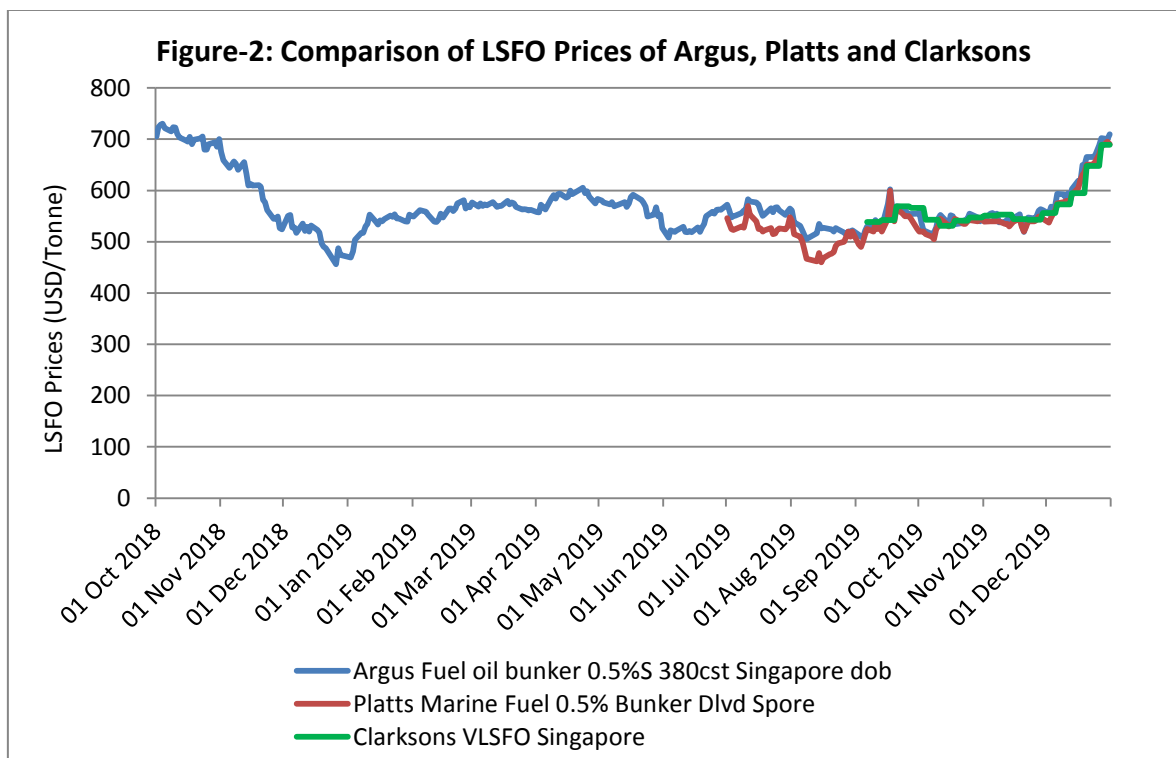
10. Keeping in view the availability of Platts index, TPCL has suggested for change of methodology for computing the escalation rate from six monthly basis to quarterly basis for the transition period till September, 2020. TPCL has further

suggested that for October, 2020 Notification and onwards, the Hon'ble Commission may adopt their usual methodology, based on Platts or Clarkson index using the data from September, 2019 to August 2020. If Argus index and the existing methodology are considered by the Commission, TPCL has proposed that the data from December, 2018 to November, 2019 may be considered for arriving at the escalation rate applicable for the period from January to March 2020 for the reason that it would capture the data closer to the date of implementation. APL has suggested that the escalation rates applicable for the period from January to March, 2020 should be same as used for October to December 2019. As the demand for LSFO during September, 2018 to August, 2019 was very less, considering LSFO price for this period would not give a correct escalation. APP has suggested to compute the escalation rate applicable for the period from January to March, 2020 based on one of the two alternatives (i) Existing IFO 380cst Singapore Bunker Price can be used for computing the escalation rate applicable for the period till December, 2019 an interim measure; (ii) Platts index can be used with quarterly escalation instead of six monthly for transition period. If the Argus index is considered, the data for the period from December, 2018 to November, 2019 may be considered for computing the escalation rate applicable for the period from January to March, 2020 i.e. to capture the data closer to date of implementation. For October, 2020 Notification and onwards, usual methodology may be adopted based on Platts or Clarksons index using the data for the period from September 2019 to August 2020.

11. All the stakeholders have appreciated the proposed methodology on the escalation rate applicable for the switchover to LSFO as on 1.1.2020.

12. We have considered the submissions made and views expressed during the public hearing by the stakeholders and decided that the methodology for computing the escalation rate for transportation of imported coal/gas shall be as under:

- (a) As per the existing methodology, latest one year data (September, 2018 to August, 2019) is required to be used for computing the escalation rate for transportation of imported coal/gas applicable for the period from January to March 2020. Platts data is available from July to December 2019, Clarksons data is available from September to December, 2019 and Argus data is available from October 2018 to December, 2019. We have made a comparative analysis on the LSFO prices published by Argus Media Ltd (Daily), Platts (Daily) and Clarksons (weekly) for the period from October 2018 to December 2019 in the Figure-2.



It can be inferred from the above analysis that the movements in LSFO price published by Argus Media Ltd, Platts and Clarksons are more or less similar.

- (b) Given the availability of data and the movements in LSFO prices published by various index developers, we have considered the LSFO price published by Argus Media Ltd for the latest one year from September 2018 to August 2019 (after extrapolating the price on 1st October 2018 to the month of September 2018) for computing the escalation rate for transportation of imported coal/gas applicable for the period from January to March 2020. Further, the Argus data for the period from March 2019 to February 2020 shall be used for computing the escalation rate applicable for the period from April to September 2020.
- (c) As far as shipping transportation is concerned, it is considered appropriate to use the data published by Clarksons based on its wider acceptability compared to the data published by other index developers. The data on price of LSFO published by Clarksons is available since September, 2019, therefore, the data can be used for computing the escalation rate applicable for October 2020 and onwards. Clarksons data for the period from September 2019 to August 2020 shall be used for computing the escalation rate applicable for the period from October 2020 to March 2021.
- (d) The percentage variation of LSFO price published by Argus Media Ltd. (average of daily prices) over Singapore 380cst Bunker Price published

by Clarksons (average of weekly prices) for December 2019 shall be the escalation rate applicable for the switchover to LSFO as on 1.1.2020.

(e) Payment shall be made as per the sample calculation provided in Annexure-I to the order.

13. We direct that the escalation rate for transportation of imported coal/gas applicable for the period commencing 1.1.2020 be notified in accordance with the methodology discussed in Para 12 of this order.

**Sd/-
(I. S. Jha)
Member**

**Sd/-
(Dr. M. K. Iyer)
Member**

**Sd/-
(P. K. Pujari)
Chairperson**

Annexure-I

| Sample Calculation on Payment Index* | | | | | | |
|---|--------------------|----------------------------|-----------------------------|--------------------------------------|---|------------------------------|
| Month | Month (in numbers) | Annual Escalation Rate (%) | Monthly Escalation Rate (%) | Escalation Applied respective months | Index Value for Payment (Assumed Starting at 100) | Remarks |
| A | B | C | D (C/12) | E (B*D) | F | G |
| Sep-19 | | | | | 100.00 | Starting Index Value |
| | | 6.00% | 0.50% | | | |
| Oct-19 | 1 | | | 0.50% | 100.50 | |
| Nov-19 | 2 | | | 1.00% | 101.00 | |
| Dec-19 | 3 | | | 1.50% | 101.50 | |
| | | | | | | |
| Escalation Rate for switchover | | | | 25.00% | 126.88 | Base for next quarter |
| | | 12.00% | 1.00% | | | |
| Jan-20 | 1 | | | 1.00% | 128.14 | |
| Feb-20 | 2 | | | 2.00% | 129.41 | |
| Mar-20 | 3 | | | 3.00% | 130.68 | Base for next semester |
| | | 10.00% | 0.83% | | | |
| Apr-20 | 1 | | | 0.83% | 131.77 | |
| May-20 | 2 | | | 1.67% | 132.86 | |
| Jun-20 | 3 | | | 2.50% | 133.95 | |
| Jul-20 | 4 | | | 3.33% | 135.04 | |
| Aug-20 | 5 | | | 4.17% | 136.13 | |
| Sep-20 | 6 | | | 5.00% | 137.22 | Base for next semester |

* The payment index is calculated using assumed escalation rates, index value, etc.