

Executive Summary

Case No 5 of 2017

**Petition filed by RInfra-D and RInfra-G for
approval of Power Procurement Plan and
Power Purchase Arrangement**

Executive Summary – Case No 5 of 2017

1. Reliance Infrastructure Ltd – Distribution (RInfra-D) and Reliance Infrastructure Ltd – Generation (RInfra-G) have filed Case No 5 of 2017 for approval of RInfra-D's Power Procurement Plan and Power Purchase Arrangement between RInfra-D and RInfra-G before the Maharashtra Electricity Regulatory Commission (MERC) under Sections 86(1)(a), 86(1)(b) of the Electricity Act, 2003 (Act) and Regulation 20.1 of the MERC (Multi Year Tariff) Regulations, 2015
2. RInfra-G entered into a Power Purchase Arrangement (PPA) for sale of 500 MW from Dahanu Thermal Power Station (DTPS) at the tariff to be approved by MERC with RInfra-D for a period of 10 years from 23-02-2008 to 22-02-2018. The said arrangement was approved by MERC in its Order dated 12-02-2009 in Case No 8 of 2008.
3. RInfra-D's Base Load is above 1000 MW, which is being served by its existing arrangement with RInfra-G and its approved PPA with VIPL. Power procurement plan submitted by RInfra-D along with the present Petition justifies the said Base Load requirement and consequently, the Power Procurement Arrangement (PPA) proposed with RInfra-G for a further period of 18 years from February 2018 is justified to meet the said base load requirement. This clearly shows that there is a requirement of power procurement to the extent of 500MW as per the power procurement plan submitted by RInfra-D.
4. RInfra-D and RInfra-G have made following submissions in the present Petition:
 - DTPS tariff (net of efficiency gains) for FY2017-18 approved by MERC in the MYT Order dated 18-08-2016 in Case No 14 of 2016

is competitive as compared to prices discovered in Competitive Bidding.

- Rlnfra-D had highlighted the benefits of PPA with DTPS in view of its low fixed cost as the plant is in operation for the last 22 years and most of its assets are depreciated.
- Rlnfra-D consumers have paid for the fixed cost of the plant over the last 22 years and such consumers should not be deprived of such benefits of depreciated assets. The Tariff Policy also states that the benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers.
- DTPS was set up pursuant to condition imposed in the erstwhile license of Rlnfra-D to set up its own generation capacity to be brought to its licensed area of supply.
- Capital invested in DTPS is liable to be recovered from the beneficiaries over the course of the Useful Life of the plant. The accumulated depreciation at present is about 70% of GFA. Rlnfra-D has accordingly chosen to utilize DTPS power for its Mumbai Licensed area till the terminal date of its own Distribution License, as otherwise the alternative would be to recover the balance invested capital of DTPS from its beneficiaries.
- Other benefits of DTPS (embedded generation) are as follows:
 - DTPS, being located near load centre, helps in reducing the Intra-State Transmission System loss. Actual transmission loss in bringing power from DTPS to Mumbai system is less than 2% as against State Transmission loss of 3.92% thereby resulting in reduction of loss at State level.
 - DTPS also provides reactive power compensation to the extent of 140 MVAR to maintain voltage stability in the grid. In absence of the same, additional investment of would be

required which would additionally burden the consumers of Maharashtra.

- DTPS plays a crucial role in islanding of Mumbai system. DTPS is connected to the transmission substations supplying to Mumbai through dedicated transmission lines and there are no constraints in bringing power from DTPS to Mumbai. Therefore, to maintain reliable Mumbai Power System and non-vulnerable to external factors, adequate load center generation is required.
- Embedded Generator close to load center has inherent ability to absorb and damp oscillation during disturbances, hence removal of the embedded generation may result in to grid instability.
- Additional cost of construction new transmission lines, cost of providing additional MVAR support and cost due to increase in transmission losses, and recovery of the invested capital (net of depreciation) of DTPS from its beneficiaries as a result of withdrawal of embedded generation needs to be factored in while comparing the competitiveness of DTPS with alternate source.
- It has been the one of the most efficient plant in the country and has been continuously supplying power to RInfra-D resulting in its optimization of power purchase cost.
- DTPS has a long-term Fuel Supply Agreement (FSA) with South Eastern Coalfields Limited (SECL) valid till 2029 and benefit of such subsidized coal (linkage coal) shall be available to the consumers of RInfra-D.
- As per RLA study of Unit 1 conducted in January 2016, only 30% of the average useful life is consumed. RLA study of Unit 2 is planned in January 2018. Due to similar vintage and operation &

maintenance, results of Unit 2 RLA study are expected to be similar.

- In Maharashtra, major generation sources are located in the eastern part of Maharashtra, whereas the load centers are in western Maharashtra. Therefore the generation located in western part of Maharashtra plays a very important role in safety and security of the grid.
- There are transmission constraints to bring power within Mumbai and meet N-1-1 reliability criteria to provide uninterrupted power to Mumbai consumers. In absence of PPA with DTPS, Mumbai consumers are exposed to load shedding in case of grid related issues.

5. In the facts and circumstances mentioned above, it is respectfully prayed that MERC may be pleased to:

- a. Approve the Power Procurement Plan for the period FY2017-18 to FY2035-36.
- b. Approve the Power Purchase Arrangement relating to supply of 500 MW by RInfra-G to RInfra-D for the period 23-02-2018 to 15-08-2036.