

Executive Summary

1. The state of Maharashtra is lagging considerably in treating MSW as compared to other states. The quantity of waste treated in the state of Maharashtra is 28% as per report of Planning Commission's Task force. This percentage is very less when compared to states like Delhi, Goa, Andhra Pradesh etc. Considering the growing need for waste management, the Nagpur Municipal Corporation (NMC) at Nagpur decided to set up a processing plant for conversion of Municipal Solid Waste (MSW) into energy at Bhandewadi, Nagpur on Design, Build, Finance Operate and transfer (DBFOT) basis.
2. NMC had invited proposal for EoI (Expression of Interest) published dated 29.11.2014 and thereon RfP (Request for Proposal) dated 19.01.2015 for selection of bidders for construction, operation and maintenance of municipal solid waste management (MSWM) facility for treating the MSW on DBFOT basis. Consortium of M/s Essel Infraprojects Ltd. and M/s Hitachi Zosan India Pvt. Ltd. won the bid in competitive bidding process. Letter of award (LoA) for the project was issued to the consortium on 4th January 2017. Consortium had promoted and incorporated M/s Nagpur Solid Waste Processing & Management Pvt Ltd. (NSWPMPL) as special purpose vehicle for this project. Concessionaire had paid project development fees of Rs. 218.8 lacs and performance bank guarantee of Rs. 500 lacs to the NMC on 26th April 2017.
3. NSWPMPL has selected highly proven and dependable technology for processing the waste and creating sustainable green energy. Hitachi Zosen's incineration technology provides the cleanest and most efficient capability for managing waste processing and creating sustainable green energy.
4. The Petitioner, Nagpur Solid Waste Processing and Management Private Limited (NSWPMPL) is a company incorporated under the Companies Act, 2013 with its registered office at 513A, 5th Floor, Kohinoor City, Kiroh Road, Kurla (West), Mumbai - 400070. NSWPMPL is promoted by Essel Infraprojects Limited (EIL), having more than 10 years of existence in Infrastructure Industry.
5. As per the agreement, the MSW processing facility should be designed to have a minimum processing capacity of 800 (+/- 20%) tonnes of MSW per day. The Concessionaire has quoted the Tipping Fee per ton of MSW (also called the base Tipping Fee of Rs. 225 per ton with an annual rise of 4.5% on negotiation) received and weighed at the gate of the Processing plant. For the development of MSW processing plant and Scientific Land Fill (SLF) development, NMC has provided a land of 10 acres. As per the terms of the Concession Agreement, NSWPMPL has agreed to pay land lease rental @ Re 1 per sq. feet of land per year to NMC for enjoyment of the license to use site for the project.
6. The scope of work includes:-
 - a. *Design, construction and operation of 800 (+/- 20%) MT per day mixed MSW processing facility at Bhandewadi, Nagpur for the assured MSW quantity during the Concession Period.*
 - b. *Provision and operations of adequate number of suitable vehicles for transport of MSW within the Municipal Solid Waste Management Facility.*
 - c. *Closure and maintenance of existing scientific Landfill till 15th year of project life as per SWM rules 2016.*
 - d. *Design, construction and operation of new Scientific Landfill and disposal of process remnants and Residual Inert Matters. The new SLF will be comprising of 3 cells which shall be closed at the end of 4th, 9th and 13th year from COD. Closed SLF's would be maintained for 15 years from the date of their respective closures.*
 - e. *Performance and fulfilment of all other obligations of the Concessionaire in accordance with the provisions of this Agreement and matters incidental thereto (relocation of waste dumped etc.) or necessary for the performance of any or all of the obligations of the Concessionaire under this Agreement*

7. The scope of the work also includes closure and maintenance of existing SLF, construction and closure of new SLF and maintenance of new SLF. The Petitioner for the purpose of funding of post closure activities set aside a part of revenue from tipping fee.
8. This project involved preprocessing of MSW as mandated by SWM rules 2016 wherein pre-processing facility consists of MSW unloading, manual / mechanical segregation, Pre-processed MSW preparation and bio-drying section for organic fraction. NMC will deliver fresh waste at the proposed MSWM facility. The wastes are unloaded at a designated area of the tipping floor. MSW storage pit handles the waste. There will be leachate collection drains from the pit and thus leachate present in the garbage will be collected in the collection pit. Next step is mechanical segregation which is followed by bio-drying. The Pre-processed MSW will be stored in the Pre-processed MSW storage area. Finally, all rejected materials will be sent to landfill sites through vehicles.
9. The tariff for the proposed MSW project in Nagpur is computed considering unique characteristics of the proposed project which are specific to the city and new regulatory framework which involves:-
 - The Preprocessing of SWM is mandated for WtE projects as per the latest SWM Rules 2016.
 - New SWM Rules 2016 have specified designing the furnace for achieving minimum 950 deg.C with two seconds residence time as compared to 850 deg.C specified by earlier MSW Rules 2000. This has resulted in redesign of boiler furnace causing additional cost. To maintain additional 100 deg.C temperature in the furnace, its design, refractory lining inside, gas velocity etc. need to be changed.
 - Wind and seismic conditions are also different leading to change in structural design and its costs.
 - In addition to different wind and seismic conditions, the soil type is black cotton soil which has lower bearing strength resulting in additional civil cost.
 - Pre-processing of MSW leads to additional civil costs.
 - Nagpur project involves rehabilitation of existing waste and its subsequent closure. The existing waste dumped in the SLF needs to be properly rehabilitated by use of excavators/JCB's to enable proper closure of the same. Then it is closed as per scientifically proven methods.
 - New SLF has to be constructed to take the inert and process residues from the processing plant. This also requires design and construction of the same.
 - The project involves requirement of expat services, maintenance of existing SLF etc. which lead to slightly higher O&M expenses
10. With an intention to sale the electricity to distribution licensees in the State, NSWPMPML has filed petition under Section 62(1) and 86(1) (e) of the of the Electricity Act 2003 before the Hon. Maharashtra Electricity Regulatory Commission for determination of tariff for supply of electricity from 11.5 MW capacity municipal solid waste based power project to be commissioned at Bhandewadi, Nagpur for sale of electricity to the distribution licensees in Maharashtra. Through the petition NSWPMPML prayed that:
 - i. *Take the accompanying Tariff Petition for approval of power purchase from the 11.50 MW pre-processed MSW based WtE plant of NSWPMPML on record and treat it as complete;*
 - ii. *Approve the levelised tariff of **Rs. 7.80/kWh** in accordance with the tariff structure adopted by the Hon'ble CERC;*
 - iii. *Grant exemption from Merit Order Dispatch Principles for the Project.*
 - iv. *Direct DISCOMs to consider the benefit of zero contract demand charges.*
 - v. *Direct the DISCOMs to consider energy which may be drawn during shut down or start up after the CoD of the project be set off against the energy injected into the grid by the project*

- vi. *Grant waiver on Cross Subsidy Surcharge on sale of power from the Project in case of sale of power directly to third party.*
 - vii. *Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/change/ modify/ alter portion(s) of this filing and make further submissions as may be required at a later stage; and*
 - viii. *Pass such an order as the Hon'ble Commission deems fit and proper as per the facts and circumstances of the case.*
11. The Hon. Maharashtra Electricity Regulatory Commission has conducted a Technical Validation Session (TVS) on 22nd November, 2017. The Hon'ble Commission directed the Petitioner to comply the data gaps and submit the revised Petition. The Petitioner submitted the Revised Petition on 28th November 2017 which has been admitted by the Hon'ble Commission on 30th November 2017 and directed NSWPMPL to publish a Public Notice under section 64(2) of the Electricity Act, 2003 inviting suggestions/objections from the public.