# THE AUTHORITY ON ADVANCE RULINGS IN KARNATAKA GOODS AND SERVICES TAX VANIJYA THERIGE KARYALAYA, KALIDASA ROAD GANDHINAGAR, BENGALURU - 560 009

Advance Ruling No. KAR ADRG 28 / 2018 Dated: 17th November 2018

### Present:

 Sri. Harish Dharnia, Additional Commissioner of Central Tax,

. Member (Central Tax)

Dr. Ravi Prasad M.P.
 Joint Commissioner of Commercial Taxes

. Member (State Tax)

1.	Name and address of the applicant	M/s Triveni Turbines Limited, 12A, Peenya Industrial Area, Bengaluru - 560058		
2.	GSTIN or User ID	29AAACT4550H1ZA		
3.	Date of filing of Form GST ARA-01	Oursell # 06.02.2018		
4.	Represented by	Sri Shivadas, Advocate, M/s Lakshmikumaran & Sridharan, Advocates		
5.	Jurisdictional Authority – Centre	Commissioner of Central Tax, Bangalore North West Commissionerate, Bengaluru RANGE-DNWD2		
6.	Jurisdictional Authority - State	LGSTO-075, Bengaluru		
7. E	Whether the payment of fees discharged and if yes, the amount and CIN	Yes, discharged fee of 1. Rs.5,000-00 under CGST Act vide CIN UTIB18012900454167 dated 31.01.2018 2. Rs.5,000-00 under KGST Act vide CIN UTIB18012900454167 dated 31.01.2018		

# ORDER UNDER SUB-SECTION (4) OF SECTION 98 OF CENTRAL GOODS AND SERVICE TAX ACT, 2017 AND UNDER SUB-SECTION (4) OF SECTION 98 OF KARNATAKA GOODS AND SERVICES TAX ACT, 2017

M/s Triveni Turbine Limited, (called as the 'Applicant' hereinafter), 12A,
 Peenya Industrial Area, Bengaluru - 560058, having GSTIN number
 29AAACT4550H1ZA, has filed an application for Advance Ruling under Section
 97 of CGST Act, 2017, KGST Act, 2017 & IGST Act, 2017 read with Rule 104 of
 CGST Rules 2017 & KGST Rules 2017, in form GST ARA-01 discharging the fee
 of Rs.5,000-00 each under the CGST Act and the KGST Act.

2. The Applicant is a Public Limited Company and is registered under the Goods and Services Act, 2017. The applicant has sought advance ruling in respect of the following question:

"Whether the turbine generator set to be supplied by the applicant to the buyer for use in waste-to-energy project is covered under Sl.No.234 of Schedule I of Notification 1/2017 – IGST (Rate) dated 28.06.2017 as "Renewable energy devices and parts for the manufacture of waste to energy plants/ devices", attracting 5% levy?"

- The applicant furnishes some facts relevant to the stated activity:
  - a. The applicant states that he is in the business of manufacturing and supply of steam turbine solutions for Industrial Captive and Renewable Power. The applicant manufactures steam turbines upto 100 MW. It was demerged company from its parent company, Triveni Engineering and Industries Limited which holds 21.82% equity capital of the applicant company, in 2010, to emerge as a pure play turbine manufacturer.
  - b. The applicant is a manufacturer of steam turbines for providing renewable power solutions specifically for Biomass, Sugar and Process co-generation, Waste-to-energy and District Heating. Apart from manufacturing, the applicant also provides aftermarket services to its customers as well as turbine users of other manufacturers supported by its customer care support, which operates through a network of service centres.
  - c. The applicant enters into agreements with their customers for design, manufacture, and supply of Steam Turbine Generator sets and also for commissioning and installation of Steam Turbine Generator sets at the site of the customers. In the course of such supplies, the applicant uses the Steam Turbines manufactured by them, while other components like condenser, Gear box, alternator, AVR panel, etc. are procured from outside vendors. In some other agreements, the applicant merely supplies the Turbine Generator sets and supervises the erection, commissioning and installation carried out by contractors engaged by the customers.
  - d. As a part of Swachch Bharat Mission and to comply with Solid Waste Management Rules, 2016, the Andhra Pradesh Government has been promoting generation of power from Municipal Solid Waste (MSW). In this context, the Andhra Pradesh Government awarded the project for development of MSW Waste-to-energy plants in three clusters in Guntur, Vishakhapatnam and Tirupati districts of Andhra Pradesh to JITF Urban Infrastructure Ltd.

- e. For the execution of the projects, the following three companies were incorporated with JITF Urban Infrastructure Ltd., as the promoter:
- i. Jindal Urban Waste Management (Guntur) Ltd.,
- ii. Jindal Urban Waste Management (Vishakhapatnam) Ltd.,
  - iii. Jindal Urban Waste Management (Tirupati) Ltd.
- f. He states that as per the project specification document issued by M/s Korus Engineering Solutions Pvt. Ltd., the technical consultants for the project implementation, each of the project sites are to comprise of the following facilities:
- Receiving and storage facility for MSW delivered at doorstep by the urban local bodies (ULBs);
- ii. Processing facility to improve the quality of MSW for use as fuel in boilers;
- iii. Incinerators with boilers to produce superheated steam along with flue gas treatment;
  - iv. Steam turbine generator for producing electricity;
- v. Air-cooled condensers
- vi. Balance of plant and other associated auxiliary facilities.
- g. He stated that the Waste-to-energy project would be an integrated facility for processing Municipal Solid Waste delivered by the Municipal Corporation and other urban local bodies forming a part of the cluster. Fresh mixed MSW would be transferred to the receiving pits from the transport vehicles. After separation of the leachate, further drying would take place in the storage pits. Manual and mechanical segregation of inert and hazardous material would be carried out before delivery of processes MSW feedstock to buffer storage pits for boiler feeding. The MSW would be used as fuel in the boiler for generating steam. In this process, the combustion energy present in the MSW is transformed to steam, The steam is made to expand in the turbine and the heat energy in the steam is converted into work. i.e., Kinetic energy. The rotating movement of the rotor is transferred to a generator through a coupling and power is produced. The very intention of the waste to energy project is to use MSW as an input and generate electrical energy as the output. The steam turbine used in the MSW based power projects are specifically designed and tailor made for these projects. These turbines, once manufactured for Waste-to-energy projects cannot be used for the normal power projects.
- 4. The applicant has filed the present application under section 97(1) of the Karnataka Goods and Services Tax Act, 2017 read with Rule 104(1) of the Karnataka Goods and Services Tax Rules, 2017. Section 97(2)(b) of the KGST Act provides that the question in respect of which Advance Ruling is sought shall be inter alia in respect of the applicability of a notification issued under the provisions of the GST Act and particularly with reference to the application

of a particular entry in one of the Schedules to the Notification. In the instant application, the applicant has sought to determine the applicability of Schedule I of the Notification No.1/2017- integrated tax (Rate) dated 28.06.2017 to the supplies of Turbine Generator to be made by the applicant to waste-to-energy projects and the rate of tax applicable on such supplies. The applicant has, therefore submitted that question on which the present advance ruling is sought fulfils the requirement under section 97(2)(b) of the KGST Act.

- 5. The applicant submits that the Turbine Generator sets that are to be supplied to the waste-to-energy projects fall under Sl.No.234 of the Schedule I of Notification No.1/2017- Integrated Tax (Rate) dated 28.06.2017 (hereinafter called "said notification"), as 'Renewable energy devices and parts for the manufacture of waste to energy plants / devices', attracting 5% levy, for the reasons furnished below. He has submitted that this application on the apprehension that the activity could be considered as a supply of service in the nature of Works Contract attracting GST at the rate of 18% as the customer has awarded the contract for erection and commissioning of the steam turbine generator sets also to the applicant.
- 6. The applicant has submitted that as per the Explanation (iii) to the said notification provides that "Tariff item", "sub-heading", "heading", and "Chapter" shall mean respectively a tariff item, sub-heading, heading and chapter as specified in the First Schedule to the Customs Tariff Act, 1975. Further, Explanation (iv) provides that the rules for the interpretation of the First Schedule to the Customs Tariff Act, 1975 including the Section and Chapter Notes and the General Explanatory Notes of the First Schedule shall, so far as may be, apply to the interpretation of this notification. The applicant submits that the Turbines and other items bought out items, proposed to be supplied by the applicant would undisputedly be covered under tariff heading 84 of the Customs Tariff Act, 1975, which deals with Nuclear Reactors, Boilers, Machinery and mechanical appliances; parts thereof.
- 7. The applicant submits that Schedule I of the Notification No.1/2017-Integrated Tax (Rate) provides the list of goods that attract IGST at the rate of 5%. Sl.No.234 of the Notification reads as below

234	84 or 85	Following renewable energy devices and parts for				
	or 94	their manufacture				
	LEFT STRAIG	(a) Bio-gas plant				
	erginsb vil	(b) Solar power based devices				
	petrota had	(c) Solar power generating system				
	ion sel-mi	(d) Wind mills, Wind Operated Electricity Generator (WOEG)				
		(e) Waste to energy plants / devices				
	United asp	(f) Solar lantern / solar lamp				
	E BUIN AND	(g) Ocean waves / tidal waves energy devices / plants				

As per the entry, supplies of the specific renewable energy devices falling under Chapter heading 84, 85 or 94 and parts for their manufacture shall

attract IGST at the rate of 5%. The renewable energy devices include "Waste to energy plants/ devices". The applicant submitted that the steam turbines and other goods supplied to the Waste-to-energy projects of the Government of Andhra Pradesh are to be used in the manufacture of the waste-to-energy plant falls within the scope of entry 234 of Schedule I and therefore attracts IGST at the rate of 5%.

- A waste-to-energy ("WTE") plant is a waste management facility that combusts wastes to produce electricity. This type of power plant is sometimes called a trash-to-energy, municipal waste incineration, energy recovery, or resource recovery plant. Waste-to-energy is renewable because its fuel source garbage or Municipal Solid Waste - is sustainable and non-depletable. The National Electricity Policy of the Government of India dated 12.02.2005 encourages the setting up of municipal solid waste energy projects in urban areas with a view to reducing environmental pollution apart from generating additional energy. According to the United States Environmental Protection Agency, waste-to-energy is a "clean, reliable, renewable source of energy." According to the Waste-to-energy Research and Technology Council, founded by the European Economic Community, the WTE plants have significant environment benefits. Generally, every Waste-to-energy project contain a series of equipment from the pit where the MSW is dumped to the generator, from where the electricity generated is uploaded to the grid. Each of this equipment form an indispensable part of waste-to-energy conversion process.
- 9. The detailed project report on Municipal Solid Waste Management for Vishakhapatnam prepared and submitted by Feedback Infra Private Limited in JV with Eco Save Systems Pvt. Ltd in September 2015 (available at http://www/sac.ap.gov.in/Sac/UserInterface/Downloads/MSWMReports/Vizag%20DPR-1.pdf) describes the Waste to Energy Project and the Refuse to Fuel Based power plant. The plant technical features as explained in the report is extracted below for ready reference:

# 9.5 Plant technical Features Selection of Steam Cycle

Plant Systems

Power Plant process description: The power plant is based on Rankine cycle with one regenerative heating in which fuel is fired in a boiler, which generates steam. The steam generated in the boiler is expanded in a steam turbine generator to generate electricity.

# Control and Instrumentation

For ease of operation, the entire plant has been divided in the following sub plants like:

 Steam Turbine Generator (STG) along with its auxiliaries,
 vacuum and condensate system etc. (Operation, Control and Monitoring from DCS at CCR)

- Steam Generator (SG) along with feeding system etc. (Operation, Control and Monitoring from DCS at CCR)
- Auxiliary Electrical System (Operation, Control and Monitoring from DCS at CCR)
- Compressed Air System (Control from Local with status monitoring at DCS)
- Fire Alarm and detection System (At Fire House and Repeat Alarm at CCR)
- Cooling Water System (Operation, Control and Monitoring from DCS at CCR)
- The I&C System will be configured to perform the following basic functions.

(Emphasis supplied)

- 10. Schedule I of the Notification No.1/2017 dated 28.06.2017 in Sl.No.234 includes renewable energy devices including waste to energy plants and parts for their manufacture. From the above, the applicant submits that the Steam Turbine Generator sets that are to be supplied by the applicant to the waste to energy project forms a part of "waste-to-energy plant". Therefore, the applicant states that as per his understanding, the product "Steam Turbine Generator Sets" to be supplied by the applicant falls under Sl.No.234 of the Notification No.01/2017 IGST (Rate) dated 28.06.2017 and consequently, is liable to IGST at the rate of 5%.
- 11. The applicant has brought to the notice of the Authority the judgement of the CESTAT in the case of Triveni Engineering and Industries Ltd. v. CCE, Bangalore reported in 2004(172) ELT 353 (Tri.-Bang). The issue before the CESTAT was the eligibility to a Central Excise Notification 6/2000-CE dated 01.03.2000 [Later under Notification No.6/2002-CE dated 01.03.2002]. The appellant in the case had sought to avail the exemption from Central Excise Duty on steam turbines supplied for use in producing energy from non-conventional sources. The Central Excise Notification 6/2000-CE dated 01.03.2000 is extracted as under

Sl.No. 251 in the Central Excise Notification 6/2000-CE dtd 01.03.2000

S.No.	Chapter or heading No. or sub- heading No.	Description of goods	Rate, under the First Schedule	Rate under the Second Schedule	Condition No.
251	Any Chapter	Non-conventional energy devices / systems specified in List 5	Nil	in i bam ler	Cont

List 5 included the entry 'Agricultural, forestry, agro-industrial, industrial, municipal and urban waste conversion devices producing energy'.

The Central Excise Notification 6/2002-CE dated 01.03.2002 is extracted as under

Sl.No. 237 in the Central Excise Notification 6/2002-CE dtd 01.03.2002

S.No.	Chapter or heading No. or sub- heading No.	Description of goods	Rate under the First Schedule	Rate under the Second Schedule	Conditi on No.
237	Any Chapter	Non-conventional energy devices / systems specified in List 9	Nil	i inealighe scréules i	ent Cé entition en con

List 9 includes: 'Agricultural, forestry, agro-industrial, industrial, municipal and urban waste conversion device producing energy'.

Hon'ble CESTAT Bangalore denied the benefit of the exemption to the appellant in the ground that the steam turbine supplied by the appellant to the bio-mass based plant merely converts energy from one form to another (from heat energy to electrical energy) and that the exemption is only for waste conversion devices producing energy from the waste material (restricted to boilers, generating heat energy from the waste). This decision of the Tribunal was affirmed by the Hon'ble Supreme Court in 2015 (321) ELT A 280 (SC).

- The applicant submits that the rationale adopted in the aforementioned decision does not apply to the present notification inasmuch as the scope of the present notification is much wider than the Notifications in the Central Excise regime. The applicant submitted that in the IGST Notification, the scope of the entry includes "renewable energy devices and parts for their manufacture" Further, the specific entry reads as "Waste to energy plants / · devices". The text of the entry itself shows a clear departure from the exemption notification in the Central Excise regime inasmuch as the entry is not limited to 'waste conversion device producing energy' only but includes 'waste to energy plants / devices' in its entirety and also includes parts used for the manufacture of the waste to energy plants / devices. This entry does not specify that the device or parts are required to either 'produce' or 'convert' energy. Therefore, the present IGST Notification not only includes the boilers used in conversion of waste to 'heat energy' but also includes all the equipment falling under Chapter headings 84, 85 or 95 of the Customs Tariff Act, 1975 used in the entire process of converting waste to energy from the dumping pit to electricity generator.
  - 13. Therefore, the applicant submits that the rationale of the Hon'ble CESTAT in the aforementioned case in the context of Central Excise Notification does not apply to interpret the present notification and therefore that the Turbine Generator set to be supplied by the applicant for use as a part of the Waste to Energy Plant falls under Sl.No.234 of Schedule I of Notification No.1/ 2017 Integrated Tax (Rate) attracting IGST at the rate of 5%.

# 14. FINDINGS & DISCUSSION:

- 14.1 We have considered the submissions made by the Application their application for advance ruling as well as the submissions made by Sri. Shivadas, Advocate during the personal hearing. We have also considered the issue involved, on which advance ruling is sought by the applicant, relevant facts & the applicant's interpretation of law.
- 14.2 The applicant is into the business of manufacture and supply of steam turbines / solutions, up to 100 MW. They also provide aftermarket services to their customers as well as turbine users of other manufacturers supported by their customer care support, through a network of service centres.
- 14.3. The Applicant has filed the instant application dated 06.02.2018 seeking advance ruling on the following question:

"Whether the turbine generator set to be supplied by the applicant to the buyer for use in waste to energy project is covered under Sl.No.234 of Schedule I of Notification 1/2017-Integrated Tax (Rate) dated 28.06.2017 as Renewable energy devices and parts for the manufacture of waste to energy plants / devices attracting 5% levy?"

- 14.4. Notification No.1/2017-Integrated Tax (Rate) dated 28.06.2017 is relevant to the matter. This Notification has six Schedules wherein the listed goods attract the rate of IGST applicable to the respective Schedules. Schedule I comprises of goods which are chargeable to IGST at the rate of 5%. Serial number 234 covers the listed renewable energy devices and parts for their manufacture and these items attract 5% IGST. One of the items in the list is Waste to energy plants/devices'.
- 14.5 The applicant manufactures Turbines and supplies them to clients who use the turbines in plants which convert waste to energy. The applicant, therefore, contends that when the turbines are supplied for such plants then the turbines are covered by serial number 234 of the aforementioned Notification and should be taxed at 5% IGST.
- 14.6 In view of the above, the issue before us to decide, for giving advance ruling on the issue sought by the applicant, is whether the product "Turbine" is a waste to energy plant / device or not when supplied for use in waste to energy project.
- 14.7 A **turbine** is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful work. A **steam turbine** is a device that extracts thermal energy from pressurized steam and uses it to do mechanical work on a rotating output shaft. Therefore a 'Turbine" is not a device that converts waste to energy. In fact in the instant case the waste is used to generate steam and the steam runs the turbine to generate electric power. Turbine itself does not work on waste but converts steam into energy. The

conversion of waste into energy is done, only at the stage of combustion. The concessional rate of 5% of IGST is available to only such devices which convert waste into energy but not for the devices that converts energy from one form to the other form.

- In view of the above, we are of the opinion that turbine is not a renewable energy device because the turbine at no stage acquires the nature of a device which converts waste to energy. The waste has already been converted into heat energy through the process of the burning/combustion which in turn is utilized to convert water into steam and the said steam runs the turbine to generate electric power. The turbine runs on steam irrespective of whether the steam is obtained by combustion of waste or any other means. Therefore the fact that in this particular case the steam was generated out of waste cannot lead to the conclusion that the turbine is a renewable energy device. The same turbine can run equally well on steam generated by use of coal etc., We are, therefore, of the view that turbine in question will not qualify to be covered under serial number 234 of Notification No. 1/2017-Integrated Tax(Rate) dated 28.06.2017.
  - In view of the foregoing, we rule as follows

## RULING

The Turbine Generator Set to be supplied by the applicant for use in waste to energy project is not covered under Sl.No.234 of Schedule I of Notification No.1 /2017 dated 28.06.2017.

Member

(Harish Dharnia) Member

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Place: Bengaluru, Date: 17.11.2018

To,

The Applicant

Copy to:

The Principal Chief Commissioner of Central Tax, Bangalore Zone, Karnataka.

The Commissioner of Commercial Taxes, Karnataka, Bengaluru.

The Commissioner of Central Tax, Bangalore North West Commissionerate, Bengaluru.

The Asst. Commissioner, LGSTO - 75, Bengaluru, Karnataka.

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