F. No. 202/5/2012-BM Government of India Ministry of New and Renewable Energy (Biomass Division)

Block No. 14, CG.O. Complex, Lodi Road, New Delhi-110003 Dated: 23rd January, 2014

To Head, State Nodal Department / State Nodal Agencies (SNA's) / Other concerned Implementing Agencies

Subject: Continuation of "Biomass Gasifier Programme from 11th Plan to 12th Plan Period" – regarding

Sir,

I am directed to convey the Sanction of the President of India for implementation of the following Biomass Gasifier based Programmes of the Ministry of New and Renewable Energy, Government of India during the remaining period of the 12th Five Year Plan Period:

- i. Biomass Gasifier based Distributed / Off-grid power programme for Rural Areas.
- ii. Biomass gasifier based programmes in Rice Mills and other industries for captive power and thermal applications, and

iii. Biomass Gasifier based Grid Connected Power (up to 2 MW Capacity) Programme.

2. The above programme / scheme will be implemented during the remaining period of the 12^{th} Plan as per the funding norms / guidelines and other provisions applicable during the 11^{th} Plan Period and until such time the same is superseded by fresh / new programmes / schemes. A total budget allocation of Rs.46.00 crores has been made for Biomass Gasifier scheme during the 12^{th} Plan period with the following broad component wise breakup:

i.	Central Financial Assistance (CFA)	:	Rs.43.00 crores
	including internal distribution etc.		
ii.	Promotional Activities	:	Rs. 2.00 crores
	such as workshop / seminar etc.		
iii.	Other Administrative Expenses	:	Rs. 1.00 crores
	1		

3. All State Nodal Agencies / State Nodal Departments and other concerned implementing agencies etc. are requested to initiate necessary action for implementation of **"Biomass Gasifier based programmes"** during the current financial year 2013-14 as per the guidelines enclosed at **Appendix-I &II.**

5. This Sanction issues under the powers delegated to this Ministry and with the concurrence of Integrated Finance Division vide their Dy. No. IFD 2130/13-14 dated 20.12.2013.

Yours faithfully

(Dr. D.K.Khare) Director 011-24363402 Email – <u>dkkhare@nic.in</u>

Copy to: -

- 1. The Principal Director of Audit, CW&M-II (Scientific Departments), DGACR Building, New Delhi
- 2. The Heads of all States / UTs Implementing Departments/ State Nodal Agencies
- 3. All Advisers / Joint Secretary
- 4. MD, IREDA
- 5. All Directors, MNRE
- 6. Director (Finance), MNRE
- 7. PS to Minister
- 8. PSO to Secretary, MNRE
- 9. P.S to AS&FA
- 10. CA, MNRE / PAO, MNRE / Cash Section / IFD, MNRE
- 11. All Regional Offices of MNRE
- 12. Sanction Folder

(Dr. D.K.Khare) Director Implementation of Biomass Gasifier based projects for Rural Areas and Grid Connected during the remaining period of the 12th Five Year Plan.

1.0 Programme Components:

- i. Biomass Gasifier based Distributed / Off-grid power programme for Rural Areas for meeting unmet demand of electricity in rural areas:
- ii. Biomass Gasifier based Grid Connected Power Programme:
 - a. Biomass gasifier based MW level grid connected power plants with 100% producer gas engines will be supported.
 - b. Besides, biomass based grid connected Boiler-Turbine-Generator (BTG) projects, preferably at tail end of the grid and having a decentralized distribution component would also be supported.
 - c. The maximum installed capacity of each such project would be 2 MW.
- **iii. Promotional Activities:** Support to activities such as awareness creation, publicity measures, seminars / workshops / business meets / training programme etc. and to expand local manufacturing capacity and also support service facilities under the programme.

2.0 Implementation Strategy:

2.1 Programme Implementing Agencies / Organizations: Project proposals as per guidelines could be submitted online / directly to the Ministry by State Nodal agencies / Departments, Energy Service Companies (ESCOs), Co-operatives, Panchayats, SHGs, NGOs, manufacturers or entrepreneurs, independent power producers, promoters & developers etc.

2.2 Submission & Approval Process:

2.2.1 The following methodology would be followed for submission and approval of project proposals:

- i. Programme Implementing Agencies / Organizations will submit proposals to the Ministry with requisite information separately for village based proposals through gasifiers, gasifier based captive power project in rice mills and other industries as per indicative proforma given respectively at *Annexure-I & II*.
- ii. Grid connected project proposals should contain Detailed Project Reports (DPRs) covering salient features as per the format. The project developer should enter into agreement with the utilities for sale of power or 3rd party sale and furnish copies of the PPA, copies of all clearance from statutory angle along with loan agreement or supporting documents for meeting balance funds etc. Only grid interactive projects would be supported which has envisaged fuel linkage mechanisms to ensure regular supply of the required quantity of biomass feed stock and provision of collection, processing and storage of biomass. Suggested points to be covered in the Detailed Project Reports (DPR) and Application Format for biomass gasifier based grid power generation projects as per indicative proforma given at *Annexure-III & IV*. The projects based on BTG route should have provision for decentralized distribution component and details should be provided in the project proposal.

iii. A Project Advisory Committee (PAC) set up by the Ministry would evaluate and recommend the proposals for issue of in-principle approval based on the programme guidelines, project details, commissioning schedule. Subsequently, concurrence for issuing in-principle approval for new proposals submitted to the Ministry would be sought from IFD before taking approval from the competent authority.

3.0 Pattern of Central Financial Assistance (CFA):

3.1 Pattern of Central Financial Assistance (CFA) for various components is given below:

S No.	Items	Pattern of CFA
i.	Distributed / off grid power projects in rural areas and grid connected power projects with 100% producer gas engines or biomass based combustion projects.	Rs.15,000 per kW
iii.	Biomass gasifier projects for Distributed / Off-grid for Rural Areas and grid connected power projects for ensuring regular availability of biomass, provision of collection, processing and storage and operation & maintenance including compulsory AMC for 5 years after the guarantee period.	Rs.1.50 lakh per 50 kW
iv.	Support towards lighting devices and distribution network	Financial support limited to a maximum of 3 km i.e. Rs.3.00 lakh per project (@ Rs.1.00 lakh per km).
V.	Support towards project formulation	Financial incentives of Rs.5000/- per projects to the banks / FIs, manufacturers, promoters, consultants & service providers for developing firmed up and bankable proposals for a minimum of 10 projects or above.
vi.	Service charges for Verification and Certification	Rs.10,000/- per 100 kW subject to maximum of Rs.1.00 lakh for a project of 1 MW capacity. A minimum service charge would be Rs.10,000/- per site
vii.	 Preparation of Detailed Project Report (DPRs) for centralized distributed / grid connected / captive power generation project: Projects between 100-500 kW capacities Projects above 500 kW capacities. DPR is not required for the projects below 100 kW capacities. 	Rs.0.50 lakh Rs.1.00 lakh

viii.	 HRD & Training O&M Technician's Course Gasifier Entrepreneur Development Course Awareness promotions such as organization of seminars, business meets, workshops etc 	 @Rs.2.00 lakh per course @Rs.3.00 lakh per course Maximum upto Rs.3.00 lakh
ix.	Support for gasifier manufacturers / suppliers for establishing service centers in areas where cluster of systems, minimum 10, have been set up in one district / region.	Rs.5.00 lakh (One-time funding)
х.	Special category states and Islands	20% higher CFA

4.0 Pattern of Release of funds:

- i. CFA as applicable under the scheme will be disbursed post-commissioning through one installment directly to the promoters or lending institutions / FIs after receipt of commissioning & verification reports and submission of the requisite documents / reports.
- ii. The service charges for Independent Verification Agency (IVA) or State Nodal Agencies (SNAs), as the case may be would be provided after commissioning and certification by the designated agencies as per guidelines. The service charges would be provided to the designated agencies, including the state nodal agencies and FIs including banks to cover their expenses.
- iii. Programmes relating to Training & Awareness Promotion, 75% of the eligible CFA will be released to implementing organizations alongwith the sanction order. The balance will be released on receipt of the utilization certificate, audited statement of expenditure and the final report.

5.0 Independent Verification system

- 5.1 The Ministry will also separately empanel Independent Verification Agencies (IVA) other than State Nodal agencies.
- 5.2 Verification would be conducted after operation of project at least for a period of one month.
- 5.3 The Independent Verification Agencies would be required to furnish the following requisite documents / reports:
 - i. Verification and commissioning reports along with Joint Commissioning Report as per the indicative format given at *Annexure-V*. The verification report would be submitted covering various items as per details as per indicative proforma given in *Annexure-VI*.
 - ii. Statement of Expenditure duly audited by the Chartered Accountant or other designated authority as per Govt. of India Rules.
 - iii. The Utilization Certificates in the prescribed format as per the GFR Form -19A to be submitted after receipt of funds (*Annexure-VII*).
 - iv. Verifying agency certificate that the agreement between the user and supplier of the gasifier systems for full guarantee and warrantee for one year followed by AMC for two years has been entered into.

6.0 HRD & Training:

6.1 **O&M Technician's Course**

6.1.1 Financial support would be provided for organizing training programmes to train gasifier operators at selected Engineering Colleges / Polytechnics in the identified cluster involving programme implementation organizations, gasifier and engine manufacturers. The training would be for eight weeks involving limited classroom exercises with hands-on training. Each training programme will have a minimum of 10 candidates. The tentative schedule for such training course is suggested below:

•	Training at Institute:		4 weeks
٠	Visit to biomass gasifier and engin	e manufacturer:	2 weeks.
٠	Field visits:		2 weeks.
		Total	8 weeks

6.1.2 Under these training programmes, stipend @ Rs.5000/- per month (total Rs.10,000/-) would be paid to the trainees for entire 8 week duration. In addition, financial support for Institutional Charges, field visits, materials, tools including contingencies etc., would be provided @Rs.2.00 lakh per course.

7.2 Gasifier Entrepreneur Development Course

7.2.1 Financial assistance will be provided for organization of Entrepreneurship Development Programmes (EDP). Such EDP would be provided for about 3 months for 15 persons per batch. Financial assistance would include institutional faculty charges; training expenses - field visit, class room training, Manuals & other materials, contingencies etc. Such course would be supported @Rs.3.00 lakh per course as per existing provisions of the scheme.

7.2.2 Single or multiple courses would be organized in association with Engineering Colleges / Polytechnics, gasifier manufacturers, programme implementing organizations etc.

8.0 Technology Demonstration Component:

8.1 The objective is to demonstrate the techno-economic feasibility of replacing inefficient steam engines with gasifier, using the captive biomass to meet the captive requirement and also to generate additional electricity feeding into the grid. Waste heat from gasifier system would be used for steam generation and for setting up of cooling / chilling system to increase the economic viability. As this integrated concept has not been demonstrated till now, it is proposed to take up demonstration projects under the scheme.

8.2 For the purpose, the existing level of subsidy will be provided for the gasifier with 100% producer gas engines components. In addition, financial assistance up to 50% of the cost of plant and machineries i.e. Vapor Absorption Machine (VAM) for cooling / chilling system and steam generating system from waste heat would be provided. Financial assistance would not be provided for land & building.

8.3 It is proposed to take up about 25 demonstration projects in rice mills replacing steam engines / boilers with biomass gasifier coupled with 100% producer gas engines for power generation along with provision for meeting entire thermal requirement through waste heat recovery. Under some of these projects, demonstration of cold storage or ice making units would also be taken up using waste heat for chilling / cold storage through VAM and steam generating systems.

8.4 Technology Demonstration Projects would be taken up as per RD&D policy of this Ministry for Technology Demonstration on 50:50 cost sharing basis. The proposals will be examined by a "Committee" set up in the Ministry for the purpose. The selected projects will be placed before TDPAC, as provided under the RD&D Policy of the Ministry.

9.0 Other Terms & Conditions:

9.1 The general terms and conditions for the grant are given at **Annexure-VIII**. The aforesaid programmes are subject to such change(s) and modification(s) as may be decided by the MNRE, Government of India from time to time and subject to availability of funds. The Ministry shall in no way be liable for expenditure incurred by promoters for pre-project preparation or other activities, merely on the basis of this circular and / or related announcement made by the Ministry. In case of any dispute on interpretation of any provisions under the scheme, the decision of the Ministry shall be final and binding.

Annexure-I

		_		
Name of the developer			SNA	
Contact Address		1	Tel	
Fax		1	Email	
Project Type	Village Electrification		Biomass	Rice Husk / Wood / other agro residues and biomass (give list)
roject rype		4	Village	biomass (give list)
Project Village			Census Code	
• •		4	District	
Tehsil		4	District	Electrified / Un-
State			Electrification	Electrified 100% Gasification /
Gasifier Capacity		kW	Project Type	duel fuel mode
	Civil / Plant &		J	
Project Cost with break	Machinery /			Give total Amount with
up	Distribution Line	Lakhs	Equity	%
				Give total Amount with
		_	Loan	%
			Domestic / no	
Load		kW	of House Holds	kW / nos of H/H
			Commercial	kW
Expected Date of]		
Commissioning			Industrial	kW
		_	Other	kW
			Distribution	<u></u>
(If case of Loan from Bank:	Details)		Line length (m)	
Bank & Branch Name		1	0 ()	
with address		Branc	n Code	
RTGS Code		Accou	nt No	
Gasifier Supplier				'
Engine Supplier				
Verification Responsibility	Bank / approved author	ized agor)CV	
				4 . h h
Any other relevant Informa				
customer Yrs of AMC prop	osed by supplier, Perior	mance g	uarantees in any by	supplier etc. in
brief.				
		•		Submit
				Subilit

On line indicative Proforma for submission of the Project Proposal on Biomass Gasification Based Distributed / Off-grid Power Generation for rural areas (<100 kW)

Guidelines for Filling up of Proforma for submission of the Project Proposal on Proforma for submission of the Project Proposal on Biomass Gasification Based Distributed / off-grid Power Generation for rural areas (<100 kW)

The following inputs are required in the profroma (Annexure-I) given in the Guidelines issued vide No. F. No. 202/3/2009-BM dated 1st December, 2009 against each items^{*}.

1. Name and full postal address of the Implementing Organization / Agency / NGOs

- a. Name of the contact persons
- b. Name and full postal address of the Implementing Organization / Agency
- c. Fax No / Email.: if any
- d. Telephone No.
- e. Mobile No.
- f. Registration details of the implementing organization / agency / NGOs (Enclose copy of the Registration Certificate, Memorandum of Association, and By-laws etc.)

2. Details of the Proposed site:

- a. Name of the village (s), tehsil, district, state.
- b. Census Code No of the Village (s) to be covered
- c. Proposed village (s) is / are Electrified or Unelectrified
- d. Total number of the households in a village (s)
- e. Indicate total number of house holds of the village (s) to be connected

3. Proposed Load Profile

a. Furnish load profile in table given below:

S. No	Load	Unit	Load	Total load									Ti	me ((01	of Su .00 h	ıpply ırs t	y of o 24	Elec 00 h	ctric rs)	ity								
			(in Watt)	(in watt)	1	2	3	4	5	6	7	8	9	1	1	1 2	1 3	1 4	1 5	1 6	1 7	1 8	1 9	2 0	2 1	2 2	2 3	2 4
1	Domestic	Nos. of H/H	CFL watt and nos																									
2.	Commercial	Nos. of units																										
3.	Industrial	Nos. of units																										
4.	Irrigation	Nos. of pumps																										

* - in the absence of full details, proposals will not be considered for approval in-principle.

- b. If proposed to provide electricity for irrigation purposes, give following details
 - i. No of pumps to be connected and average hours of operation
 - ii. Capacity of the pumps (HP / kW)
 - iii. Existing Diesel consumption per pump (liters per hours)
 - iv. Likely Diesel saving per pump (liters per hours)
 - v. No of days irrigation required (total number days in one year)
 - vi. Total area to be irrigated annually (acres / hectare)
 - vii. Hours of supply (from ... AM / PM to ... AM / PM)

4. Fixed cost

- a. Details of proposed Gasifier and 100% producer gas engines and cost
 - i. Name of the supplier of gasifier
 - ii. Name of the supplier of producer gas engine and generator
 - iii. Capacity of gasifier (kW)
 - iv. Capacity of the 100% producer gas engine (kW)
 - v. Rice Husk / Biomass consumption Kg/hr
 - vi. Cost of Gasifier
 - vii. Cost of producer gas engine
 - viii. Civil & Other cost
 - ix. Total system cost in Rs.....
 - x. Copy of Invoice, time schedule for supply & terms and condition of warrant and charges for 2 years AMC (Please attach copies)
 - xi. Expected date of commissioning.

b. Transmission / Distribution line (follow safety norms)

- i. Total length of transmission lines (in meters)
 - ii. No of poles per km
- iii. Cost of the transmission lines (in Rs.) indicating the following
 - 1. Cost of wire,
 - 2. Cost of poles,
 - 3. Other installation expenses
 - 4. Average cost of distribution line for household connection

iv. Total Cost of Transmission & Distribution lines

c. Total Fixed Project Cost

- i. Cost of Gasifier
- ii. Cost of producer gas engine & generator
- iii. Cost of Transmission / distribution lines
- iv. Civil cost
- v. Any other cost (please specify)
- vi. Total Project Cost

5. Expected Revenue Generation

S. No.	Load	Unit Rate	No.	Monthly (in Rs.)	Yearly (in Rs.)
1.	Domestic	Rs. per Households per Month	No of Connection		
2. 3.	Commercial Industrial	Rs. per Month Rs. per Month			
4.	Irrigation	Rs. per hour of operation	Capacity and Nos. of pump sets		
			Total		

6. Recurring Cost

S. No	Component	Unit Cost	Quantity	Monthly (in Rs.)	Yearly (in Rs.)
1	Biomass	Rs./ton	tones		
2.	Manpower	Salary per person	No of person		
3.	Interest if any	Rate of interest	Total Amount		
4.	Consumable				
5.	AMC				
6	Any other such as interest on loans etc.				
			Total		İ

7. Surplus Revenue Expected Revenue Generation (-) Recurring Cost = Rs..... per year

8. Biomass availability and sustainable supply option

- Type of biomass (Please enclose details of availability of biomass)
 - i. Rice husk
 - ii. Other (Please specify)
- b. Quantity required
 - i. Daily
 - ii. Yearly
- c. Cost of Biomass at site (Rs. per ton)
- d. Proposed biomass storage facility

9. Financing Details

a.

- a. Own Equity
- b. If loan sought form the banks
 - i. Total loan Amount sanctioned / sought Rs.
 - ii. Name & full Address of the Bank / Branch
- c. Central Financial assistance (Subsidy from MNRE) Rs.....
- d. Any other source of funding (please give full details)

- Rs.

10. Details of Bank Account of Implementing Organization / Agency / NGOs:

- a. Name of account Holder
- b. Name & Address of the Bank& Branch
- c. Branch Code
- d. RTGS Code
- e. Bank Account No

11. In case, loan taken from bank

- a. Name & Address of the Bank& Branch
 - b. Branch Code
 - c. RTGS Code
 - d. Loan Account No of the Bank
- **12.** Please enclose any other details for justification of the project indicating financial viability, revenue / business model, economical and social benefits, mode of Operation & Maintenance, collection mechanism of biomass, electricity charges etc.
- **13. Certificates:** Please send the following certificates while submitting the proposal to the MNRE along with covering letter seeking financial support from the MNRE addressed to Dr D K Khare, Director, Ministry of New & Renewable Energy, Block No. 14, CGO Complex, Lodhi Road, New Delhi-110003 (E-mail <u>dkkhare@nic.in</u> Tele Fax no 011-24363402):

Certificate from developer / Implementing Organization / Agency / NGOs

This is to certify that the above information are correct to the best of my knowledge.

() Signature of the Developer / Implementing Organization / Agency / NGOs with full name & address with seal.

Date: Place

Certificate from Forwarding Agency, if any

This is to certify that the all the above information have been verified and are found correct to the best of my knowledge.

() Signature of the Forwarding Agency with full name, & address with seal.

Date: Place

Annexure-II

On line indicative Proforma for submission of the Project Proposal on Biomass Gasification Based Captive Power Generation in Rice Mills (<100 kW)

Name of the Rice Mills and				
developer			SNA	
Contact Address			Tel	
Fax			Email	
Project Type	Captive Generation and / or Distributed Power		Biomass	Rice Husk / Wood / other agro residues and biomass (give list)
City/Village				
Tehsil			District	
State				
Capacity of:		kW	Project Type	100% Gasification /
Rice mills (ton/hr)				Duel fuel
Existing Engines (kW) /				
Gasifier (kW) /				
Producer Gas Engine (kW)				
Project Cost		Lakhs	Equity	Give total Amount with %
Present Diesel consumption		,	Loan	Give total Amount with %
Proposed Load	Captive / Distributed	kW		
Expected Date of Comm				
(If case of Loan from Bank: L	Details)			
Bank & Branch Name				
with address			Branch Code	
RTGS Code			Account No	
Gasifier Supplier				
Engine Supplier				
Verification Responsibility	Bank / approved authoriz	zed ager	псу	
Any other relevant Informati	ion e.g. Estimated saving	s in Die	sel fuel, Yrs of AM	C proposed by supplier,
Performance guarantees if an				
of domestic consumption, co	mmercial, industrial etc.	Indicat	e nos of house hold	s etc
				Submit

Guidelines for Filling up of Proforma for submission of the Project Proposal on Biomass Gasification Based Captive Power Generation in Rice Mills (<100 kW) and Proposed Distributed Power to the Villages

The following inputs are required in the profroma (Annexure-II) given in the Guidelines issued vide No. F. No. 202/3/2009-BM dated 1st December, 2009 against each items^{*}.

1. Name and full postal address of the rice mills

- a. Name of the contact persons
- b. Name and full postal address of the rice mills
- c. Fax No / Email.: if any
- d. Telephone No.
- e. Mobile No.
- f. Registration No. of Rice Mill (e.g. SSI etc.)

2. Details of the Rice Mill:

e

- a. Capacity of Rice mill ton per hours
- b. Average daily operation hrs per day
- c. Average days of operation in a year days /years
- d. Whether having electricity connection Yeas / No
 - Existing Diesel Engines i. Capacity-
-kW
- ii. Make / Model No.
- iii. Year of purchase
- iv. Present Diesel consumption liter per hour

3. Details of proposed Gasifier and also 100% producer gas engines, if required.

- a. Name of the supplier of gasifier / producer gas engine
- b. Capacity (kW)
- c. Rice Husk consumption Kg/hr
- d. Cost of Gasifier / producer gas engine
- e. Civil & Other cost
- f. Total cost in Rs.....
- g. Copy of Invoice, time schedule for supply & terms and condition of warrant and charges for 2 years AMC (Please attach copies)

- Rs.

h. Expected date of commissioning.

4. Financing Details

- a. Own Equity
- b. If loan sought form the banks
 - i. Total loan Amount sanctioned / sought Rs.
 - ii. Name & full Address of the Bank / Branch
- c. Central Financial assistance (Subsidy from MNRE) Rs.....

* - in the absence of full details, proposals will not be considered for approval in-principle.

5. Details of Bank Account of Rice Mill / Rice Mill owner:

- a. Name of account Holder
- b. Name & Address of the Bank& Branch
- c. Branch Code
- d. RTGS Code
- e. Bank Account No

6. In case, loan taken from bank

- a. Name & Address of the Bank& Branch
- b. Branch Code
- c. RTGS Code
- d. Loan Account No of the Bank

7. If distributed electricity component proposed, give following details;

- a. Name of the village, tehsil, district, state.
- b. Proposed domestic load (kW) and hours of supply
- c. Indicate total number of house holds of the villages to be connected
- d. Distribution line total length in meters
- e. Commercial Load (kW) and hours of supply
- f. Industrial Load (kW) and hours of supply
- g. Proposed electricity charges for domestic/ commercial / industrial
- h. Brief detail of mode of operation (please enclose separate sheet)
- 8. Certificates Please send the following certificates while submitting the proposal to the MNRE along with covering letter seeking financial support from the MNRE addressed to Dr D K Khare, Director, Ministry of New & Renewable Energy, Block No. 14, CGO Complex, Lodhi Road, New Delhi-110003 (E-mail <u>dkkhare@nic.in</u> Tele Fax no 011-24363402):

Certificate from developer / owner of the rice mill

This is to certify that the above information is correct to the best of my knowledge.

Signature of the developer / owner of the rice mill with full name & address with seal.

Date: Place

Certificate from Forwarding Agency, if any.

This is to certify that the above information has been verified and are found correct to the best of my knowledge.

() Signature of the forwarding agency with full name & address with seal.

Date:

Place

Indicative points to be covered in the Detailed Project Reports (DPR) for biomass gasifier based off grid / distributed power generation projects (>100 kW)

The Detailed Project Report (DPR) should provide information on the following aspects:

- i. Demand Current and expected (tentative).
- ii. Load management Load chart preparation taking into account seasonal variations in use of electricity, especially for irrigation etc.
- iii. Plant sizing Sizing of the plant, capacity utilization factor for the plant as per the load chart.
- iv. Technological options (Gasification / Biomass-Turbine–Generator (BTG) taking into account load pattern, capacity utilization factor and type of biomass fuel available.
- v. Project Details
 - a. Proposed Installed capacity (kW)
 - b. Cost of the project (As approved by FIs if loan is tie up)
 - i. Civil Works
 - ii. Plant & Machinery
 - iii. Misc. Equipment
 - iv. Pre-operative expenses & Others
 - c. Anticipated commissioning schedule
- vi. Project cost estimates and financial calculations. Costs details of each item, i.e., equipments, power distribution network, civil work etc.
- vii. Details of Power Distribution Network (PDN) along with a drawing indicating types and no. of poles, length, specifications of the wires, fixtures, service lines from pole to the households and inside house wirings etc.
- viii. Proposed system, energy balance etc.
- ix. Technical specifications of each of the system/equipment proposed.
- x. Sources of biomass current and potential, its stability
- xi. Proposed Fuel Linkages mechanisms.
- xii. Financing plan Capital expenditure for power plant and other investments needed to reach projected demand. Sourcing working capital, sources of revenue, tariff setting, other non-tariff sources of revenue, operational sustainability, cash flow statement, plan to meet revenue gap if any, pay back period.
- xiii. Utilities & maintenance facilities power, water, biomass storage & handling etc
- xiv. Environmental aspects
- xv. Human resources Community empowerment, involving them in ownership and decision-making, training in operation and management of the power plant
- xvi. Strategy for operation and maintenance of electricity generating system and other systems and devices, economics of operation and maintenance Risk management Identification of risk and how it would be managed.
- xvii. Project implementation plan Tasks and milestones with timelines and clear identification of responsibilities should be presented.
- xviii. Details of cost of energy/electricity generation, tariff to be charged, revenue collection from the beneficiary households, revenue and expenditure gap, if any, and the mode of filling up this gap. The net proposed payment from the each household must be clearly indicated.

Annexure-IV

Indicative Application Format for Biomass Gasifier Based Grid Power Generation Projects and BTG with Captive Consumption / Distributed power / Grid Power projects (>500 kW- 2 MW)

- 1. GENERAL
 - a. Name, Address, Phone, Fax & Email of applicant.
 - b. Name and designation of authorized signatory
 - c. Constitution (Private Sector/Proprietorship/joint sector/Coop. etc.)
 - d. Location Address of project (Village, District, State)
- 2. PROJECT DETAILS
 - a. Proposed Installed capacity (MW)
 - b. Proposed Captive / Distributed component and surplus to grid (kW)
 - c. If proposes, waste heat utilization (heating / cooling) furnish details with possible use for cold storage etc with cost and source of finances.
 - d. Cost of the project (As approved by FIs if loan is tie up)
 - i. Civil Works
 - ii. Plant & Machinery
 - iii. Misc. Equipment, Pre-operative expenses, Others
 - e. Anticipated commissioning schedule
- 3. WHETHER TIE-UP/AGREEMENT FINALISED
 - a. PPA: (Yes/No)
 - i. Whether power purchase agreement with SEB or private utilities has been made? If yes, Copy of PPA
 - b. Firming of equipment/technology: (Yes/No)
- 4. TECHNOLOGY Proposed: Gasification with 100% producer Gas Engines / Biomass-Turbine-Generator (BTG)
- 5. BIOMASS
 - a. Biomass used & Quantity used per day / per year
 - b. Envisaged Fuel linkage mechanism.
- 6. AVERAGE COST OF GENERATION (Rs/kWh)
- 7. FINANCING
 - a. Total cost of project as approved by FIs
 - b. Means of financing
 - c. Debt: Equity Ratio
 - d. Promoter's contribution (Equity)
 - e. Term loans with rate of Interest (FI wise)
 - f. Any other source
 - g. Name of the Lead FI (and other FIs, Lending to the Project) complete **Bank & Branch Name with address, Branch Code, RTGS Code, Account No** telephone number, fax number, e-mail etc., and name & designation of the contact person with bank.
- 8. TECHNICAL
 - a. Design & make of gasifier with detail
 - b. Capacity
 - c. Capacity of 100% gas engines & make / Turbines & Generators
 - d. Grid voltage at which interconnection is to be done

(Authorized Signatory) Date /Place

Annexure-V

INDICATIVE FORMAT FOR JOINT COMMISSIONING REPORT (JCR) BIOMASS GASIFIER BASED DISTRIBUTED / OFF-GRID / GRID POWER GENERATION PROJECTS

Reference	Users Name	Name of	Rating /	Mode of	Machine	Date of	Amount of
MNRE in-	& Address	Manufacturer /	capacity	application	No.	Commissioning	CFA
principle		Supplier	of				
approval			systems,				
Letter No.			both for				
& Date			gasifier				
			and				
			engines				
			kW /				
			KVA				
1	2	3	4	5	6	7	8

Certified that:

- i. Training on operation and maintenance and safety aspects has been given adequately to users/ operators of the Institutes/Organizations concerned.
- ii. Operating manuals, warranty card etc. have been provided to the Institute/ Organization concerned.
- iii. Undertakings for the regular operation & maintenance of the systems have been obtained from the concerned Institute/Organization.
- iv. Gasifier system and sub-system (including equipments and instruments) have been verified at site and functioning satisfactorily as per terms & reference of the grant.
- v. Verified operation of project at least a period of one month.
- vi. Verified agreement between the user and supplier of the gasifier systems for full guarantee and warrantee for one year followed by AMC for two years

Name & Address of the Manufacturer / Supplier with seal

User Name & Signature

Signature of authorized verifying authority

Date: Place:

Annexure-VI

1	Indicative Proforma- Verification Check list		
1	Project File No. and date of in-principle approval		
2	Name & address of the Developer		
3	Location of the system (Full address)		
		Approve	l Verified
4	Project Type (Gasification / BTG)		
	Captive Generation in Rice Mills		
	Off grid / Distributed power for villages		
	Grid Connected Project or Combination with captive / distributed / grid		
5	Biomass		
	Rice Husk		
	Wood		
	Other Agro residues (give details of agro residues)		
	Multiple Biomass (give details of other biomass)		
6	Project Type		
	100% Gasification / BTG		
	Dual fuel		
7	Gasifier Supplier Name and Address		
8	Gasifier / BTG Capacity (kW)		
9	Machine number of Gasifier, producer gas engines / turbine / generator set		
	(as provided by the manufacturer)		
10	Load (kW)		
11	Engine / turbines manufacturer		
12	Rating of the engine / turbines (kVA)		
13	Date of commissioning		
14	Total Project Cost (Lakhs) Indicate cost of gasifier, engine, turbines, local distribution network (in meters) etc		
15	Amount of CFA (Lakhs) sanctioned		
16	O&M as per logs		
10	Hours of operation		
	Amount of biomass / rice husk consumed per unit		
	Number of filters changed in a month		
	6		
	Shutdowns in the last three months		
	Revenue collected during last two - three months		E-t-r 1
	Training to operators (by manufacturer): Duration of training <i>On O&M</i>	On site	External
	Duration of training: <i>On Safety aspects</i> Attach original Commissioning Report, Utilization certificates and audited statement of		
17.	expenditure (as per proforma).		
10	Verified operation of project at least a period of one month through log book or other	1	
18.	supporting documents.		
19	Verified agreement between the user and supplier of the gasifier systems for full guarantee	Attech are	
20	and warrantee for one year followed by AMC for two years Support towards project formulation – Indicate Name & Address, Account No of the	Attach cop	у
20	promoter complete details of Bank & Branch Name with address, Recould No of the		
	Code,		
Gasif	ier system and sub-system (including equipments and instruments) have been verified at site ar	nd functionin	σ
	actorily as per terms & reference of the grant	renetionin	D
	ture of authorized independent verification authority		
-	/ Place:		

Annexure-VII

FORM GFR 19 A

(See Government of India's Decision (1) below Rule 150)

Form of Utilization Certificate

S.No.	Letter No. & Date	Amount
		Total

Certified that out of Rs...... of grants-in-aid sanctioned during the year under this Ministry/Department Letter No. given in the margin and Rs..... on account of unspent balance of the previous year, a sum of Rs...... has been utilised for the purpose of for which it was sanctioned and that the balance of Rs...... remaining unutilised at the end of the year has been surrendered to Government (vide No...... dated) / will be adjusted during towards the grants-in-aid payable during the next year.

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.

Kinds of checks exercised :

1) 2) 3) 4)

5)

Signature Designation Date

SPACE BELOW FOR USE IN THE MNES

Countersigned by the Division concerned.

SSO / PSO / DIRECTOR

HEAD OF THE DIVISION

ANNEXURE-VIII

GENERAL TERMS AND CONDITIONS FOR GRANTS BY GOVERNMENT FOR BIOMASS ENERGY & CO-GENERATION PROGRAMME

- (i) Approval of the proposal and the grant being released is for specific project and the grant is required to be spent for the project within the stipulated time. Any portion of the amount sanctioned which is not utilized would be required to be surrendered to the Government of India and carry forward of funds to the next financial year for utilization for the project during that year may be considered with the specific approval of this Ministry.
- (ii) The achievements made during the course of the project will be photographically covered from time to time and a copy of each such photograph will be sent to this Ministry for information and record.
- (iii) The organization will arrange to display a Notice Board at prominent place at the project site to the effect that the project has been financially supported by Ministry of New & Renewable Energy (MNRE).
- (iv) The organization shall ensure that the time schedule laid down for the execution of the project is strictly followed.
- (v) The organization would render to this Ministry an audited statement of accounts including comments of the Auditor(s) regarding the observance of the condition governing the grant within six months following the end of each financial year.
- (vi) The Comptroller and Auditor General or any other Agency/officer(s) authorized by this Ministry will have the right of access to the books and accounts of the organization for grant received from the Government.
- (vii) The recipient financial institution shall provide utilization certificates in the prescribed format as per the GFR form 19A (Annexure-VII). Audited Statement of Expenditure to be submitted by the grantee organization at the time of seeking next installment as per the Terms & Condition of the sanction.
- (viii) Equipments acquired with Govt. of India assistance should not be disposed of or encumbered or utilized for purpose other than for which grant has been sanctioned without prior approval of the Ministry. Separate Stock Register has to be maintained by the Organization for these items procured through Government funds and whose value is more than Rs 10,000/-.
- (ix) The organization shall furnish a final commissioning report within three months of project commissioning incorporating salient technical features of the project and summary of its performance.
- (x) MNRE reserves the right to add/alter/change these conditions at its sole discretion in the wider interest of the scheme.

Captive Power and Thermal applications in Rice Mills and Other Industries during the remaining period of the 12th Five Year Plan.

1.0 Implementation Strategy:

1.1 Programme Implementing Agencies / Organizations: Project proposals as per guidelines could be submitted online / directly to the Ministry by State Nodal agencies / Departments, Energy Service Companies (ESCOs), Co-operatives, Panchayats, SHGs, NGOs, manufacturers, entrepreneurs, independent power producers, promoters & developers, etc.

1.2 Submission & Approval Process:

1.2.1 The following methodology would be followed for submission and approval of project proposals:

- i. Programme Implementing Agencies / Organizations as given in para 1.1 above will submit proposals to the Ministry with requisite information for gasifier based captive power and thermal applications in industries as per indicative proforma given at *Annexure I, II & III*.
- ii. A Project Advisory Committee (PAC) set up by the Ministry would evaluate and recommend the proposals for issue of in-principle approval based on the programme guidelines, project details, commissioning schedule. Subsequently, concurrence for issuing inprinciple approval for new proposals submitted to the Ministry would be sought from IFD before taking approval from the competent authority.

2.0 Central Financial Assistance (CFA)

Central Financial Assistance in the form of capital subsidy would be provided to biomass gasifier projects in industries and other provisions are given below:

2.1 Capital subsidy for Biomass Gasifiers for thermal and electrical applications

- i) Rs.2.0 lakh / $300 \text{ KW}_{\text{th}}$ for thermal applications.
- ii) Rs.2.5 lakh / 100 KW_{e} (for electrical applications through dual fuel engines.
- iii) Rs.10.00 lakhs / 100 Kw_e for 100% producer gas engines with gasifier system.
- iv) Rs. 8.00 lakhs / 100 Kw_e for 100% producer gas engine alone.

2.2 Capital Subsidy for deployment of biomass Gasifiers with 100% producer gas engines in Institutions for captive use:

- i) Rs. 15.00 lakhs / 100 Kw_e for 100% producer gas engines with gasifier system
- ii) Rs. 10.00 lakhs / 100 Kw_e for 100% producer gas engines alone

2.3 Incentives / service charges to SNAs.

Incentives / service charges @ Rs.1.00 lakh / MW_e (or equivalent) would be provided to SNAs on pro-rata basis, subject to a ceiling of Rs.5.00 lakh / project, for their active involvement in promoting Biomass Power projects.

2.4 The capital subsidy will be considered subject to the following :-

- i) The amount of capital subsidy would be calculated on the basis of installed capacity;
- ii) CFA would be limited to a maximum capacity of 5 MW, irrespective of the installed capacity of the project.
- iii) In case of Special Category States (NE Region, Sikkim, J&K, Himachal Pradesh and Uttaranchal), 20% higher capital subsidy than that for General Category States would be provided.

3.0 Pattern of Release of funds:

- iv. After receipt of the verification and commissioning report and other requisite documents / reports from the verification agency as stated in para 4.0 below, the case would be processed for sanction for the payment of eligible CFA after taking IFD's concurrence and approval of the competent authority.
- v. CFA as applicable under the scheme will be disbursed post-commissioning through one installment directly to the promoters or lending institutions / FIs after receipt of commissioning & verification reports and submission of the requisite documents / reports.
- vi. The service charges for Independent Verification Agency (IVA) or State Nodal Agencies (SNAs), as the case may be would be provided after commissioning and certification by the designated agencies as per guidelines. The service charges would be provided to the designated agencies, including the state nodal agencies and FIs including banks to cover their expenses.

4.0 Independent Verification system

- 4.1 The Ministry will also separately empanel Independent Verification Agencies (IVA) other than State Nodal agencies.
- 4.2 Verification would be conducted after operation of project at least for a period of one month.
- 4.3 The Independent Verification Agencies would be required to furnish the following requisite documents / reports:
 - v. Verification and commissioning reports along with Joint Commissioning Report as per the indicative format given at *Annexure-IV*. The verification report would be submitted covering various items as per details as per indicative proforma given in *Annexure-V*.
 - vi. Statement of Expenditure duly audited by the Chartered Accountant or other designated authority as per Govt. of India Rules.
 - vii. The Utilization Certificates in the prescribed format as per the GFR Form 19A to be submitted after receipt of funds (*Annexure-VI*).
 - viii. Verifying agency certificate that the agreement between the user and supplier of the gasifier systems for full guarantee and warrantee for one year followed by AMC for two years has been entered into.
 - ix. General terms and conditions for grants by government for biomass programme are given at **Annexure-VII**.

Annexure-I

PART - D

FORMAT FOR BASIC INFORMATION FOR PROJECTS ON BIOMASS GASIFIER SYSTEMS FOR THERMAL AND ELECTRICIAL APPLICATIONS, 100% PRODUCER GAS BASED PROJECTS AND CONVERSION OF EXISTING POWER PLANTS

Sl. No.	User's address Mode of	Name of Manufacturer	Rating of system Thermal /	No. of systems proposed	Unit Cost Estimate /	Amount of Central Financial
	application	/ Supplier	Mech./ Electrical		actual price as intimated by the user /	Assistance (CFA) as per
			Licencea		manufacturer	approved scheme of
						Biomass Gasifier
						Gasilier

Certified that:

- 1. Certified that adequate quantity of surplus biomass is available at the site and user/applicant is genuinely interested for installation and operation of gasifier on regular basis.
- 2. User Industry has agreed to provide balance funds over and above CFA for installation of proposed gasifier system.
- 3. User Industry has agreed to operate and maintain the system at their own on a regular basis.

Name & Signature of the Promoter/User

(Countersigned by Manufacturer)

Date: Place:

Annexure-II

Guidelines for Filling up of Proforma for submission of the Project Proposal on **Biomass Gasification Based Captive Power Generation and thermal applications** in Industries (<100 kW)

9. Name and full postal address of the Industry

- Name of the contact persons а
- b. Name and full postal address of the Industry
- c. Fax No / Email.: if any
- d. Telephone No.
- e. Mobile No.
- f. Registration No. of Rice Mill (e.g. SSI etc.) (copy enclose)

10. **Details of the Industry:**

- a. Present installed Capacity for power & thermal need of industry
- b. Average daily operation hrs per day
- Average days of operation in a year days /years C.
- d. Whether having electricity connection Yes / No
- e. Existing Diesel Engines
 -kW i. Capacity-
 - ii. Make / Model No.
 - iii. Year of purchase
 - iv. Present Diesel consumption liter per hour
- Brief description of the Industry with existing process and proposed process with f. gasifier for thermal and / or electrical applications. Pl indicate present conventional fuel used, hrs of operation, cost of fuel,

11. Details of proposed Gasifier to be installed

- With 100% producer gas engines, if required. a.
- **Retrofitted with existing / new DG sets** h
- **Retrofitted with boiler / furnace** С
 - i. Name of the supplier of gasifier / producer gas engine / DG sets
 - ii. Capacity (kW)
 - iii. Type of biomass to be used
 - iv. Biomass consumption Kg/hr
 - v. Availability of biomass and its cost and proposed supply mechanism
 - vi. Expected saving and economics etc
 - vii. Cost of Gasifier / producer gas engine / DG sets if new (any other equipments)
 - viii. Civil & Other cost
 - ix. Total cost in Rs.....
 - x. Copy of Invoice, time schedule for supply & terms and condition of warrant and charges for 2 years AMC (Please attach copies)
- Expected date of commissioning. d.

12. **Financing Details**

- **Own Equity** а
 - b. If loan sought form the banks
 - i. Total loan Amount sanctioned / sought Rs.
 - ii. Name & full Address of the Bank / Branch
 - c. Central Financial assistance (Subsidy from MNRE) Rs.....

* - in the absence of full details, proposals will not be considered for approval in-principle.

- Rs.

13. Details of Bank Account of Industry:

- a. Name of account Holder
- b. Name & Address of the Bank& Branch
- c. Branch Code
- d. RTGS No and MICR Code
- e. Bank Account No

14. In case, loan taken from bank

- a. Name & Address of the Bank& Branch
- b. Branch Code
- c. RTGS and MICR Code
- d. Loan Account No of the Bank
- 15.
- 16. Certificates Please send the following certificates while submitting the proposal to the MNRE along with covering letter seeking financial support from the MNRE addressed to Dr D K Khare, Director, Ministry of New & Renewable Energy, Block No. 14, CGO Complex, Lodhi Road, New Delhi-110003 (E-mail <u>dkkhare@nic.in</u> Tele Fax no 011-24363402):

Certificate from developer / owner of the rice mill

This is to certify that the above information is correct to the best of my knowledge.

Signature of the developer / owner of the industry with full name & address with seal.

Date: Place

Certificate from Forwarding Agency, if any.

This is to certify that the above information has been verified and are found correct to the best of my knowledge.

() Signature of the forwarding agency with full name & address with seal.

Date:

<u>Place</u>

.

APPLICATION FORMAT FOR CAPITAL SUBSIDY (BIOMASS GASIFIER PROJECTS FOR ELECTRICAL AND THERMAL **APPLICATIONS IN INDUSTRY)**

1. **GENERAL**

(i)	Name, Address, Phone, Fax & :	
	Email of the Promoter and industry separately.	
(ii)	Name and designation of	:
	authorized signatory	
(iii)	Constitution (whether Co-operative/	:
	Private Sector/Public Ltd/	
	joint sector/Public Sector Company etc.)	
(iv)	Location of the Project with address	:
PRO.	IECT DETAILS	
(i)	Installed capacity (MW)	:
	(a) Thermal (MW)	

- (b) Power (MW)
- Captive requirement (MW) (ii)
- (iii) Surplus Exportable (MW), if any

3. DETAILS OF TECHNOLOGY USED WITH SCHEMATIC DIAGRAM etc (Please specify whether Gasification for electrical / thermal applications or both)

:

:

:

٠

:

BIOMASS 4.

2.

(i)	Biomass proposed	:
(ii)	Quantity required per day	:
(iii)	Biomass Availability in the region	:

(iii) Biomass Availability in the region

5. SUPPORT FUEL

Type of other fuels, if proposed to be used as : Support / supplementary fuel

6. **AVERAGE COST OF GENERATION (Rs/Kwh) and OTHER BENEFITS GIVE DETAIL:**

7. **PROJECT DETAILS**

- \triangleright Total cost of project
 - i. **Civil Works**
 - Plant & Machinery ii.
 - Misc. Equipment iii.
 - Pre-operative expenses iv.
 - Others v.
 - If loan sought, total cost as approved by FIs :
- Means of financing
 - (i) Debt : Equity Ratio
 - (ii) Promoter's contribution (Equity)
 - (iii) Term loans with rate of Interest (FI wise):
 - (iv) CFA from MNRE
 - (iv) Any other source
- Loan repayment period (FI Wise) : \geq
- \geq Anticipated commissioning schedule

8. Details of Company / Rice Mill:

- i. Name and Address of the Company / Rice Mill with City, District, State & Pin Code
- ii. Act/Registration No:
- iii. Date of Registration (DD/MM/YYY):
- iv. Registering Authority
- v. State of Registration:
- vi. TIN Number
- vii. TAN Number

9. Full detail of the Bank Account of Rice Mill / Rice Mill owner:

- i. Name of account holder with E-mail / telephone no / fax no etc
- ii. Name & Address of the Bank & Branch
- iii. Branch Code
- iv. RTGS and MICR Code
- v. Bank Account No

10. In case, loan taken from bank

- i. Name & Address of the Bank& Branch
- ii. Name of the contact person with E-mail / telephone no / fax no etc
- iii. Branch Code
- iv. RTGS & MICR Code
- v. Loan Account No of the Bank

11. Enclosure check list / whether enclosed (Please tick)

1		One copy of DPR	()
2	2.	Copy of PPA/No objection certificate under section 44 if required	()
3	3.	Copy of Statutory clearances / State Government approvals	()
Z	ŀ.	Authorized / attested copies of loan Agreement (s)	()
5	5.	Sanction Order of FI(s)	()
e	5.	Appraisal Note of FI(s)	()
7	7.	Eligibility check list	()
8	8.	Disbursement Schedule (FI-wise)	()

9. Any other (please specify)

12. Any other issues related to the project

13. Enclose all relevant documents of the industry, statuary clearances sought, pollution clearances etc.

AUTHORIZED SIGNATORY

Annexure-IV

INDICATIVE FORMAT FOR JOINT COMMISSIONING REPORT (JCR) BIOMASS GASIFIER BASED CAPTIVE POWER GENERATION / THERMAL APPLICATIONS PROJECTS

DC	TT	NL C			M 1'		
Reference	Users	Name of	Rating /	Mode of	Machin	Date of	Amount of
MNRE in-	Name &	Manufacturer	capacity	application	e No.	Commissioning	CFA
principle	Address	/ Supplier	of				
approval			systems				
Letter No.			, both				
& Date			for				
			gasifier				
			and				
			engines				
			kWe /				
			kWth				
			and				
			engine				
			capacity				
			KVA				
1	2	3	4	5	6	7	8

Certified that:

- iii. Training on operation and maintenance and safety aspects has been given adequately to users/ operators of the Institutes/Organizations concerned.
- iv. Operating manuals, warranty card etc. have been provided to the Institute/ Organization concerned.
- v. Undertakings for the regular operation & maintenance of the systems have been obtained from the concerned Institute/Organization.
- vi. Gasifier system and sub-system (including equipments and instruments) have been verified at site and functioning satisfactorily as per terms & reference of the grant.
- vii. Verified operation of project at least a period of one month.
- viii. Verified agreement between the user and supplier of the gasifier systems for full guarantee and warrantee for one year followed by AMC for two years

Name & Address of the Manufacturer / Supplier with seal

User Name & Signature

Signature of authorized verifying authority

Date:

Place:

Annexure-V

	Indicative Proforma- Verification Check list	nnexure-V	
1	Project File No. and date of in-principle approval		
2	Name & address of the Developer		
3	Location of the system (Full address)		
		Approved	Verified
4	Project Type (Gasification)	TT	
	Captive Generation		
	Thermal Application		
	Grid Connected Project or Combination with captive / distributed / grid		
5	Biomass		
J	Rice Husk		
	Wood		
	Other Agro residues (give details of agro residues)		
	Multiple Biomass (give details of other biomass)		
(
6	Project Type		
	100% producer gas engines / Dual fuel		
_	Thermal		
7	Gasifier Supplier Name and Address		
8	Gasifier Capacity (kWe / kWth)		
9	Machine number of Gasifier, producer gas engines / turbine /		
	generator set (as provided by the manufacturer)		
10	Load (kWe / kWth)		
11	Engine manufacturer		
12	Rating of the engine (KVA)		
13	Date of commissioning		
14	Total Project Cost (Lakhs) (Indicate cost of gasifiers, engine, etc)		
15	Amount of CFA (Lakhs)		
16	O&M as per logs		
	Hours of operation		
	Amount of biomass / rice husk consumed per unit of electricity or hr if		
	thermal		
	Number of filters changed in a month for electrical system		
	Shutdowns in the last three months		
	Revenue collected / saving of conventional fuels during last one months	T T	
	Training to operators (by manufacturer): Duration of training On O&M	On site	External
	Duration of training: On Safety aspects etc		
	Attach original Commissioning Report, Utilization certificates and audited		
17.	statement of expenditure (as per proforma).		
	Verified operation of project at least a period of one month through log		
18.	book or other supporting documents.		
19	Verified agreement between the user and supplier of the gasifier systems		
-/	for full guarantee and warrantee for one year followed by AMC for two		
	years	Attach copy	V
20	Support towards project formulation – Indicate Name & Address, Account		1
_ V	No of the promoter complete details of Bank & Branch Name with address,		
	Branch Code, RTGS Code,		
Gasi		vorified at a	ito and
	fier system and sub-system (including equipments and instruments) have been tioning satisfactorily as per terms & reference of the grant	vermed at s	
	tioning satisfactorily as per terms & reference of the grant		
	ature of authorized independent verification authority		
Date	e / Place:		

FORM GFR 19 A

(See Government of India's Decision (1) below Rule 150)

Form of Utilization Certificate

S.No.	Letter No. & Date	Amount
		Total

Certified that out of Rs...... of grants-in-aid sanctioned during the year under this Ministry/Department Letter No. given in the margin and Rs..... on account of unspent balance of the previous year, a sum of Rs...... has been utilised for the purpose of for which it was sanctioned and that the balance of Rs...... remaining unutilised at the end of the year has been surrendered to Government (vide No...... dated) / will be adjusted during towards the grants-in-aid payable during the next year.

2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.

Kinds of checks exercised :

1) 2) 3)

- 4)
- 5)

SPACE BELOW FOR USE IN THE MNES

Signature Designation Date

Countersigned by the Division concerned.

SSO / PSO / DIRECTOR

HEAD OF THE DIVISION

GENERAL TERMS AND CONDITIONS FOR GRANTS BY GOVERNMENT FOR BIOMASS PROGRAMMES

- (xi) Approval of the proposal and the grant being released is for specific project and the grant is required to be spent for the project within the stipulated time. Any portion of the amount sanctioned which is not utilized would be required to be surrendered to the Government of India and carry forward of funds to the next financial year for utilization for the project during that year may be considered with the specific approval of this Ministry.
- (xii) The achievements made during the course of the project will be photographically covered from time to time and a copy of each such photograph will be sent to this Ministry for information and record.
- (xiii) The organization will arrange to display a Notice Board at prominent place at the project site to the effect that the project has been financially supported by Ministry of New & Renewable Energy (MNRE).
- (xiv) The organization shall ensure that the time schedule laid down for the execution of the project is strictly followed.
- (xv) The organization would render to this Ministry an audited statement of accounts including comments of the Auditor(s) regarding the observance of the condition governing the grant within six months following the end of each financial year.
- (xvi) The Comptroller and Auditor General or any other Agency/officer(s) authorized by this Ministry will have the right of access to the books and accounts of the organization for grant received from the Government.
- (xvii) The recipient financial institution shall provide utilization certificates in the prescribed format as per the **GFR form 19A** (**Annexure-VI**). Audited Statement of Expenditure to be submitted by the grantee organization at the time of seeking next installment as per the Terms & Condition of the sanction.
- (xviii) Equipments acquired with Govt. of India assistance should not be disposed of or encumbered or utilized for purpose other than for which grant has been sanctioned without prior approval of the Ministry. Separate Stock Register has to be maintained by the Organization for these items procured through Government funds and whose value is more than Rs 10,000/-.
- (xix) The organization shall furnish a final commissioning report within three months of project commissioning incorporating salient technical features of the project and summary of its performance.
- (xx) MNRE reserves the right to add/alter/change these conditions at its sole discretion in the wider interest of the scheme.