F. No. 23/1/2012-SWES Government of India Ministry of new and renewable energy Wind Power Division

> Block-14, CGO Complex, Lodi Road, New Delhi-110003 Dated: 15.01.2016

Head, State Nodal Departments/ State Nodal Agencies/ Other concerned implementing Agencies.

Sub: Additions/Modifications to the administrative sanction order no 23/1/2012-SWES dated 04.09.2013 for continuation of the scheme on "Small wind energy and hybrid systems (SWES)"-Reg.

Sir,

To

With reference to the above and In continuation to this Ministry administrative sanction order of even number dated 16.04.2010 and 24.09.2013 regarding continuation of Small wind energy and hybrid systems programme, the undersigned is directed to convey the following modifications/additions in the above scheme.

2. Installation of Aero-generators/SWES systems on telecom towers will also be eligible for CFA under community users. However "either 5.% to 10 % power of the installation capacity of the SWES system or one street light of 20 Watt capacity within 50 metre of distance from the telecom tower, for each 2kW capacity of SWES system has to be shared for community purpose". The manufacturers/Beneficiary will identify suitable telecom towers and prepare a bundled proposal having a minimum cumulative capacity of 20 kW and a minimum number of 10 systems and submit to MNRE through corresponding State Nodal Agencies or Bank/Financial Institutions.

3. The service providing company that owns the telecom tower will be the beneficiary.

4. Under the programme CFA will be provided for SWES systems which are having valid Type test reports from NIWE or any International recognised testing agencies duly accredited by their corresponding national accreditation bodies affiliated to International Laboratory Accreditation Cooperation (ILAC) under Mutual Recognition Arrangement (MRA). Accordingly an indicative list of recognised test agencies is placed at Annexure-I.

5. For availing MNRE subsidy manufacturers must establish manufacturing base in India as per ISO standard. In this regard, manufacturer has to produce the following valid documents. Subsequent to the submission of documents a team of officials from MNRE/NIWE will visit the manufacturing facility for its evaluation.

(i) Details of manufacturing facility

(ii) Certificate from District Industry Centre (If Any)

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- (iii) Copy of the Pollution control board clearance (if any).
- (iv) Copy of ISO Certificate
- (iv) Copy of Certificate of Importer Exporter Code (I E C) (if any)
- (v) Copy of certificate of Incorporation & Memorandum of Association.

6. A maximum 500 kW capacity of a new type tested small wind turbine model will be initially supported without manufacturing base in India to enable the installation of new technologies and testing the performance of the products in Indian conditions.

7. All SWES systems installed in telecom towers has to be under warranty from the installer as per the scheme. Project monitoring report for telecom tower installations has to be prepared with specific information in regard to diesel savings.

8. All other terms and conditions are same as applicable under administrative sanction no. 23/1/2012-SWES dated 24.09.2013 and 23/1/2009-SWES dated 16.04.2010.

9. This issues with the concurrence of IFD vide diary no. FTS/ JS & FA dated 01.05.2015 and FTS/IFD dated 01.09.2015 and with approval of Secretary vide Dy. No FTS/Secretary dated 14.01.2016.

Yours faithfully Prabir Kumar Dash 15 Scientist-C

Сору То:-

- 1. All States/UTs Implementing Departments/Agencies.
- 2. PS to Minister (NRE).
- 3. PSO to secretary
- 4. PS to JS (WE)/ JS & FA.
- 5. Special Secretary (T), DoT, Room No. : 318, Ministry of Communications and IT, Sanchar
- Bhawan 20, Ashoka Road, New Delhi 110001.
- 6. MD, IREDA/ Principal Adviser (CA & QoS), TRAI.
- 7. Director (GU).
- 8. Dy. CA, MNRE/PAO, MNRE /Cash Section/IFD.

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Prabir Kumar Dash Scientist-C

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1. <u>Indicative list of Test Agencies for Aero –generators in compliance with IEC 61400-2, IEC 61400-12-1, JSWRA 00001 (JAPAN), MCS-006 (UK) and AWEA 9.1-2009 (USA) standards.</u>

- a. NIWE, India
- b. DNV, Denmark
- c. GL, Germany
- d. TUV SUD, Germany
- e. TUV NORD, Germany
- f. DEWI OCC, Germany
- g. Intertek, USA
- h. NREL, USA
- i. WINDTEST, DNV-GL
- j. Under Writers Laboratory.

2. Indicative list of test agencies for other components.

a. For Photovoltaic Module:

Sr.No.	Laboratory / organisation	Description / Specifications
(i)	National Institute of Solar Energy	Power rating up to 100 Wp as per IEC
	(NISE)	61215
(ii)	Electronic Regional Test Laboratory	Standard Test Condition (STC) test facility.
	[(ERTL-(E)]	
(iii)	Electronic Test and Development	Power rating up to 100 Wp as per IEC
	Centre (ETDC-B)	61215. Under ICEEE-CB, IEC 61701.
(iv)	UL(B)	Power rating up to 400 Wp as per IEC
		61215, IEC 61730 Pt. II and IEC 61701.
(v)	TUV - Rhineland	Power rating up to 400 Wp as per IEC
		61215 & 61730 Pt. II
(vi)	Electrical Research Development	Power rating up to 3 Wp to 300 Wp as per
	Association (ERDA), Vadodara	IEC 61215 and IEC 61646 IS 14286

b. For Batteries:

Sl.No.	Laboratory / organisation	Description / Specifications	
(i)	National Institute of Solar Energy (NISE)	MNRE approved	
(ii)	Electronic Regional Test Laboratory [(ERTL-(E)]	Up to 1000 Ah	
(iii)	Electronic Test and Development Centre (ETDC - B)	Up to 100 Ah	
(iv)	Central Power Research Institute (CPRI-(B)) Up to 1000 Ah		
(v)	Electrical Research Development Association	Up to 1000 Ah	
	(ERDA), Vadodara		

c. For Inverters:

SI. No.	Laboratories /	Inverter > 100 W	
	Organisations	Efficiency	Environmental
(i)	National Institute of Solar	Up to 10 KVA	Including IP MNRE
	Energy (NISE)	MNRE approved	approved
(ii)	Electronic Regional Test	MNPE approved	MNPE approved
	Laboratory [(ERTL-(E)]		
(iii)	Electronic Test and	Up to 3 KVA	MNRE approved
	Development Centre (ETDC - B)	MNRE approved	
		Inverter >	
		100 W	
		Efficiency	Environmental
(iv)	Central Power Research	Up to 10 KVA	NABL Accredited/ MNRE
	Institute (CPRI-(B))	MNRE approved.	approved
(v)	Electronic Regional Test	Up to 5 KVA	NABL Accredited
	Laboratory [(ERTL-(N)]		
(vi)	UL(B)	Up to 6 KVA	NABL Accredited
		NABL Accredited	
(vii)	TUV - Rhineland	Up to 10 KVA	NABL Accredited
		NABL Accredited	
(viii)	Inter Tek	Up to 5 KVA	NABL Accredited
		NABL Accredited	
(xi)	Electrical Research	Up to 100 KVA	Facility available for
	Development Association		testing
	(ERDA), Vadodara		

d. For Charge controllers:

SI.N	Laboratorias / Organisations	Charge Controller	
о.	Laboratories / Organisations	Protection	Environmental
(i)	National Institute of Solar	MNRE approved	Including IP MNRE
	Energy (NISE)		approved
(ii)	Electronic Regional Test	NABL Accredited	MNRE approved
	Laboratory [(ERTL-(E)]	MNRE approved	
(iii)	Electronic Test and	MNRE approved	MNRE approved
	Development Centre (ETDC - B)		
(iv)	Central Power Research	MNRE approved	NABL Accredited /
	Institute [CPRI-(B)]		MNRE approved
(v)	Electronic Regional Test		NARL Accredited
	Laboratory [(ERTL-(N)]	Up to 5 KW	NABL ACCIEUTEU
(vi)	UL(B)	Up to 6 kW	NABL Accredited
(vii)	TUV - Rhineland	Up to 10 kW	NARL Accredited
		NABL Accredited	NABL ACCIEUTED
(viii)	Inter Tek	Up to 5 kW	NARL Accredited
		NABL Accredited	NABL ACCIEUTED
(ix)	Electrical Research	Up to 100 KVA	Facility available for

Development	Association	testing
(ERDA), Vadodara		

e. For Cables and Conductors:

SI. No.	Laboratories / Organisations	Description
(i)	Electrical Research Development Association (ERDA), Vadodara	All size of PVC/Rubber cables and overhead conductors can be tested for their insulation and mechanical properties
(ii)	Central Power Research Institute (CPRI), Bangalore	All size of PVC/Rubber cables and overhead conductors can be tested for their insulation and mechanical properties