

# **Nepal Electricity Authority** (A Government of Nepal Undertaking)

# **Invitation of Proposals**

for

# Participation in the sale of Energy Efficient Appliances

# **Issued by:**

Nepal Electricity Authority Energy Efficiency and Loss Reduction Department Durbar Marg, Kathmandu

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# NEPAL ELECTRICITY AUTHORITY



# **Invitation for Proposals for**

# Participation in the Sale of Energy-Efficient Appliances

- 1. Nepal Electricity Authority (NEA) intends to promote among its electricity consumers the use of energy-efficient technologies as a part of its Energy Conservation (EC) and Demand Side Management (DSM) effort. As part of this effort, NEA wishes to enlist the support of the private sector firms in the sale of energy-efficient ceiling fans and energy efficient water pumps to its consumers from NEA's designated Distribution Centers located across the country, for which NEA will provide space for setting up sales outlet at each Distribution Center. The participating firms shall be responsible for the entire costs incident to the procurement, transportation and delivery, and retail sale of the goods including applicable taxes and duties, and cost of replacement of defective goods as per the product warranty. Technical specifications of Ceiling fans and Water pumps to which the offered goods must conform, and Conditions of Participation, can be collected during office hours from the address mentioned at point 6 below or can be downloaded from NEA website: www.nea.org.np
- 2. NEA now invites proposals from interested firms (suppliers or manufacturers) to submit their technical and financial proposals (sealed in separate envelops) for the following goods:

Lot 1: Energy-efficient ceiling fans.

Lot 2: Energy-efficient water pumps

A firm may submit proposal for Lot 1 or Lot 2 or both.

- 3. The proposal shall include the following:
  - Company registration, VAT registration and Tax clearance certificates of the participating firms
  - Brand of goods that will be offered with manufacturer's details including, among others, name of the manufacturer, address of correspondence, technical data/specifications of the offered goods, annual production capacity, and annual production and supply records of last three years, financial statements of the last three years.
  - Test reports issued by a reputed test lab to show conformity to the specifications.
  - Samples of each type and rating of the goods for which the proposal will be submitted.
  - The financial proposal indicating firm retail unit prices of goods (energy-efficient ceiling fans and energy-efficient water pumps) valid for 24 months from the date of proposal submission.
  - Supplier's product replacement warranty of at least three (3) years against quality/manufacturing defects.
- 4. NEA will provide only the space for setting up the sales outlet at each Distribution Center for one-year period, subject to renewal, if necessary. However, NEA will also implement, at its own cost, an outreach program to communicate to its consumers the benefits of the use of energy-efficient technologies, through print and electronic media.
- 5. A maximum of three eligible firms will be selected based on the outcome of the evaluation of the proposals taking into account the past performance, quality of the product, annual production capacity, conformity to the specifications, test certificates, terms of warranty, and the unit prices of the goods.
- 6. The Proposals must be submitted not later than 1 P.M., March 30, 2018 to the following address:

Energy Efficiency and Loss Reduction Department Tel: 4153206

Nepal Electricity Authority Email: eelrd@nea.org.np
Durbar Marg, Kathmandu Website: www.nea.org.np

If the last date of submission happens to be a public holiday, the submission shall be made on the next working day.

- 7. Applications received after the deadline will not be entertained. NEA reserves the right to reject any or all proposals, or cancel the process altogether without assigning any reason whatsoever at any time.
- 8. The interested firms may contact for clarification at the above address.

## TERMS AND CONDITIONS OF PARTICIPATION

- 1. The successful firms ("Firms" hereinafter) shall be responsible for all costs of the goods incident to manufacturing; transportation, customs duties, storage and final sale from NEA designated outlets located at various distribution centers. The Firm shall also be responsible for display and storage at the distribution counter including racks, furniture, and any other facilities that may be necessary for the effective sale of the products. The quoted prices will be the firm retail price at which the Firm offers to sell the goods to the consumers.
- 2. The total goods to be sold have been sliced into two Lots as follows:
  - Lot 1: Energy-efficient ceiling fans
  - Lot 2: Energy-efficient water pumps

The Firm may submit proposals for Lot 1 or Lot 2 or both.

- 3. NEA shall provide the space to the successful firms for setting up the sales counters at designated NEA distribution centers across Nepal.
- 4. NEA shall implement awareness campaign highlighting the benefits of the use of energy efficient goods/appliances through print and electronic media.
- 5. NEA's estimate of goods proposed for sale is:
  - 200,000 units of Energy-efficient ceiling fans of 1200 mm size.
  - 1000 units of energy-efficient submersible water pumps of 0.5, 1 and 2 HP rating in the ratios of 30%, 60% and 10% respectively.
  - 1000 units of energy-efficient surface water pumps of 0.5, 1 and 2 HP rating in the ratios of 30%, 60% and 10% respectively.

NEA however does not guarantee in any way that these figures are final. Therefore, the proposers are requested to make their own assessment of demand and submit the price proposals accordingly. It is the sole responsibility of the selected firms to sale the goods. NEA shall not be liable to compensate for any unsold goods.

- 6. NEA may apportion the total quantities among the selected firms and allocate the sales counters, as appropriate.
- 7. The Firms shall also provide a software package to effectively manage the sale of the goods. The software shall have a provision to input, among others, NEA consumers numbers, number of goods sold, unit price, total amount paid, date of sale, defect report, etc.
- 8. The product warranty shall be of 3 (three) years counted from the date of sale of the goods, and shall cover replacement of any goods which breakdown due to quality or manufacturing defects within the period of three (3) years from the date of sale of the goods.

- 9. If NEA receives complains regarding any defects in the sold goods, NEA will instruct the corresponding supplier/firm to take care of the complaint and rectify the defects. It will be the responsibility of the supplier/firm to abide by such instructions from NEA. If instructions are not followed, NEA shall terminate the service from corresponding supplier/manufacturer and shall blacklist the same for future assignments.
- 10. NEA may perform test on the offered goods for such parameters such as power factor, power consumption, and lumens output to ascertain the compliance of the offered goods with the technical specifications.
- 11. The submitted financial proposals shall be opened at 2 PM on the last day of proposal submission in the presence of the representatives of the participating firms, who choose to attend.
- 12. The evaluation of the proposals will be done to confirm if the offered goods meet the technical specifications and other requirements as specified herein and in the Invitation for Proposal. The proposals not submitting necessary documents as specified herein and in the Invitation for Proposal may not be considered for evaluation.
- 13. The price of the goods shall be valid for a minimum of twenty-four (24) months from the date of submission of the proposal. It is estimated that the agreement will be signed within 6 months from the date of proposal submission, and 6 months will be required for the manufacture and supply/delivery of the goods, and one year for the sale of the goods. If the Firm determines that the above-specified periods for the manufacturing, supply/delivery and sale of the goods are too optimistic or pessimistic, the Firm may submit a revised estimate.
- 14. Any fall in prices of the goods due to technological innovation during the supply period shall be reflected in the retail prices of the goods charged to the customers.
- 15. The Firm shall supply type test certificate to confirm that that the proposed goods for sale meet the technical specification, which is made part of this Terms and Conditions of Participation.
- 16. NEA will not have any liability for the goods sold by the supplier/firm to the consumers and NEA also will not have any financial obligations for any or all of the goods that remain unsold at the end of this scheme.
- 17. NEA will not object on sale of goods in the quantity higher than the estimate mentioned herein within the stipulated period.
- 18. Nepalese law shall be applicable in any dispute arising in connection with this agreement or the sale of goods.

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# **Technical Specifications**

## **Energy efficient fans**

## 1. Scope

These specifications cover the requirements of energy efficient ceiling fans suitable for indoor installation on 230 V, 50 Hz supply systems.

#### 2. Service Condition

The ceiling fans shall be designed and constructed for installation and operation under the following conditions:

Ambient temperature: -5°C to 55°C Relative humidity: up to 100%

Altitude: up to 2000 m above the mean sea level

## 3. Standards and Quality Certification

3.1 The equipment specified in this section shall conform to the latest edition of the appropriate BIS specifications and/or other recognised international standards. In particular:

IS 374-1979 Electric ceiling type fans and regulators (Bureau of Indian Standards)

3.2 The manufacturer of the offered goods must have been accredited with the latest edition of ISO 9001 (including design in the scope of registration) quality certification.

## 4. Description

4.1 Technical details are given in Table 1.

#### 4.2 Accessories

The following accessories shall be provided with each ceiling fan.

- Remote control
- Blade set, Hook Assembly, Mounting Kit, Downrod, Canopies

### 4.3 Markings

In addition to the information as required by the governing standard, the fan body shall display the words "Sold under NEA DSM / EC Program" marked with indelible paint.

#### 5. Tests

Tests shall be performed in accordance with the relevant international standards.

## 6. Documentation

- The suppliers shall submit, along with the application, type test reports of the offered goods.
- The suppliers shall submit a proof of manufacturer's accreditation of BEE (Bureau of Energy Efficiency, India) 5 star rating or Energy Star or equivalent international energy rating agency.
- The suppliers shall submit a copy of the Standard governing fabrication and testing of the fittings and accessories for the energy efficient fans.

## 7. Warranty

See the Conditions of Participation

# **Technical requirements**

# TABLE 1

1200 mm
32 Watts
230 m <sup>3</sup> /min
0.9
320 RPM
Brush-less DC type (BLDC)
Aluminum
1.05 mm
Aluminum or Aluminum Alloy
Powder Coating
Shielded
3 years
Remote controlled with timer and sleep mode
140 – 280 V
48 -52 Hz
3
BEE 5 star rating or equivalent

# **Technical Specification**

## **Energy efficient water pumps**

## 1. Scope

These specifications cover the requirements of Energy efficient borewell submersible pumps and surface water pumps suitable for installation on 1-ph, 230 V, 50 Hz supply systems.

## 2. Standards and Quality Certification

- 2.1 The equipment specified in this section shall conform to the latest edition of the appropriate BIS specifications and/or other recognised international standards.
- 2.2 The manufacturer of the offered goods must have been accredited with the latest edition of ISO 9001 (including design in the scope of registration) quality certification.

## 3. Description

3.1 Technical details are given in Table 1 (Submersible pumps) and Table 2 (Surface pumps).

#### 3.2 Accessories

The following accessories shall be provided with each pump.

- Control panel/starter with overload protection, on/off switch, MCB, voltmeter, ammeter enclosed in powder coated MS box of IP52 degree of protection
- Wires and cables
- Erection clamps or special spanners if any.

## 3.3 Markings

In addition to the information as required by the governing standard, the pump body shall display the words "Sold under NEA DSM/EC Program" marked with indelible paint.

#### 4. Tests

Tests shall be performed in accordance with the relevant international standards.

#### 5. Documentation

- The suppliers shall submit, along with the proposal, type test reports of the offered goods.
- The suppliers shall submit a proof of manufacturer's accreditation of BEE (Bureau of Energy Efficiency, India) 5 star rating or Energy Star or equivalent international energy rating agency.

- The suppliers shall submit a copy of the Standard governing fabrication and testing of the fittings and accessories for the submersible pumps.

# 6. Warranty

Please refer to the Conditions of Participation.

# **Technical requirements**

# **TABLE 1 (Submersible Pumps)**

Borewell size	4 inch
Capacity	0.5, 1 & 2 HP
Product Warranty	3 years
Input voltage	160 – 240 V (230 v nominal), Single phase
Frequency	48 - 52 Hz
Power factor	not less than 0.85
Type of Duty	S1 (Continuous)
Direction of rotation	Clockwise
Total maximum head	not less than 100m
Starting method	1Ph -Capacitor Start Capacitor Run
Efficiency label	BEE 5 star-rating or equivalent
Additional Features	Thermal overload protection, control box with suitable starting relay and capacitors, power cable of suitable size and length

# **TABLE 2 (Surface Pumps)**

Power Rating	0.5, 1 & 2 HP		
Input voltage	160 – 240 V (230 v nominal), Single phase		
Frequency	48-52 Hz		
<b>Type of Duty</b>	S1 (Continuous)		
<b>Degree of protection</b>	IP54		
<b>Class of Insulation</b>	В		
<b>Direction of rotation</b>	Clockwise		
Total head	Not less than 40m		
Suction lift	Not less than 7m		
Nominal pipe size	1" x 1"		
Efficiency label	BEE 5 star-rating or equivalent		
<b>Additional Features</b>	Permanent split capacitor (PSC)		
	Thermal overload protection		
	Monoset construction with high quality mechanical seal		
	<ul> <li>Totally enclosed fan cooled motor</li> </ul>		

# **Technical Data Sheet**

(Ceiling Fans)

Parameters	NEA's Requirements	Details to be filled by the proposer			
		Complied? (Yes/No)	Brief Description	Remarks (if not complied)	
Sweep/Size (min)	1200 mm				
Power Rating (max)	32 Watts				
Air Delivery (min)	230 m <sup>3</sup> /min				
Power Factor	0.9				
Speed (min)	320 RPM				
Motor Type	Brush-less DC type (BLDC)				
Blade Material	Aluminum				
Blade thickness (min)	1.05 mm				
Body Material	Aluminum or Aluminum Alloy				
Coating	Powder Coating				
Bearing	Shielded				
Product Warranty	3 years				
Regulator/Control	Remote controlled with timer and sleep mode				
Input voltage	140 – 280 V				
Frequency	48 -52 Hz				
No. of blades	3				
Quality label	BEE 5 star rating or equivalent				

# **Technical Data Sheet**

# (Submersible Water Pumps)

Parameters	NEA's Requirements	Details to be filled by the proposer		
		Complied? (Yes/No)	Brief Description	Remarks (if not complied)
Borewell size	4 inch			
Capacity	0.5, 1 & 2 HP			
Product Warranty	3 years			
Input voltage	160 – 240 V (230 v nominal), Single phase			
Frequency	48 - 52 Hz			
Power factor	not less than 0.85			
Type of Duty	S1 (Continuous)			
Direction of rotation	Clockwise			
Total maximum head	not less than 100m			
Starting method	1Ph - Capacitor Start Capacitor Run			
Efficiency label	BEE 5 star-rating or equivalent			
Additional Features	Thermal overload protection, control box with suitable starting relay and capacitors, power cable of suitable size and length			

# **Technical Data Sheet** (Surface Water Pumps)

Parameters	NEA's Requirements	Details to be filled by the proposer			
		Complied? (Yes/No)	Brief Description	Remarks (if not complied)	
Power Rating	0.5, 1 & 2 HP				
Input voltage	160 – 240 V (230 v nominal), Single phase				
Frequency	48-52 Hz				
Type of Duty	S1 (Continuous)				
Degree of protection	IP54				
Class of Insulation	В				
Direction of rotation	Clockwise				
Total head	Not less than 40m				
Suction lift	Not less than 7m				
Nominal pipe size	1" x 1"				
Efficiency label	BEE 5 star-rating or equivalent				
Additional Features	<ul> <li>Permanent split capacitor (PSC)</li> <li>Thermal overload protection</li> <li>Monoset construction with high quality mechanical seal</li> <li>Totally enclosed fan cooled motor</li> </ul>				