

OP.No. 47 of 2019



From
The Chief General Manager,
Energy Conservation,
APEPDCL
Visakhapatnam.

To
The Secretary,
APERC,
Singareni Bhavan, Red Hills,
Hyderabad – 500 004.

Lr.No. CGM/EC/APEPDCL/VSP/GM/Solar/E-228925/D.No. 86 /19,dt. 26-06-2019

Sir,

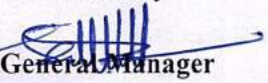
Sub :- APEPDCL – Solar Energy - Seeking approval of Honorable Commission for purchase of power from farmers at INR 1.50/kWh i.e. approval of Honorable Commission for purchase of excess energy injected into Grid from Grid connected Solar Brushless DC (BLDC) agricultural pumpsets in Savaravilli (R) agricultural feeder of Bhogapuram section, Vizianagaram Circle, Andhra Pradesh – Filing of petition at APERC – Filing of petition before Hon'ble APERC – Reg.

Ref:- 1) Minutes of meeting of Principal Secretary, Energy, I&I, GoAP, dt.10.05.2018
2) Minutes of meeting of Principal Secretary, Energy, I&I, GoAP, dt.22.05.2018
3) NREDCAP/SPV Pumps/3/2018, dt.23.05.18
4) Principal Secretary, Energy, I&I, GoAP Lr.No.ENE01/176/2019-POWER-I-E&I&I, dt.21.03.19

The petition for approval of the Honorable Commission for purchase of power from farmers at INR 1.50/kWh i.e. approval of Honorable Commission for purchase of excess energy injected into Grid from Grid connected Solar Brushless DC (BLDC) agricultural pumpsets in Savaravilli (R) agricultural feeder of Bhogapuram section, Vizianagaram Circle, Andhra Pradesh and also seeking consent on implementation of pilot project is herewith filed along with petition fee in the form of DD for an amount of Rs.10000/- vide DD No.843631, dt.18.06.2019 please.

Encl: 1 No.DD for Rs.10000/-
2. Petition – 6nos. sets

Yours faithfully


Chief General Manager
Energy Conservation
APEPDCL:: Visakhapatnam

Copy submitted to Director/Operation/APEPDCL/Visakhapatnam.
Copy submitted to Director/Finance/APEPDCL/Visakhapatnam

BEFORE THE
ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF ANDHRA PRADESH

FILE NO:

Petition No. 47 /2019

IN THE MATTER OF:

Seeking approval of Honorable Commission for purchase of power from farmers at INR 1.50/kWh i.e. approval of Honorable Commission for purchase of excess energy injected into Grid from Grid connected Solar Brushless DC (BLDC) agricultural pumpsets in Savaravilli (R) agricultural feeder of Bhogapuram section, Vizianagaram Circle, Andhra Pradesh

AND

Eastern Power Distribution Company of Andhra Pradesh Limited- Petitioner

Affidavit

I, G. Sarath Kumar, Son of Late Sri. G. Rama Murthy, aged about 58 Years, residing at Visakhapatnam the deponent named above do hereby solemnly affirm and state on oath as under:-

1. That the deponent is the **Chief General Manager/Energy Conservation** of Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL) duly authorized by APEPDCL to make this affidavit on its behalf and the deponent is acquainted with the facts deposed below,
2. I, the deponent named above do hereby verify that the contents of the affidavit and those of the accompanying petition are true to my personal knowledge and verify that no part of this affidavit is false and nothing material has been concealed.


DEPONENT

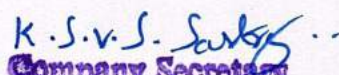
Chief General Manager
Energy Conservation
Corporate Office
APEPDCL, Visakhapatnam

VERIFICATION.

The above named Deponent solemnly affirm at Visakhapatnam on this 20th day of June, 2019 that the contents of the above Affidavit are true to my knowledge no part of it is false and nothing material has been concealed there from.


DEPONENT

Solemnly affirmed and signed before me


Company Secretary
CORPORATE OFFICE
Eastern Power Distribution
Company of A.P. Ltd.,
VISAKHAPATNAM

Chief General Manager
Energy Conservation
Corporate Office
APEPDCL, Visakhapatnam

BEFORE THE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF ANDHRA
PRADESH

FILE NO:

Petition No. 47/2019

IN THE MATTER OF:

Seeking approval of Honorable Commission for purchase of power from farmers at INR 1.50/kWh i.e. approval of Honorable Commission for purchase of excess energy injected into Grid from Grid connected Solar Brushless DC (BLDC) agricultural pumpsets in Savaravilli (R) agricultural feeder of Bhogapuram section, Vizianagaram Circle, Andhra Pradesh

AND

IN THE MATTER OF:

Eastern Power Distribution Corporation of Andhra Pradesh Ltd. (APEPDCL)-Petitioner

Ref: 1) Minutes of meeting of Principal Secretary, Energy, I&I, GoAP dt. 10.05.2018

2) Minutes of meeting of Principal Secretary, Energy, I&I, GoAP dt. 22.05.2018

3) NREDCAP/SPV Pumps/3/2018, dt. 23.05.18

MOST RESPECTFULLY SHOWETH THE SUBMISSION:

1. The APEPDCL humbly submits following proposal for purchase of excess energy from the pilot project of Grid connected Solar Brushless DC (BLDC) agricultural pumpsets

2. GoAP subsidy for Agricultural pumpsets

The Government of Andhra Pradesh (GoAP) has been providing free power supply to agriculture sector and the DISCOMs are compensated through subsidy support annually. For the FY 2019-20, GoAP has committed to a total subsidy of INR 7,064 Cr.

The subsidy support provided by the GoAP to the agriculture segment has been on the rise and is as shown in the table below:

Table 1: Subsidy per pumpset by GoAP

Financial Year	Cost of Service* (CoS) (INR/kWh)	Agricultural subsidy per unit (INR/kWh)
2014-15	5.25	2.97
2015-16	5.38	3.00
2016-17	5.33	2.82
2017-18	5.54	3.37
2018-19 (Approved)	5.88	5.57
2019-20 (Approved)	6.06	6.06

*Approved CoS as per Tariff Order

As shown in above table, agricultural subsidy per unit is on rise in AP and is gradually equating to Cost of Service (CoS) for FY19-20. Further, CoS is increasing 2.91% y-o-y in last 5 years and the levelized CoS for next 25 years is estimated to be INR 7.64/kWh. At levelized CoS of INR 7.64/kWh, annual subsidy per pumpset¹ is INR 50,806.

3. Grid connected solar pumpsets

Grid connected solar pumpsets help harness solar energy to meet the power requirements of the farmers during the day time. The distributed solar power generation also enables in reducing power losses in the network. In addition, some of the other benefits of replacing the existing pumpset with solar powered grid connected pumpset include:


Chief General Manager
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Corporate Office
APEPDCL, Visakhapatnam

¹ Annual consumption by pumpset at 6,650 units based on historic data.

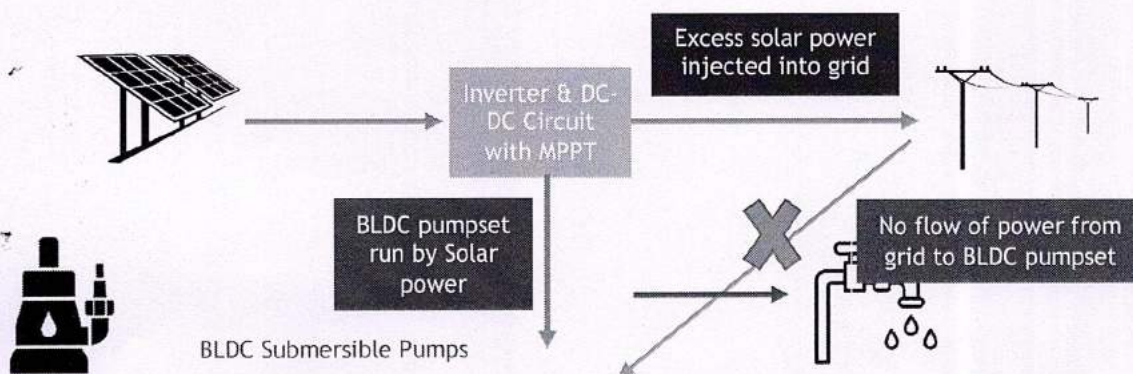
- Installing an efficient pumpset could help reduce power consumption
- Lead to potential agriculture subsidy reduction for the Government
- Additional income for farmers on net injection of power
- Helps contribute towards conservation of ground water
- The distributed nature of Grid connected Solar pumpsets shall reduce T&D losses for APDISCOMs.

The existing pumpset at the farmer-end can be replaced either by an energy efficient AC pumpset or through Brushless DC (BLDC) motor pumpset together with solar panel system.

BLDC motors have lower inertia and better torque control and are 20-25% more efficient than conventional AC motors. Another key advantage of installing a DC pumpset is that drawl of power from the grid for operating the pump is not possible, thereby preventing the load from coming onto the grid and requiring the pump to be operated by the solar panels only. Accordingly, it is proposed to leverage the DC pump technology together with solar panels to replace existing pumpset at farmer-end. MNRE has issued specifications for Solar BLDC motor pumpsets and states like Chhattisgarh, Madhya Pradesh, UP, Rajasthan, Haryana have already invited tenders for procurement of Solar BLDC motor pumpsets.

Replace existing pumpsets with grid connected brushless DC motor together with solar panels

The schematic representation of a Grid connected BLDC pumpset at the farmer-end is shown below:



As shown above, DC power from solar panels is passed through DC-DC circuit and Maximum Power Point Tracker (MPPT) to operate the BLDC submersible pump. Excess solar power is converted to AC power using Inverter and is injected into the grid. The benefits for famers include the following:

- Access to energy efficient solar pumping asset worth few lakhs for free
- Reliable water discharge from BLDC pumps for 8-9 hours during the day-time
- Additional income generation potential for the farmer

4. Pilot project for Grid connected Solar BLDC pumpsets

APEPDCL humbly submits that as per the instructions of Principal Secretary, a tender was floated by APEPDCL for replacement of existing AC Agricultural pumpsets with Grid connected Solar BLDC pumpsets as a pilot project with entire capital expenditure borne by APEPDCL. APEPDCL has identified one agriculture feeder of Savaravilli Rural covering about 250 numbers of agriculture services across 32 villages duly convincing the farmers to have BLDC motors.


 Chief General Manager
 Energy Conservation
 Corporate Office
 APEPDCL, Visakhapatnam

For the tender invited by APEPDCL for replacement of 3 HP and 5 HP AC pumpsets, L1 price of INR 330,000 and INR 400,000 was discovered for 3 HP and 5 HP Grid connected Solar BLDC pumpsets respectively. Approximately an amount of INR 9.3 Cr. was incurred by APEPDCL towards energization of 216 Nos. Solar BLDC pumpsets and were connected to grid.

5. Cost Benefit Analysis

APEPDCL humbly submits that the implementation of Grid connected Solar BLDC pumpset pilot program in the area of Savaravilli feeder in APEPDCL of Andhra Pradesh would result in an annual amortization cost of INR 49,625 per 5 HP pumpset².

As highlighted in Section 2 of this petition, levelized agricultural subsidy per pumpset is INR 50,806 which is equivalent to annual outflow for APEPDCL for the capital cost incurred to install Grid connected Solar BLDC pumpsets. Accordingly, after loan tenure of 15 years, GoAP/APEPDCL shall have annual savings due to avoided subsidy of ~INR 50,000 per 5 HP pumpset for period of 10 years³ or Net Present Value (NPV) of savings of INR 60,927 per 5 HP pumpset as shown in below table.

Table 2: Savings due to avoided subsidy with Grid connected Solar BLDC pumpset

S.No.	Parameter	Units	Value
1.	Capital cost of 5 HP Grid connected Solar BLDC pumpset	INR	400,000
2.	Net Present Value (NPV) of annual subsidy ⁴	INR	460,927
3.	NPV of savings to APEPDCL due to avoided subsidy	INR	60,927

Further, due to efficient pumpsets, surplus energy generated from solar panels after consumption by BLDC pumpsets can be injected into grid. This excess energy injected into grid results shall decrease power purchase cost for APEPDCL.

The then Honorable Chief Minister of Andhra Pradesh has announced through paper media, for payment of INR 1.50/kWh to the farmers for the excess energy injected into the grid. Farmer is providing lease free land for installation of Grid connected solar BLDC pumpsets in his field and is maintaining the asset by washing and cleaning solar panels regularly. Hence purchase of excess power from farmers at INR 1.50 per unit of energy injected into grid is a win-win situation for APEPDCL as well as farmers.

Following table highlights estimated savings to APEPDCL in the undertaken pilot project due to excess energy injected by farmer into the grid.

Table 3: Estimated levelized savings to APEPDCL with 5 HP Grid connected Solar BLDC pumpset

S.No.	Parameter	Units	Value
4.	Marginal variable cost in FY19-20	INR/kWh	3.58
5.	Y-o-y escalation in variable cost ⁵	%	4.00%
6.	Levelized variable cost for 25 years	INR/kWh	4.96
7.	Transmission loss as per Tariff order FY19-20	%	3.03%
8.	Distribution loss as per Tariff order FY19-20	%	10.11%
9.	Levelized marginal cost including T&D losses	INR/kWh	5.69
10.	Power purchase cost for excess energy injected into grid by farmers	INR/kWh	1.50
11.	Levelized savings to APEPDCL for excess energy injected into grid	INR/kWh	4.19

As shown in below table, NPV of savings to APEPDCL due to power purchase from farmer varies based on excess energy injected into by farmer upon using solar energy to run his BLDC pumpset. Following table highlights estimated savings to APEPDCL and revenue to farmers for injection into grid by farmer varying from 2,000 units to 4,000 units per annum.


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 Corporate Office
 APEPDCL, Visakhapatnam

² 5 HP pumpset capital cost is INR 400,000. 100% debt by APEPDCL for pilot project at interest rate of 9% p.a. with loan tenure of 15 years.

³ Life of Grid connected Solar BLDC pumpset is 25 years

⁴ Annual consumption by pump at 6,650 units, CoS of INR 6.06/kWh escalated 2.91% y-o-y for 25 years

⁵ Discount rate of 10%

Table 4: Estimated savings to APEPDCL and annual revenue to farmers in various scenarios

S.No.	Parameter	Units	Value	Value	Value
1.	Excess energy injected into grid by farmer each year ⁶	kWh	2,000	3,000	4,000
2.	Levelized annual savings to APEPDCL	INR	8,380	12,570	16,760
3.	NPV of 25 years savings to APEPDCL	INR	76,066	114,099	152,131
4.	Annual revenue to farmers	INR	3,000	4,500	6,000

Based on Table 2 and Table 4 shown above, it can be inferred that the pilot project is estimated to incur subsidy savings of INR 60,297 and power purchase savings of INR 75,000-INR 1,50,000 to APEPDCL on NPV basis. Further, pilot project is estimated to provide additional revenue of INR 3,000- INR 6,000 per annum to farmer for 25 years for excess energy injected into grid.

Further, Government of India (GoI) has issued draft guidelines for KUSUM scheme to promote solarization of existing pumpsets. As part of KUSUM scheme, Central Financial Assistance (CFA) of 30% by MNRE, State subsidy of 30% of benchmark cost of MNRE shall be provided. Both CFA by MNRE, State and fall in capital cost of Grid connected Solar BLDC pumpsets shall result in increased subsidy savings to tune of INR 240,000 and power purchase savings of INR 75,000-INR 1,50,000 to APDISCOMs on NPV basis for upcoming projects.

6. Prayer

Thus, the APEPDCL humbly prays before the Honorable Commission to consider this petition and pass necessary orders on the following:

1. Approval and consent of the BLDC Pumpsets Pilot Project on Savaravilli feeder of Vizianagaram District of Andhra Pradesh.
2. Allow APEPDCL to pay to farmers INR 1.50/kWh as power purchase cost for excess energy injected into grid from the time of installation and commission of Grid connected Solar BLDC pumpset from June 2018 on Savaravilli feeder of Vizianagaram District of Andhra Pradesh.
3. Pass necessary orders as deemed fit by the Honorable Commission

Place:

Date:


 Chief General Manager
 Energy Conservation
 Corporate Office
 APEPDCL, Visakhapatnam

⁶ With CUF of 15%, 5 HP Grid connected Solar BLDC pumpset with 5 kW solar panels is estimated to generate ~6,720 units annually.

Minutes of the meeting held at 3.30 pm on 10.05.2018 on implementation of grid-connected and off-grid Solar Pump Sets.

Present:

1. Sri Ajay Jain, Prl. Secy., Energy
2. Sri Ranganadham, Adviser to Secretary
3. Sri M. Kamalakar Babu, MD, NREDCAP and his team
4. Sri Rajababu, CE, IPC, APTRANSCO
5. Sri Chandrasekhar Reddy, CEO, SECM
6. Sri Santosh, KPMG
7. Sri Srinivas, KPMG

Action points:

- i) KPMG to prepare detailed notes for appraisal to Hon'ble CM, Hon'ble Finance Minister, Hon'ble Minister for Energy, CS, Prl. Secy. to CM and Secy, finance. One should be a detailed note which will be the same as proposal from MD, NREDCAP to Govt. for approval and the other would be a one or two page bullet note for appraising the concerned. (*Action: Srinivas, KPMG and his team. Deadline 14.5.2018.*)
- ii) A meeting to be conducted with all stakeholders namely, pump manufacturers, system integrators, Solar pump developers, lenders, DISCOMS and Insurance Companies. This meeting would be held on 22.5.2018 from 10.00 am to 4.00 pm at Vidyut Soudha. MD, NREDCAP will send the invitation letters to all the concerned which would be identified by KPMG. CMD, APTRANSCO along with JMD Commercial and CE, IPC, CMDs of DISCOMS, MD, NREDCAP, CEO, SECM and KPMG shall also

attend the meeting. EESL will also be invited for the meeting.

(Action: MD NREDCAP and KPMG)

- iii) The performance of 24,000 off-grid Solar Pumps installed has to be evaluated. For this MD NREDCAP will furnish the mobile numbers of all the farmers to CEO, RTG by 15.5.2018 who in turn will be requested to obtain the feedback from these people through Parishkara Vedika and know the satisfaction level of the farmers. The questionnaire for obtaining information from farmers will be designed by MD, NREDCAP with the help of KPMG and will be given to RTG Babu by 15.5.2018. *(Action: MD NREDCAP – Action report to be submitted by 20.5.2018).*
- iv) Further, MD, NREDCAP, with the help of his team will devise software which will show the generation from these 24,000 pump sets. The same shall be completed before 20.5.2018. *Action: MD NREDCAP*
- v) Initially, it is decided that the scheme may be taken up in three districts of Srikakulam, Vizianagaram and Visakhapatnam in which around 25,000 pump sets will be installed. DISCOMS will borrow money from PFC, REC, IREDA, NABARD, World Bank, Andhra Bank and SBI and implement the scheme. It is felt that a single tender comprising of EPC would help in fast grounding the scheme. NREDCAP will be the nodal agency for calling tenders. *Action: MD NREDCAP*
- vi) DISCOMS officials have to be fully involved in the Project. After finalization of the scheme, DISCOMS will nominate a nodal officer at the Corporate level and also in each district. It was further decided that Prl. Secy., Energy along with Adviser, MD,

NREDCAP, officials of APTRANSCO and KPMG will visit all the three districts and address meetings upto the lineman for their involvement in the scheme. *Action: Prl. Secy., Energy, MD, NREDCAP and CMDs of DISCOMS*

- vii) The views of MD, EESL and Mr.Raina from NTPC would also be obtained before finalizing the scheme. *Action: Prl. Secy., Energy*
- viii) The important point to be kept in mind is about maintenance aspect of DC pumps. In the meeting to be held with the Pump Manufacturers, their annual capacity and number of pumps installed so far in the country will also be obtained. Teams from DISCOMS and NREDCAP along with some of the farmers will visit in our State/neighbouring states where these pump sets have been installed so as to obtain firsthand knowledge about these pump sets. Further, the number of service centers should also be ascertained from the manufacturers. *Action: CMDs of DISCOMS, MD NREDCAP and KPMG.*
- ix) KPMG shall start preparing tender documents in consultation with MD NREDCAP as per guidelines of MNRE and that term sheet of tender shall be shared with the stakeholders in the meeting to be held on 22nd May and final tender should be ready by 31st May. *Action: KPMG Srinivas and his team.*
- x) BEE will also be involved in this and CEO,SECM will take action to get grants from the BEE for organizing the workshop and visits. *Action: CEO, SECM*
- xi) Briefing would be done to Hon'ble CM and all the members from 15 – 18 May after taking time from Hon'ble CM.

- xii) It was felt that implementation is the key for success of the programme as this idea is known for a long time to Government of India as well as many State Governments but has not been implemented successfully so far in the country. The learning from Karnataka will also be obtained. A team from SPDCL can visit Karnataka and see for themselves where the pump sets have been installed and obtain the feedback of their functioning. At appropriate time, the approval of APERC will also be obtained. *Action: CMD, SPDCL and Adviser*
- xiii) MNRE will also be contacted for their guidance and experience in implementation of these DC pump sets.
- xiv) All the concerned are requested to take necessary follow up action immediately as per the above time lines and the next meeting to review the progress will be held on 17.5.2018 at 3.00 pm.

Prl. Secy., Energy

**Minutes of the meeting held at 10.30 am on 22.05.2018 on implementation of
BLDC Based on Grid Solar Pumpsets**

Present:

1. Sri Ajay Jain, Prl. Secy., Energy
2. Sri Ranganadham, Adviser to Secretary
3. Sri Dora, CMD | APEPDCL
4. Sri Nayak, CMD | APSPDCL
5. Sri M. KamalakarBabu, MD, NREDCAP and his team
6. Sri Rajababu, CE, IPC, APTRANSCO
7. Sri Chandrasekhar Reddy, CEO, SECM
8. Sri Srinivas, KPMG and his team
9. Representatives from,

- i) M/s Rotomag
- ii) M/s Shakti Pumps
- iii) M/s Jain Irrigation systems Ltd
- iv) M/s Suguna Motors & Pumps
- v) M/s. CRI Pumps Private Ltd
- vi) M/s Stanley Black & Decker
- vii) M/s Novus Green Energy Systems
- viii) M/s Premier Solar systems
- ix) M/s Energy efficiency Services Ltd
- x) M/s Renew Power
- xi) M/s Greenko Group
- xii) M/s Adani Power Ltd
- xiii) M/s Tata power solar systems
- xiv) NABARD
- xv) M/s REC Ltd
- xvi) M/s ICICI Lombard General Insurance Co. Ltd.
- xvii) General Insurance Corporation of India

After due deliberations with all the stakeholders, the following decisions are taken:

- i) CMDs of both the DISCOMs are requested to send teams for inspection of on / off-grid Solar Pump Sets with brushless DC motors in service at the following places:

- a) **Sholapur and Nanded in Maharashtra State**

CMD, SPDCL will send a team duly contacting M/s Jain Irrigation along with NREDCAP representative.

- b) **Raipur and Bilaspur in Chhattisgarh State**

CMD EPDCL will send his team duly contacting M/s Rotomag and a representative from NREDCAP.

- c) **Kanakapura near Bangalore**

CMD SPDCL will arrange inspection of grid-connected Solar Pump Sets duly contacting M/s Novus Energy.

The teams shall give their feedback to the respective CMDs by 28.05.2018 after field visits and Principal Secretary | Energy will have a tele-conference on 29.05.2018 with team members and CMDs of Discoms.

- ii) CMD | EPDCL shall select one agriculture feeder covering about 250 numbers of agriculture services for implementing this pilot project of grid-connected Solar Pump Sets by 25.05.2018 duly convincing the farmers to have BLDC motors.
- iii) CMD EPDCL will call for short term bids for implementation of grid connected Solar Pump Sets with BLDC motors in the selected agriculture feeder from the 10 companies mentioned below who attended today's meeting duly giving the required data before 29th May 2018.

1. Jain Irrigation	6. Tata power
2. Rotomag	7. Stanley
3. Shakti	8. Nobel
4. Wilo Pumps	9. Suguna
5. Adani	10. Premier Solar Modules

- iv) The CMD | APSPDCL was requested to identify one district for implementation of the project to about 30,000 Agricultural services.
- v) M/s EESL shall work in parallel to prepare the Tender documents and be ready with Tender specifications by the end of June 2018.
- vi) The Companies will submit their quotations for the pilot project by 03.06.2018 and the work order to be given by 06.06.2018 with instructions to complete the whole installation works by 30.06.2018 by CMD | APEPDCL
- vii) The CMD | APSPDCL shall immediately ensure the following for evaluating the results:
 - a) Energy meter of the feeder in working condition,
 - b) Maintenance of LT lines and 11 kv Lines in best condition so that there are no interruptions during the test period.
- viii) The energy saved and energy injected by individual pump sets shall be measured for this pilot project as this is the basic record for future projects and for obtaining necessary approvals from the Regulatory Commission and Government.
- ix) Every care shall be taken to see that there are no hurdles in computing the results from the pilot project by ensuring working of various meters.
- x) It is proposed to have next meeting on 21.06.2018 while the Pilot Project is in execution so as to understand any bottlenecks in implementing the Project.
- xi) The Bidders were requested to quote very competitive rates keeping in mind the future volume of business. They were also requested to examine whether they can take up this pilot under CSR (Corporate Social Responsibility)

- xii) Principal Secretary | Energy informed that considering the outcome of the pilot project, work for installation of one lakh BLDC pump sets shall be undertaken from August 15th 2018 and shall be completed by December 2018

Pr. Secy.
22/11/2018
Pr. Secy., Energy, I&I

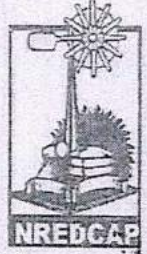
ఆంధ్రప్రదేశ్ నూతన మరియు పునరుద్ధరణీయ ఇంధన వనరుల అభివృద్ధి సంస్థ లి.

New & Renewable Energy Development Corporation of Andhra Pradesh Ltd.

(A State Government Company - ISO 9001:2015 Certified)

Regd. Office : # 12-464/5/1, River Oaks Apartment, CSR Kalyana Mandapam Road,
Tadepalli, Guntur District. Andhra Pradesh - 522 501, India.

Tel : 08645 797162 / 797163 E-mail : info@nredcap.in Website : www.nredcap.in



Ref: NREDCAP/SPY Pumps/3/2018

Date: 23-05-2018

To

The CMD, EPDCL, Visakhapatnam

Sir,

Sub: Solar P V Water pumping programme for Agriculture/Irrigation purpose – Field Visits – Nomination of Officer from NREDCAP - Reg.

Ref: 1. Instructions of Prl Secy, Energy, I & I & CRDA Dept, Govt of A P during the Workshop held on 22-05-2018 at Vijayawada.

As per instructions of the Principal Secretary, Energy, I & I & CRDA Dept, Govt of A P during the workshop on BLDC water pumping systems held on 22-05-2018 at Vijayawada, the following officers of NREDCAP are nominated for the field visits of Chhattisgarh state.

1. Sri G Satyanarayana, District Manager, NREDCAP, East Godavari district. Telephone No: 9000550972,
2. Sri M. Vijayakumara Raju, District Manager, NREDCAP, Srikakulam. Telephone No: 9000550987

Thanking You,

Yours faithfully

[Signature]
23/5

V C & MANAGING DIRECTOR

Copy to Concerned officers of NREDCAP