

## NON-GRID TENDER QUESTIONS AND ANSWERS

QUESTION	ANSWER
How many companies do you contemplate on awarding this contract to?	We will be awarding more than one company
Who will be owning the project from the time of awarding the bid?	Department will be owning the project for duration of the contract
Will you ensure that the Power Purchase Agreement is in place for this project?	This will be dealt with at a later stage
On the innovative aspect, can we furnish you with the proposal for your consideration in relation to the provision of alternative energy that is sourced from biomass stations?	You can go ahead and do that but ensure that comparison and integration with the current technology come to the fore.
With the department already having designed and imposed a system to be supplied, why are we expected to indicate innovative approaches, when are told what to supply?	We have not designed a system (saying 100Wp is not a design)
Why is the department looking for a technical proposal (apart from just an implementation plan), whilst you have already dictated the type and size of system you are going to procure?	We are looking broadly for your understanding of what needs to happen in this project (battery management, performance of system, user understanding etc ) in all these there are technical elements
Should we all returnables and SBD's except SBD 3.3 in one envelope, and SBD 3.3 with the BoQ?  Given that a 2 envelope system is to be observed, how then will point 10.4.1.1.e - "Business Model that includes a cost and revenue structures", be handled as financials need to be excluded from the technical envelope?	There is attachment or annexure for financier and that is what we expecting in the financial envelope and the rest must be on the technical envelope
With reference to point 10.4.1.1.g - the department alludes to mobile payments, what exactly is the department's train of thought on this matter?  <ul style="list-style-type: none"> <li>○ Payments by whom? <ul style="list-style-type: none"> <li>▪ Beneficiaries</li> <li>▪ Municipalities</li> <li>▪ DoE</li> </ul> </li> </ul>	CLARIFY IN YOUR BIDS HOW TO GO ABOUT IN TERMS OF DEVELOPING A SUSTAINABLE MODEL FOR THE NON –GRID PROJECT (The above is a guideline)

<ul style="list-style-type: none"> <li>○ Payments to whom? <ul style="list-style-type: none"> <li>▪ Service Provider(s)</li> <li>▪ Municipalities</li> </ul> </li> </ul> <p>With reference to point 10.4.1.1.e - the department alludes to a business model;</p> <ul style="list-style-type: none"> <li>○ How revenue will be collected", isn't the department buying these systems out right?</li> </ul>	
<p>Based on your requirements as per the attached drawing, the system specified is not an appropriate design as the batteries would not charge sufficiently based on the panel wattage and the delivery output to the load will not be sustainable.</p> <p>We will rather recommend a design of approximately a 300 watt panel and 120 ah gel battery that could sustain 45 hours as requested.</p> <p>Based on our research, there are no locally manufactured solar charge controllers however there are locally manufactured solar panels which we will quote on.</p> <p>The balance of load equipment could be manufactured at our premises.</p> <p>We hope for a favourable response in terms of the design requirements.</p>	<p><b>YOU MAY PROPOSE AN ALTERNATIVE HOWEVER OUR DESIGN WAS BASED ON COST HENCE WE PROPOSED SMALL PANEL AND ACID LED BATTERY</b></p>
<p>In your specifications, you define the system as follows:</p> <p>Daily Energy Production</p> <p>Panel : 100Wp Lead Acid Battery : 1200wh (12V x 100AH) and Controller</p> <p>This means the system can produce about 100Wp x 80% x 5 hours per day = 400Wh per day in Gauteng in summer (I use Johannesburg good months as example). In the Cape, that number can go as low as 3 hours per day which gives you a production of 240wh per day.</p>	<ol style="list-style-type: none"> <li>1) <b>YES THE SYSTEM MUST BE ABLE TO PROVIDE ENERGY FOR ALL APPLIANCES IF NEEDS BE</b></li> <li>2) <b>THIS WILL FALL UNDER A BIGGER SYSTEM NOT THE ONE CURRENTLY PROPOSED</b></li> <li>3) <b>YOU CAN DO THE CALCULATIONS WITH THE INFORMATION PROVIDED TO YOU</b></li> </ol>

Daily Energy Usage :

6 x DC LED internal ambient lamps x 3W  
x 4 hrs a day = 72wh a day  
2 x DC LED external bulkhead lamps x 3W  
maximum x 12 hrs a day = 72wh a day  
Shatterproof Solar Lanterns- solar run  
time of 4hrs/day at (29-60 Lumen) light  
global lighting/SABS approved = 0wh a  
day as it is solar  
2 x 7A DC socket adaptors (12V cigarette  
lighter type, suitable for  
DC TV and = about 40W x 5 hours –  
200wh  
DC cell-phone chargers, - about  
10wh  
(or possibly for small dedicated  
inverter for DSTV, although DC  
powered DSTV units are now  
available) = about 40W x 5 hrs =  
200wh  
1 x DC cell-phone charging adaptors kit  
for all general cell-phones (cigarette  
lighter type)  
(i) 1 x 9v outlet for radio - 10W x 4hrs =  
80 wh

This is in excess of 600wh per day used.

So if we use an average of 600wh per day with  
the appliances and only recover 400wh from the  
sun – how will this system last more than 6 days.

A lead acid battery needs to be at a certain  
charge level or cycle to a level that is high in  
order to last.

- 1) Are we expected to produce energy for  
all the above appliances daily?
- 2) Are the users limited to using the system  
to the above appliances or can they also  
run things like a DC fan, fridge etc?
- 3) What is the required amount of energy in  
Wh that should be made available to the  
user on a daily basis? We can only  
provide a system that will meet the  
customers requirement once we know  
this information.