KARNATAKA SOLAR POWER DEVELOPMENT CORPORATION LIMITED
(JV Company of KREDL, GoK and SECI, GoI)

Queries sought by SPDs with respect to 2000MW Pavagada Solar Park

The Auto CAD drawing provided by KSPDCL does not seem to match the actual plots in some cases. For instance, the auto CAD shows a huge hill in plot 5, Block 7 which as told on site by KSPDCL officials is not a part of the plot. Please see picture 1.	Revised autocad drawing has been uploaded.
Neither of the plots in block 6 & 7, as per the shared drawings are having 250 acres of land. This is the minimum mandatory requirement for a 50 MW AC solar PV Plat. The PDF version of the solar park map shared by KSPDCL mentions 1098 Acres in Block 6 which is evidently less than 250 Acres per Plot.	Revised autocad drawing has been uploaded, wherein each of sub block are having area of 250 acres or more.
To understand the actual picture of every plot , the Auto CAD drawing has to be geo referenced one with boundary coordinates and contours. The one provided by KSPDCL does not satisfy this requirement.	Revised autocad drawing has been uploaded which inter alia provides boundary coordinates .
Blocks for open DCR category: Based on phone discussions with you, we understand block5 (plot2 & 3) are reserved for DCR category while block 6& 7 are reserved for open category. Please confirm.	Revised autocad drawing has been uploaded, wherein B-27 and B-28 each of 50 MW block are reserved for domestic category.
Plot sizes : We note that the project size is 50 Mw (AC) each which means DC capacity can go upto 60-62.5MWP.the current plot sizes are around 200-210 acres which is not sufficient for 60 MWP capacity. Based on phone discussions with you, we understand that plots are being redefined with minimum plot area of 250 acres and above. Please confirm. In case it is so we	Revised autocad drawing has been uploaded, wherein each of sub block are having area of 250 acres or more.

request you to upload new plot layout on site.	
Transmission Losses: We note that the distance from block 6 pooling substation (66/220kV) to main substation (220/400kV) is around 10 KM and the distance of block 7 pooling substation (66/220kV) to main substation (220/400kV) is around 12-15KM.Therefore, 220kV losses shall be higher from block 7 to main substation compared to block 6. Will these losses be apportioned equally among all 12 projects or will they be apportioned block wise?	The transmission loss from SPD station upto Powergrid Station will be apportioned to each of the SPD's in proportion to their generation in accordance with the terms of Implementation Support Agreement.
Topography Report: Can SPIA provide Topography or contour report for block 6&7? We look forward to your phone response.	Revised autocad drawing has been uploaded which inter alia provides boundary coordinates.
The exact routes for lying the cables from each plots to pooling station are yet to be confirmed. Also as per verbal confirmation from KSPDCL officials, cable duct will also be built by them. They need to confirm regarding duct sizing.	SPD at its own cost shall lay UG Cable in 2 circuits along the road side from their 66/11 kV sub Station to the 220/66kV internal Pooling station of KSPDCL. KSPDCL will neither provide any cable tray support structures nor cable ducts.
There are 11 kV cables running through the solar park as per site visit, these are to be removed. KSPDCL to confirm removal of the same is in there scope.	11 kV overhead distribution lines passing if any in the earmarked solar park area will be cleared by KSPDCL before handing over of land.
There are a large no of trees in each plot KSPDCL to confirm, that they shall be responsible for removing these trees, and taking all necessary clearances for the same.	The responsibility of removing the trees vests with the SPD. However, the SPD shall pay compensation to KSPDCL in respect of Horticultural trees/agricultural crops/yielding bore-wells/buildings in good condition as determined by the Appropriate Authorities.

As per latest document on KSPDCL's website-"SPD'S need to reimburse the cost towards yielding existing bore-wells and other horticulture plants etc. to KSPDCL ". KSPDCL must also confirm that water from these bore wells would hence be available for all SPD's even those with other Plots. This cost MUST be confirmed before bidding stage, and appropriate needs to be made to the implementation & support agreement.	The yielding bore-wells for which the compensation as determined by the appropriate authorities paid by SPD shall be the property of the SPD until completion of lease period. Thus sharing of water between the other SPDs is the prerogative of the SPD.
As confirmed during pre-bid Meeting, and also site visit by KSPDCL, Metering at 220/400 kV sub-station should be in KSPDCL's scope. Appropriate amendments need to be made in implementation & support Agreement and draft PPA.	Set of Main and Check Meters and also Standby Meter of 0.2S accuracy class, as per CEA (Installation & operation of meters) Regulations 2006/IEGC as applicable, shall be Procured and installed by SPD on each incoming feeder at 220KV side of 400/220kV Grid Sub Station (Interconnection point) of CTU i.e., POWERGRID based on specifications & make provided by KSPDCL/POWERGRID.
KSPDCL to confirm which plots of Block 5 are available for DCR category tender. Also, as seen in site visit, some plots have problems like, 'Naalis' passing through plots. Hence entire 250 acres will not be usable. The plot area for such plots should accordingly be increased. KSPDCL to confirm.	Revised autocad drawing has been uploaded, wherein B-27 and B-28 each of 50 MW block are reserved for domestic category.
Land profiling and contouring details to be provided before hand as the distance from the pooling substation will be impacting overall EPC cost	Revised autocad drawing has been uploaded which inter alia provides boundary coordinates .
what will be the per 66 KV Bay Charges at the 220/66KV substation. (will this be part of the Solar park development charges).	Yes. It forms a part of upfront charges

what will be the metering equipment charges at the 220/66 KV substation.(will this be part of the solar park development charges).	Yes. It forms a part of upfront charges
Please give clarity on the charges / costing of the 220 KV metering equipment at the 400/220 KV PGCIL SS, as the same will meter the pooled power and will not be of individual solar power producer. The agreement calls for solar power developer to pay for this. What will be the metering equipment charges at the PGCIL 400 KV substation.	Metering equipment charges at the PGCIL 400 kV substation as claimed by Powergrid shall be collectedfrom all the SPDs in proportion to their installed capacity.
Will there be any supervision charges by KSPDCL on the SPD for the 66KV cable connection between individual plant and the 220/66KV pooling substation.(even through the cable supply and erection shall be by SDP)	No.
There are critical mis matches with between the Auto CAD file shared for the plots by KSPDCL and the actual plots conditions on site. In addition to this there are certain other issues with the Auto CAD file which is not giving the right picture of the plots and hence makes our plot assessment impossible. Please refer to the detailed letter attached mentioning all the issues along with the valid reasons stating the significance and importance of correcting or rectifying them.	Revised autocad drawing has been uploaded.
In this regard, we wish to confirm the Substations which are allocated for the blocks for the 600 MW tender from NTPC. Kindly provide details stating the connecting substation For all the Blocks (B-27 To B-38).Please help to provide this information at the earliest as plot assessment will depend on this.	1. B-27 and B-28 sub blocks of SPDs under domestic category shall have to be connected to 220/66kV station proposed at B-6 sub station. 2. B-29, B-30 and B-31 sub blocks of SPDs under open category

	shall have to be connected to 220/66kV station proposed at B-6 sub station itself. 3. B-32 to B-36 sub blocks of SPDs under open category shall have to be connected to 220/66kV station proposed at B-7 sub station . 4. B-37 and B-38 sub blocks of SPDs under open category shall have to be connected to 220/66kV station proposed at B-8 sub station.
As per discussion with our vendor with regards to 66 KV transmission line for Pavagada project, only copper cable of 1000 Sqmm or 630 Sqmm are usually accepted by KPTCL at 66 KV level. Can you please clarify if we can use Aluminium conductor in place of Copper as it has a major cost implication.	Laying UG cable in 2 circuits along the road side from the SPD's 66/11 kV sub Station to the 220/66kV internal Pooling station of KSPDCL is the responsibility of SPD. Hence, KSPDCL has no comments on the specification of the UG Cable.