

Sno	Questions	Response
1	Whether a comprehensive solution including EB Management can be in RESCO Scope?	No
2	Clarity in the scope of SMPS Up-gradation.	Not in RESCO scope
3	It is better to have a Proper Power Purchase Agreement defining the term (not less than 10 Years). Considering the capex involved, 5 years amortization will result in higher KWH rates. Life of Solar set up excluding batteries	Shall be addressed to during commercial engagement process
4	Resco's interests and risks are not considered in the present RFP taking in to account the Capex involved.	Shall be addressed to during commercial engagement process
5	RFP does not give clarity on O&M Scope. Resco needs to have the scope of comprehensive passive maintenance to avoid any clash of interests with the other O&M vendor.	Site O&M not in RESCO scope
6	Tower company to provide CPH assurance for DG & periodic replacement of DGs as required avoiding low efficiency due to wear and tear.	Ownership of existing DG on site is to towerco. O&M and new DG in RESCO scope. As DG power will also be billed in terms of Rs. / KWH, concern of CPH does not arise.
7	Tower companies to define and allocate Space for within the site RET installation without any disturbance during the period of Agreement	Towerco will support up to the extent possible for this
8	Is there a provision in the RFP for prototypes (i.e. products that expect to be commercially available within the next year, but are currently not on the market)?	R&D and proto fall in the scope of RESCO. New products and developments shall be considered in progressive contracts.
9	How long does the contract period have to be? I.e. how long does RESCO need to be running this particular cell tower site once we establish a system?	Time period of the contract can be maximum of 10 years. Details shall be addressed to during commercial engagement process
10	Table 3: what is MGO? Is that the amount of power provided to the community after the cell tower power needs are fully met?	MGO is Minimum Guaranteed Offtake. This is the minimum amount of power that would be paid for by towerco, irrespective of the power being consumed or not, provided the power was available for off-take by RESCO.
11	There are a number of statutory compliance regulations, how can we determine if we are compliant? It seems to me that most likely we will need to hire a consultant familiar with the cell tower power regulations and setting up cell tower sites in order to execute this experiment properly	All the legal / policy / regulation etc. related issues are in RESCO's scope and need to be taken care by RESCO.
12	What is the volume of first implementation program / pilot?	App. 500 sites
13	Whether the respective PPA agreements would be signed with individual companies or taipa?	With respective towercos
14	Please clarify that if the power demand trigger is applicable round the clock then RESCO also need to have provision of supplying power beyond solar working hours from evening till next day morning. This will require RESCO to have batteries for storage resulting in duplication of same at site and at RESCO end	The power demand trigger would be applicable 24x7. RESCO's are not limited to using solar only as the RET option. In case a RET needs battery to be used, it will be up to the RESCO to decide and keep battery as part of their set-up to provide power on demand.
15	How will the RESCO's and towercos battery be differentiated functionally?	Towercos battery will be placed as part of load, after the meter and ATS. It will not be in RESCOs scope and control.

16	When should RESCO be required to provide power to a specific site?	Within 10 minutes of power demand
17	What should be the role of DG at site? Who will own and operate the DG?	DG should be used in extreme emergency, and will be owned by towerco. O&M of DG by RESCO at their cost
18	What is definition of RESCO?	As considered in this RFP, RESCO - Renewable Energy Service Company, are organizations supplying power (from Renewable sources). MNRE accreditation as RESCO is desired, but not mandatory.
19	Will it be only a renewable energy producing company; Will the power to be produced by RESCO is only from renewable source?	Yes, DG to be used in extreme emergency only
20	Is the PPA (Power purchase Agreement) with RESCO Generation based or Consumption based.	Consumption based
21	If the agreement is generation based, who is entitled for GBI (Generation Based Incentives). Weather it is TAIPA or RESCO	This agreement is consumption based. Hence this concern does not arise.
22	If the PPA is consumption based then what is the maximum connected load and Minimum daily consumption commitment from TAIPA to RESCO.	App. peak and avg load shall be provided after vendor screening. MGO clause in RFP takes care of this.
23	What will be the average distance of the towers from the RESCO generating station? Who will be responsible for the transmission capex and loss in transmission? Will it be equally distributed between tower companies or not?	It will be known to RESCO post survey of the sites, which will happen after shortlisting of vendors basis there proposals. All the activities prior to power delivery point lie in RESCO's scope.
24	Who will make the payment to RESCO? Is it TAIPA as an entity or individual tower companies?	Individual towerco will sign the contract and accordingly will be responsible for making the payments.
25	Is there is any Consumption tariff for peak Generation hours and off peak generation hour Or it is flat consumption tariff	The tariff could be either flat or time based
26	Who will take the power synchronization responsibility with power station and individual consumption points (the towers)?	This situation is not applicable to current set-up. In case this is required prior to power delivery point, RESCOs need to take care. For ATS, RESCOs to share specification for seamless power transfer (as mentioned in RFP)
27	What is the assurance towards RESCO's investment?	Shall be addressed to during commercial engagement process
28	What will be the payment methodology?	Shall be addressed to during commercial engagement process
29	Is there any option of handshake between various RESCO's operating in different geographies?	RESCO need to explore
30	What is the support from Government and how can it be attained?	RESCO need to explore
31	May we know the energy requirements (electricity, air conditioning) for the various type of towers (legacy, stand alone, shared)	App. peak and avg load shall be provided after vendor screening
32	Location of the Pilot sites (latitude and longitude if available – this will help us understand the ambient climatic conditions, including the amount of sunlight and temperature as well as the logistics for delivering and installing the energy supply system	Shall be offered after screening the potential vendors

33	Site layout – we need to know where the batteries are to be installed for each site. i.e., will they be in an existing cabinet? Are they expected to be housed within the station's base tower? Is there an existing structure or cabinet where they are to be installed or do we need to provide a cabinet ourselves? Is the ground rocky or soft – which will help us understand if we can easily install an underground vault? Is there any security fencing protecting the facility. Have there any thefts from the facility?	Space shall be provided to RESCO, if feasible & available, without any physical security. Please plan accordingly.
34	Assumed ambient temperature, to which we are to design – what is the ambient temperature to which the existing batteries are exposed and is there air conditioning?	Indian ambient conditions to be considered while designing the solution
35	1-line drawing of each site, showing the electrical system, including rectifiers, generators, grid (if present), base transceiver equipment, etc. Please also include the rated generation capacity (in kW) for each diesel generator, and battery bank	RESCO scope limited to deliver power on demand at a defined point
36	Voltages and loads (in kW) the battery system will serve – do we serve only the DC loads or is there a requirement to serve AC loads, as well. If we are serving AC loads, what is the voltage and the frequency (i.e., 50 Hz?). What is the load of the entire station in kW which we have to serve?	As per RFP, RESCO has the option to provide DC or AC power. For details, see section "Deliverable" of RFP and fill the tables under Metering & Tariff.
37	Load duration curves – how do the loads vary over time during the day and season by season. E.g., is it a flat 6kW load 24 hours a day, 365 days a year, or is it higher at night due to lighting and lower in the winter months, because of reduced air conditioning, etc.	Indicative load curve shall be provided by respective towercos, post screening of potential vendors
38	Electrical generation devices – Is the grid present and, if so for how many hours a day, on average. Please also list any diesel generators and their rated generation capacity (e.g., 16kW or 20kVA), the number of hour a day they operate and their average monthly fuel consumption. For the existing station, where does the diesel fuel come from and who performs the maintenance on the diesels and the batteries? Please also list existing batteries, their chemistry (e.g., VRLA – lead acid, or Lithium ion, etc.), their rated capacity (e.g., 1200Ah), their current role (e.g., Uninterruptible Power Supply or UPS in case of generator and grid failure).	RESCO need to have basic understanding of telecom passive infrastructure
39	Has TAIPA or the IP had a dialogue or worked with the local village (in the case of a rural base transceiver station)?	Power delivery on demand up to the load point defined at site is in the scope of RESCO. Hence, all activities related to power delivery needs to be taken care by RESCO
40	How many sites are in the Pilot, how many companies will be selected for the Pilot?	Sites to be offered to RESCOs will be app. 500. Selection will be basis proposals received.
41	If the Pilot is successful, what is the process to proceed to a broader-based implementation (i.e., will it go to another RFP, to a short list of companies or a straight award to the success firm from the Pilot)?	It will depend on the pilot performance and shall be discussed accordingly

42	After a successful Pilot, how many sites in total will the successful bidder be servicing?	Industry target is to convert 100,000 sites to Alternate Energy.
43	Is there a requirement to track emissions and/or fuel consumption from the system and report these back to TAIPA on a regular basis?	Emissions have to be tracked and reported as mentioned in the RFP
44	Do we own any Greenhouse Gas Offsets, which will arise from the implementation of the green system?	Yes.
45	Who will own the equipment we install at the end of the Pilot Project and/or does TAIPA have a preference? If we are successful in the Pilot and move on to deploying the larger system, who will own this equipment at the end of the contract?	RESCO
46	Please share the matrix of close by located sites so that probability of transmitting power from one site to other sites can be explored	RESCO need to identify (post survey of the sites, which will happen after shortlisting of vendors basis there proposals)
47	Can TAIPA help in understanding or give clear cut guidelines whether electricity rules of various states allow electricity billing in Rs/kWH	All the legal / policy / regulation etc. related issues to be taken care by RESCO.
48	Amount of penalties to be borne	Shall be addressed to during commercial engagement process
49	The excess rental, if any because of new Green Solution shall be borne by Towerco or solution provider	For existing space on site, land lord management remains with towerco, for additional space, RESCO to manage
50	Existing genset can be used only during emergency- is there a maximum number of hours per day (on average) cap on usage of existing DG? What is the interpretation of <i>emergency</i> ? This is especially important as DoT's green guidelines do not permit the usage of DG for a green telecom solution	Site uptime is critical. Emergency definition shall be addressed to during commercial engagement process
51	Is RESCO to give DG free model? In DG - RET hybrid solution whether existing DG is allowed for RESCO	DG shall be used for emergency only.
52	Kindly guide us on regulatory issues in electricity distribution. As per our understating, Electricity Act 2003, no one shall transmit electricity or distribute electricity or trade electricity unless authorised to do so by a licence issued as per guidelines under Electricity Act 2003	All the legal / policy / regulation etc. related issues to be taken care by RESCO.
53	Example: A non EB, two ID BTS site if has average load of 6kW will need 50kWp Solar power plant for DG free atmosphere. This translates to 8000 Sq feet area as nearest to the site as it is DC power. Please comment	RESCO's need to deliver power on demand to the site. All related back-end preparation and planning needs to be executed by RESCO.
54	The power uptime per site - Is this exclusive of 10 minutes lead time to provide backup energy?	Exclusive of the 10 minutes lead time mentioned in the RFP
55	Please clarify whether energy bill to be raised to TAIPA or individual tower co or individual tenant at each tower	The energy bill will be raised to individual towercos
56	Please provide site spread in each circle with EB availability	Shall be offered after screening the potential vendors
57	Battery and DG ownership: In case above battery goes defective or does not give expected back up who will pay for its replacement . Same query for DG, who is responsible for lifetime ownership costs like replacement. I believe regular OnM will have to be done by us etc.	Indus owned DG shall be offered to RESCO for emergency back-up power. O&M shall be borne by RESCO. Battery ownership detailed in the RFP under section "RESCO Concept"

58	Whos is the customer counterparty for RESCO	Respective towercos
59	Is this a single contract with TAIPA (which is not a valid counterparty for us) or will same contract template be used to sign with each of the towre firms	Contracts shall be between RESCO & Towerco directly
60	IF any IP defaults what is the recourse clause to protect the investments? Who is the counterparty who guarantees the contract execution. If it is tower cos, can we decide to not work some of the tower cos which we feel is not viable creditworthy counterparty for our investors?	Contracts shall be between RESCO & Towerco directly. Details shall be addressed to during commercial engagement process
61	Scope of towers: How and from where can we get an idea on towers in Rajasthan, Punjab and M&G? How many towers are offered here? Will all ground based towers in a given region be available? Can we chose not to work with a subset of towers? (for instance rooftop towrs or capture sites where there is high diesel stronghold etc?)	Initially, this RFP covers 500 nos. of pilot sites. Details of towers, location and configuration etc. shall be shared by towercos, after screening of potential RESCOs; site selection is RESCO/towerco choice.
62	Will the tariff be divided circle wise, or will remain flat for all circles?	It's upto RESCO's to propose during commercial bidding
63	Can the DG on site be used to charge RESCO battery?	No
64	Health and CPH of existing DG sets and impact on SLA in the event of failure during triggering of back up energy(DG) due to drained DG Battery or inherent malfunctioning of DG sets	Uptime maintenance is RESCO responsibility and penalty will be levied accordingly. Provision of existing DG is an enabler / support from towerco, not a responsibility.
65	Whether Resco will be entitled to utilize SMPS installed at OPCO site for the purpose of charging additional set of Batteries drawing energy from DG installed at respective Tower Co.	No
66	Guaranteed minimum energy withdrawal by Tower Co. in the event DC Energy availability on 24*7 basis	It will depend on the proposal being made, along with MGO obligations. In general, EB is the priority source for towerco.
67	Assurance of employing renewable energy source on priority over EB typically in EB sites.	It will depend on the proposal being made. In general, EB is the priority source for towerco.
68	Will Tower Co. bear the responsibility of Land Acquisition as Land owner may not be willing to accommodate Tower Co. for offering required space for solar installation	For existing space on site, land lord management remains with towerco, for additional space, RESCO to manage
69	Rental Bucket : RESCO or Tower Co.?	RESCO to bear the rentals for its requirements
70	Safety and security of Solar assets at OPCO sites? Will manpower engaged by OPCO be responsible?	RESCO asset safety will remain with RESCO.
71	With substantial investment on Solar solution at tower sites, enforcing termination clause should have provision of buy back clause on reasonable and mutually acceptable terms otherwise very purpose would stand to be defeated	Shall be addressed to during commercial engagement process
72	TAIPA has not defined a typical model of clusters in the RFP. We request you to kindly define the clusters so that we can define the system capacity, backup requirement and min guaranteed revenue	Geography has been mentioned. Site details shall be shared with RESCOs after first round of screening.

73	Under the MGO clause of metering and tariff section, does it include a cumulative off take guarantee by the IP from the RESCO for net units of power, i.e., including power from both RET and DG or only the RET component. Please clarify as the RESCO is responsible for maintaining and running the DG too as and when required.	DG is for emergency only. MGO is for total power delivered
74	Kindly comment on the availability of open area (unrestricted sunlight during the entire day) for installation of RET infrastructure at site. The required area shall be made available by the IP	Responsibility for space is with RESCO. IPs will provide space at site if feasible.
75	What treatment will be given to committed off-take from the RESCO when bursty cycles of Grid - On 30 minutes, off 45 min, for a block of 16 hours	All these factors have to be considered by RESCO while designing the solution, as power supply is on demand, with uptime penalty
76	Tenancy increase or decreases impacting the total configured power delivery capacity of RESCO	RESCO should mention the flexibility in their solution and the options available to cater to site upgradation / downsizing.
77	For very high delivered KWH / month, (say beyond 4000 kwh / month), its not feasible to put solar system as site area will not permit for the most of the sites...in that case only captive unit will work where we give energy to national grid and draw back for the particular area allotted to us within the state.	Please mention the limitations in your proposal. But the limitation should not be such that they impact our operations, uptime, safety etc.
78	What should be the mode of proposal submission?	Closed, sealed bids to be delivered at TAIPA office (Gurgaon) on or before last date & time of submission