

Southern Power Distribution Company of Telangana Limited

#6-1-50, Corporate Office, Mint Compound, Hyderabad 500 063
website www.tssouthernpower.com

Expression of Interest ("EOI") - Revised

Invitation to participate in Expression of interest for Implementation of Distribution Automation & Real Time Monitoring in Industrial Areas of TSSPDCL License Area, Telangana, India

Southern Power Distribution Company of Telangana Limited (TSSPDCL) caters to the power requirements of 8 million consumers geographically spread over twenty circles viz., Hyderabad Central, Secunderabad, Banjara Hills, Hyderabad South, Cybercity, Habsiguda, Medchal, Rajendranagar, Saroornagar, Vikarabad, Siddipet, Mahabubnagar, Nalgonda, Suryapet, Yadadri, Medak, Sangareddy, Nagarkurnool, Wanaparthy & Gadwal. TSSPDCL comprises of 28 Industrial Areas. These are further divided into 94 Industrial Parks in its license area as shown in figure 1.

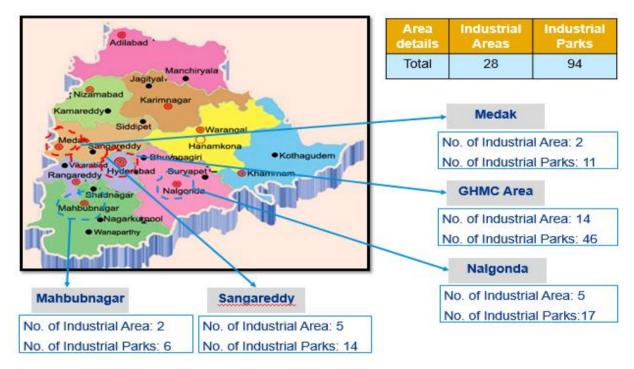


Figure 1:)

TSSPDCL has been putting continuous efforts to provide uninterrupted, quality & reliable power supply to all consumers and has initiated automation of the distribution network in its license area. Presently, TSSPDCL is covering 228 substations in GHMC area and 156 feeders in Hyderabad city for automation as part of ongoing SCADA project.

1. Objective of the Project

The state of Telangana has achieved 1st position in Ease of Doing Business (EoDB) Ranking 2016. EoDB rankings mandates 15 areas of compliance for Energy Department and TSSPDCL has achieved a high

ranking due to its compliance in the areas outlined for energy department. TSSPDCL, in an endeavour to further improve the network performance is keen on exploring & adopting leading practices in distribution automation with application of data analytics and real time monitoring. TSSPDCL is also keen on bringing down the SAIDI & SAIFI in these industrial areas thereby effectively impacting the DISCOM level SAIDI & SAIFI. Improvement in SAIDI/SAIFI will also enable revenue enhancement for DISCOMs and help in avoiding capital cost for backup arrangements. Distribution Automation will reduce the duration of faults resulting in lower SAIDI. Condition Based Monitoring & Preventive Maintenance through predictive analytics will additionally result in reduction of frequency of faults resulting in a lower SAIFI. TSSPDCL is also interested in equipping real time monitoring devices and making use of analytics for condition based monitoring and real time load management. The primary objective of the project is to achieve customer delight and to be able to provide interruption free 24x7 power to the consumers.

2. Project Details

The project would cover 127 substations in the license area catering power to 451 feeders and 13,530 DTRs distributed amongst ten circles as shown in fig 2.

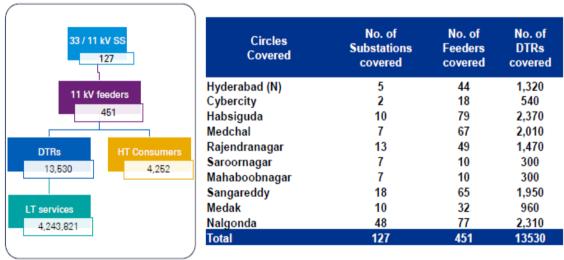


Figure 1: Infrastructure Details (as on September 2017)

Other details of the project are as detailed below:

3. Indicative Scope of Work

- a. **Distribution Automation**: This will include installation of distribution automation equipment on 11 kV and 33 kV lines and integration with the suitable communication infrastructure along with control center with required hardware & software on EPC basis with O&M of 5 years.
- b. Communication Infrastructure: This will include installation of communication equipment for automation best suitable for the area to

be served. The player has to do assessment of the area to come up with the optimal solution.

c. **Data Analytics & Real time Monitoring**: The Player will also be responsible for installation of real time monitoring equipment for condition based monitoring and generating periodic reports through data analytics for maintaining asset health, etc.

4. Indicative Geographical Area & Network Coverage

- a. **Geographical Area**: The distribution automation project will be divided in two area-wise packages.
- b. **Network Coverage**: The project will cover automation of 11 kV distribution radial network catering to the earlier mentioned Industrial areas. Auto restoration mechanism for incoming 33 kV feeders for the above mentioned 33/11 kV sub-stations is also proposed to be covered under this project.

5. Indicative Bid Model:

BoQ will be shared with the bidder at the time of RfP and the bidders will be selected on the basis of the cost based bidding subject to prequalification and technical qualification.

6. Preferable experience

Power Distribution Licensees in India/international power distribution utilities who have implemented SCADA/DMS solution (auto-reclosers/sectionalizers/RMUs/FPIs or any combination thereof), which is functioning successfully for last three years

(or)

Original Equipment Manufacturers (OEMs)/EPC players who have made end-to-end implementation of SCADA/DMS projects (auto-reclosers/sectionalizers/ RMUs/ FPIs or any combination thereof) for distribution licensees in India/abroad and which is functioning successfully for last three years

7. Proposed next steps:

The prospective parties who have expressed interest would be invited to give a presentation and offer their views on the suitable solution for distribution automation in industrial areas. DISCOM is not bound to accept any or all of the suggestions which may be tabled.

The DISCOM reserves its right to fix suitable Pre-Qualification (PQ) criteria, technical qualification criteria and financial criteria which it deems fit for the next stage of the process.

The DISCOM reserves its right to proceed with the next stage of bidding, or annul the process at any time based on the response received and as the management of TSSPDCL deems fit.

8. Presentation from Parties responding to EOI

Players responding to this EOI should submit their responses in the prescribed format attached in the annexure. Players should give a presentation to the management of TSSPDCL on 7th March, 2018.The presentation from the players should cover the following aspects -

- Experience in implementation of the Distribution Automation Solution and the extent of electricity network infrastructure covered by such a solution.
- Proposed methodology of implementing the Distribution Automation (DA) Solution in TSSPDCL. (Preliminary View).
- Key insights gained by the bidders in implementation of Distribution Automation (DA) Solution in other project areas.
- Best practices in implementation of Communication technologies suited for DA.

The above is list is only indicative and the players are encouraged to present additional information which they deem fit based on their experience.

The players may submit Expression of Interest (EoI) in one hard copy signed originals and an email copy to Telangana Southern Power Distribution Company Limited addressed to Chief General Manager (Projects) not later than 28th February, 2018 at the below mentioned address.

9. Corporate Office

Chief General Manager (Projects),

Southern Power Distribution Company of Telangana Ltd.,

Corporate Office: #6-1-50,

Mint Compound,

HYDERABAD-500 063.

Tel.: +91-9440813838, 9440813840

EoI soft copy can be emailed to <cgmproj@tssouthernpower.com> no later than 28th February, 2018.

10. Key Dates

EoI Floating - 28th <u>December, 2017</u>

Submission of Interests - <u>28th February, 2018</u>

Presentation by the EOI players - 7th March, 2018

Any further information in this regard can be viewed from the website of www.tssouthernpower.com.

Annexure: Format for Submitting Interests

UTILITIES					
		EC	OI Response Format		
S. No.		Description	Responses		
Α	De	tails of the Utility			
1	Na	me			
	Ye	ar of Commencement of			
2	licensee operations				
	Area of Operation and				
3	geography covered				
4		erational Performance			
		r last three years)			
	a	SAIDI			
	b	SAIFI			
В	Implementation of SCADA/DMS Solutions				
В		ographical Area of			
1		plementation			
2		riod of implementation			
		ccessful Operation since			
3	when				
4	Technology Implemented		(Yes/No and number of network elements implemented)		
	а	Auto reclosers			
	b	Sectionalizers			
	С	RMUs			
	d	FPIs			
	е	FRTUs			
	f	Specify if any other			
С	Benefits Realized				
	а	Parameters Improved			
		Description of the project			
	b	& benefits realized			
	Digital Competency &				
D	An	alytics			
		Data Analytics platform			
		implemented in licensee			
	а	area			
	b	Capabilities in application development			
	2	Capabilities in installation			
		of IOT sensors for real-			
	С	time monitoring			
	d	Benefits realized			

(Relevant rows can be filled in and players can add additional rows for furnishing information if required)

OEM/EPC					
		EC	Ol Response Format		
S. No.	Description		Responses		
Α	Details of the EPC/OEM				
1	Name				
		. of Projects (SCADA/ DMS)			
2	projects Implemented in India				
3	Details of the Key Projects implemented (upto 3)				
3	1111	Project Cost (Max can be			
	а	mentioned)			
	b	Population Covered			
	С	No. of Feeders Covered			
	d	No. of Substations Covered			
	lm	plemented SCADA/DMS			
В	Sol	lutions (upto 3)			
1	Areas of Implementation				
2	States				
		ccessful Operation since			
3	wh				
4	Technology Implemented				
	а	Auto reclosers			
	b	Sectionalizers			
	С	RMUs			
	d	FPIs			
	е	FRTUs			
	f	Specify if any other			
С	Benefits Realized				
	а	Parameters Improved			
		Description of the project			
	b	& benefits realized			
D	Digital Competency & Analytics				
	AII	Data Analytics platform			
		implemented in licensee			
	а	area			
		Capabilities in application			
	b	development			
		Capabilities in installation			
		of IOT sensors for real-			
	C .	time monitoring			
	d	Benefits realized	additional rows for furnishing information if required)		

(Relevant rows can be filled in and players can add additional rows for furnishing information if required)