SHORT TERM E-TENDER SPECIFICATIONS/DOCUMENTS

1. E-Tender No. : **44**/E. Workshop C./MRT/ **2022-23**

2. Last Date of Online Submission : **05.09.2022** - 14.00 hrs

3. Due date of opening. (Part-I) : **05.09.2022** - 16.30 hrs

4. Price of Tender fee : **Rs. 3,540.00** (**Rs. 3,000.00** +18% GST) **(Though NEFT/ RTGS only)**

5. Earnest money : **Rs. 70000.00** **(Through NEFT/RTGS only)**

6. Description of Work. : विद्युत कार्यशाला मण्डल, मेरठ के अर्न्तगत कम्प्यूटीकृत विभिन्न विद्युत कार्यशालाओं हेतु पूर्व निर्मित सॉफ्टवेयर पर मास्टर डॉटा के निर्माण हेतु विभिन्न कार्यशालाओं में 25 नं0 डाटा आपरेटरों, मण्डल कार्यालय हेतु 1 नं0 परियोजना प्रबन्धक तथा उक्त निर्मित सॉफ्टवेयर हेतु वैब स्पेस इत्यादि एक वर्ष की अवधि हेतु उपलब्ध कराने का कार्य।

7. Estimated Cost : **Rs. 69.06 Lacs**

Bank Account Detail:
Executive Engineer, Electricity Workshop Division, Meerut.
Bank A/C No: 1403900519, IFSC Code: CBIN0282337
Central Bank of India, Jail Chungi Branch, Meerut.

The details of aforesaid E-Tender can be had in following enclosed Annexure- I to XI

1. Check List (Annexure- I)
2. General Instructions to Tenderers (Annexure- II)
3. Tender Performa (Annexure- III,IV,V,VI)
4. Performa of Deviations (Annexure – VII)
5. Prequalifying Conditions (Annexure-VIII)
6. General Conditions and Special T&C (Annexure-IX,X)
7. Scope of Work (Annexure-XI)
8. Price Schedule(Annexure-XII)

Superintending Engineer

नोट :–निविदाकार द्वारा प्रत्येक निविदा हेतु वांछित धरोहर राशि एवं निविदा मूल्य अलग–अलग (अप्रतिदेय), फर्म के नाम चालू खाते से ही **RTGS/NEFT** के माध्यम से ही अधिशासी अभियन्ता, विद्युत कार्यशाला खण्ड, मेरठ के नाम से सैन्ट्रल बैंक ऑफ इण्डिया की जेल चुँगी, मेरठ स्थित बैंक शाखा में संचालित चालू बैंक खाता सं० 1403900519 (**IFSC Code CBIN0282337**) में जमा कराया जाना अनिवार्य है। IMPS के माध्यम से जमा धनराशि मान्य नहीं होगी। IMPS द्वारा जमा की गई धनराशि अथवा सयुक्त रूप से जमा की गई (निविदा शुल्क एवं धरोहर राशि) राशि को निविदा शुल्क मानते हुये उक्त जमा राशि को जब्त कर लिया जायेगा। निविदाकार द्वारा निविदा भाग–1 (निविदा/धरोहर राशि एवं तकनीकी बिड), निविदा भाग–2 (प्राइजबिड) निविदा खुलने की निर्धारित तिथि एंव समय तक, ई–टेण्डरिंग वेबसाईट www.etender.up.nic.in पर अपलोड की जा सकेगी। निविदा भाग–1 (निविदा शुल्क एवं धरोहर राशि) निर्धारित दिनांक एंव समय पर वेबसाईट www.etender.up.nic.in पर खोली जायेगी तथा उसमें निविदाकार अर्ह पाये जाने के उपरान्त ही उक्त निविदाकार की तकनीकी बिड खोली जायेगी। निविदा प्रपत्र खोलने वाले दिवस को अवकाश होने की स्थिति में उक्त निविदाए अगले कार्यदिवस में खोली जायेगी । अधोहस्ताक्षरी द्वारा किसी भी निविदा को स्वीकार/अस्वीकार करने या समस्त निविदाओं को या उसके किसी भाग अथवा अपूर्ण निविदाओं को निरस्त करने का अधिकार सुरक्षित हैं।

Check List for Documents to be upload in Part-Ist (Prequalifying Condition)

E-Tender No   :   **44**/EWC-MT/2022-23

Sl.	Description	Yes/No	Uploaded on page No.
1	**Required Tender Cost deposited in desired Bank Account and its UTR Detail Uploaded.**		
2	**Required Earnest Money deposited in desired Bank Account and its UTR Detail Uploaded.**		
3	**Copy of GST registration certificate (Provisional Certificate shall not be accepted)**		
4	**Copy of PAN card**		
5	**Copy of (AY-2021-22)/latest Income Tax Return Acknowledge Certificate.**		
6	**Under taking as per (Annexure-VI enclosed) on Rs. 10.00 non judicial stamp paper for Conflict of Interest/Not black listed/ debarred/ from business in any Govt./Semi Govt./ PSU/ local Bodies etc.**		
7	**Declaration as per (Annexure-V enclosed) on Rs. 10.00 non-judicial stamp paper about proposal in response to the above invitation shall not be withdrawn within 180 days from the date of opening.**		
8	**The bidder should have a minimum average annual turnover (MAAT) of required amount per annum for the best three financial years out of the last five financial years. The audited balance sheet / CA's certificate with UDIN Number shall be enclosed in support of above failing which the bid shall not be considered.**		
9	**Net worth of the bidder should be positive. Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets with UDIN Number shall be enclosed in support of above failing which the bid shall not be considered.**		
10	**The bidder should have a minimum solvency of Rs. (25% of estimated cost) or credit facility not older than 12 Months from the Ist. date of opening of Part-I of this tender on E-Tender Website http://etender.up.nic.in and it should be issued from Nationalized/ scheduled bank Only.**		
11	**The bidder should have a minimum of ISO 9001 certificate for software development or IT and software related activities.**		
12	**The bidder must have implemented at least & web based IT solutions in Govt/ Semi Govt. Organization.**		
13	**The bidder must have implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in the last Five year as prime contractor in Govt/ Semi Govt. Organization from the date of opening of bid part-1. (Agreement/ Order are to be enclosed) as below:-** **A-Bidder Should have successfully completed the implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in single order having**		

	minimum order value 80% of estimated cost of similar nature or higher rating work.		
	or		
	B- Bidder Should have successfully completed the **implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management** in maximum two order having minimum order value 50% of estimated cost of similar nature or higher rating work.		
	or		
	C- Bidder Should have successfully completed the **implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management** in maximum three order having minimum order 40% of estimated cost of similar nature or higher rating work.		

In Case of Firm's is a Limited Company / Pvt. Limited Company/ Partnership Firm or Authorized signatory is different from Firm's Proprietor . Tenderer has to submit a valid Board Resolution, Partnership deed & Singing Authority letter, Power attorney with tender document, failing which Bid Part-II(Price Bid) will not be opened of such Tenderer.

**Tenderer Signature
with Seal**

TO BE SUBMITTED BY THE CONTRACTOR DULY SIGNED

TENDER INSTRUCTION

Tenderers are requested to go through the instructions carefully and furnish complete information, along-with their tender offer, failing which their offers may not be considered at all tenders shall be received in two parts {Part-I–Technical Bid, Pre qualifying conditions & Part-II–Price Bid} will be filled up in E-Tender Website "http://etender.up.nic.in"

1. **TENDER BID PART-I :-**
    Required Documents will be uploaded in pdf. format. In the absence of said information/documents, the part-II of the tender will not be opened at all.

2. **TENDER BID PART-II (PRICE BID) :-**
    Tender Part-II (Price Bid) will be uploaded in excel file format after fill up the rates and G.S.T. Percentage. Incomplete Excel Sheet, i.e. not filled up the rate or G.S.T. Percentage the tender part–II (Price Bid) will be rejected.

3. The tender shall be uploaded on E-Tender Website http://etender.up.nic.in

4. The tenders will be opened by the Superintending Engineer with other Nominee in this office at specified date and time. In case the tender opening date is holiday, the date of opening of tender will stand extended to next working day.

5. The conditions of Standard Form A of UPPCL applicable against this tender.

6. Superintending Engineer, Electricity Workshop Circle, Meerut reserves the right to reject any tender or all the tenders or part thereof without assigning any season thereof.

7. The purchaser does not pledge to accept the lowest tender and reserves that right to accept any tender or reject any/all the tender(s) without assigning any reasons.

8. All material which will be provided by the contractor, issued used in the repairing of the equipment shall be of best quality and shall be confirming to relevant ISS/BSS mentioned in this tender.

9. The successful tenderers are required to execute an agreement on Non-judicial stamp paper of Rs. 100.00 along within 7 days from the date of issue of regd. Notice and if the firm fails to do so this Earnest Money will be forfeited and works can be assigned to other participant of the tender.

10. Contract will be awarded on basis L-1 Rates in respect of Total Value of Tender.

11. The tenderers are requested to make themselves fully conversant with the job requirement and technical specification and general conditions of the contract as per Form 'A of UPPCL.

12. If the tenderer fails to completion of job within stipulated time a penalty at the rate of 0.5% per week or part thereof subject to maximum 10% will be deducted from his bill as per terms and conditions laid down in Form 'A of UPPCL.

13. The contractor shall be responsible for any damage loss and breakage during execution of work.

14. For any further Clarification. tenderers can contact to the Superintending Engineer, Electricity Workshop Circle, Meerut No subsequent representation of ground of any sort of misunderstanding will be entertained.

15. Payment shall be made per Month basics as per conditions of Form 'A'. No interest shall be paid for delayed payments, whatsoever the delay may be.

16. In the event of unsatisfactory performance/progress of work as may be determined by the Superintending Engineer, Electricity Workshop Circle, Meerut The agreement will be terminated without any notice and security will be forfeited.

17. Successful Contractor has to provide petty items under the scope of work of standard/reputed manufactures confirming to relevant ISS norms.

18. The successful tenderer will be required to enter into an agreement as per General Condition of contract Form A of UPPCL. All the documents submitted in connection with the tender shall also be part of contract.

19. However, if there is tolerance on negative side within the permissible limit of the specified standard, and it does not make any difference in the performance of the material to be decided purchaser only the proportionate reduction in prices shall be done by the consignee.

Signature of Tenderer
with Seal

TENDER PROFORM A
(To be filled & submitted by the Tenderer in Tender Bid Part –I)
IMPORTANT INSTRUCTIONS TO THE TENDERERS

Your e-tender shall not be considered, if you fail to submit this Performa duly filled. Replies should be complete without ambiguity and should be clearly written against each item.

Terms such as "Refer covering letter etc." shall not be acceptable. You may, however, attach extra sheets, if the space is not sufficient.

Sl. No	Particulars	
1	Specification No. against which you have tendered	
2	UTR details by which cost of tender Specification was deposited by you.	
3	Name & Address of the tenderer.	
4	Email Id of contractor	
5	Mobile no. of contractor	
6	Whether tenderer is Prime Contractor or Petty Contractor with power of attorney of manufacturer (authentic proof regarding agents of manufacturer to be enclosed)	
7	UTR details and Amount of earnest money deposited with full Details.	
8	Type of Firm (i.e. proprietary firm, Partnership firm, Pvt. Ltd. Firm, Public Ltd. Firm etc.)	
9	Full Quantity offered (Yes/No.)	
10	Do you agree to all conditions of Form - A/B of tender Specifications. If not, state the modifications clearly in the schedule enclosed which you would desire in Form – A/B other terms & conditions (It may please be noted that, it shall be entirely at the discretion of the competent authority to accept or reject the modifications proposed.)	
11	Name & Detailed address of your Authorized representative against this order / agreement	
12	Name & detailed address of tendered/ proprietor / partners / Directors be given.	
13	Give two references who can certify your financial status & capability to undertake such supply order one of the reference should be a scheduled Bank of India.	
14	Do you confirm that are no typographical errors/ omissions in your tender & all other documents, forming part of the tender (answer Yes / No)	
15	Would you agree validity period of 180 days against this tender (Yes/No)	
16	What is the completion / delivery period, pl. state if the completion is guaranteed under penalty? (Yes/No)	
17	Are you agreeable to the completion period being reckoned from the date of receipt of letter of acceptance by you? (Yes/No)	
18	Do you agree to furnish security deposit, if order is placed with you ? (Yes / No)	
19	Pl. Enclose the certified copy of the latest income tax clearance certificate/Income Tax return.	

20	Weather all the schedule & documents required have been submitted or not ? (Yes/No)	
21	What is your PAN No.	
22	What is your GST No.	
23	The bidder should have a minimum average annual turnover (MAAT) as required in this tender per annum for the best three financial years out of the last five financial years. The audited balance sheet / CA's certificate with UDIN number shall be enclosed in support of above. (Yes/No)	
24	What is your Bank A/c No. & Name of Bank.	

TECHNICAL SPECIFICATION AND PRICES		
25	Are the work/items offered, in accordance to the specifications of the tendering authority. (Yes/No)	
26	Pl. indicate clearly if the quoted prices are Firm & Firm in all respect throughout the currency of the contract / agreement. (Yes/No)	
27	If the quoted rates are inclusive of any taxes /duties / other charges, give details of such taxes /duties / other charges, included & at the rate(s)	
28	Pl state, if you would claim any other charges over & above the prices as extra, which are not covered above. If Yes, Pl. state each separately indicating the amount in Rs. Against each per unit basis.	
29	Do you offer any discount and if so, then what is the rebate / discount in Rs. Per unit?	

Signature of the Tenderer with seal.

SHORT TERM E-T.No. 44/E.Workshop C./MRT/2022-23

M/s…………………………..

………………………………..

………………………………..

To,

The Superintending Engineer,
Electricity Workshop Circle
PVVNL, Meerut.

Dear Sir,

With reference to your tender for the above work, I/We offer to submit our proposal having rates for site, erection at site in the schedule annexed or such portion thereof, as you may determine in strict accordance with the terms, conditions and instructions to the tenderer and conditions of the tender and sale contained in Part-1 of the above referred tender to the satisfaction of the seller or in default thereof to forfeit to and pay to PVVNL, the sum of money mentioned in the said conditions.

THE RATES QUOTED ARE NET AND FIRM AND IN FULL SATISFACTION OF ALL CLAIMS. I/WE AGREE TO ABIDE BY THIS TENDER FOR THE PERIOD OF 180 DAYS FROM THE DATE OF OPENING OF BID PART-1.

A sum of Rs. …….. in the form of RTGS/NEFT **from the Firm's Current Account** having UTR no. …………………….dt………….. vide ………………… (Name of Bank) as tender cost has been deposited in the **Executive Engineer, Electricity Workshop Division, Meerut. Bank A/C No: 1403900519, IFSC Code: CBIN0282337 Central Bank of India, Jail Chungi Branch, Meerut**. The proof of the same has been annexed with the bid proposal. A sum of Rs. …….. in the form of RTGS/NEFT having UTR no. ………………………….dt…………vide …………………. (Name of Bank) as earnest money. The proof of the same has been annexed with the bid proposal, the full value of which shall be retained by the PVVNL on account of earnest money security deposit specified in the said condition of contract.

I/we hereby undertake and agree to execute a contract in accordance with the said 'Terms, Conditions & Instruction to the Tenderer of the tender bid specification.

Firm RTGS Details:-

The details of the funds (earnest money/Tender Fees) given by the firm in the present tender, are deposited in the departmental account, as mentioned herein under:-

Firm current account number-

Name of Bank with address:-

IFSC code of the branch-

Amount:- Rs. ……….. & head (EMD/Tender Cost)

UTR no.-

Yours faithfully,

Signature of the Tenderer
(With complete address & Seal)

NOTE: Please note that no money transfer through IMPS transaction will be accepted at all.

Note :– (This Declaration is to be enclosed in tender bid part-I)

Part-1
DECLERATION

(To be executed on a Rs. 10.00 non-judicial stamp paper)

Tender Invited by:- Superintending Engineer, EWC, PVVNL, MEERUT.

Tender for:-

From:-

Name of Tenderer:-

Specification no.:-   **SHORT TERM E-T.No. 44/Workshop C./MRT /2022-23**

Date of opening of bid part-1:-

IN CONSIDERATION of the EWC,PVVNL, Meerut having treated the tenderer to be an eligible bidder whose tender may be considered, the tenderer hereby agrees to the condition that the proposal in response to the above invitation shall not be withdrawn by us within **180 days** from the date of opening of the tender (or any extension thereof), also to the condition that if thereafter the tenderer does withdraw his proposal within the said period, the earnest money deposited by them may be forfeited by the PVVNL and at the discretion of the purchaser. The purchaser may debar the tenderer from tendering for a minimum period of one year reckoned from the date of opening of the tender.

Signed this …………. day of ……….2022

Place:

Signed by

State title whether Proprietor/Partner
(With complete address & Seal)

Part-1
DECLERATION

(To be executed on a Rs. 10.00 non-judicial stamp paper)
Undertaking/Declaration by the bidder

Tender Invited by:- Superintending Engineer, EWC, PVVNL, MEERUT.

Tender for:-

Name of Tenderer:-

Specification no.:-   **SHORT TERM E-T.No. 44/Workshop C./MRT /2022-23**

(A)   "Regarding Conflict of Interest"
 I…………………………………Sole Proprietor / partner / Director of M/s…………..………………………. under take that I am not interested as a proprietor and/or partner and/or Director in any other party/firm, participated in above Tender.

(B) "Regarding black listing/Debarring of the firm"
        We hereby undertake and submit the declaration that our firm/company is not debarred/blacklisted by any agency or department of Government of Uttar Pradesh/ any other state government / Government of India including State public sector Undertakings or central public sector undertakings during the period of last Five years. As on bid submission date, there is no black listing proceeding or debar for participating in bidding by any State Government or Government of India or their departments or PSUs. My/Our Firm/ Company is/are not involved in any illegal activity and/or not sheeted for any criminal act of theft and/or diverting fertilizers for industrial use or any other essential commodity during last five years.

        In case, at any stage if the above declaration is found false or incorrect, the SE, EWC, Meerut shall be free to take any punitive / legal action against us, as may be deemed fit , which shall be acceptable / binding on us and the consequences shall be to our account.

(C) "Regarding information/details Given"
I, …………………………………sole proprietor / partner/ Directors of M/s ……………………………..is giving undertaking that details given are correct to the best of my knowledge and I agree to abide by all your tender/order terms and conditions.

That I further undertaking that in case any of the facts sworn in as mentioned above and any particulars mentioned in our application is found other-wise or incorrect or false at any stage, Beside, Govt. Deptt./Govt. Nigam/Govt. Boards shell be entitled to take all such actions as may be deemed fit including termination of Contract, if awarded, without any claim for any compensation whatsoever on account of such premature closure of the contract.

I know that to swear a false affidavit is a crime under the law and with such knowledge only I have swear this affidavit.

Signed this …………. day of ……….2022

Place:

Signed by

State title whether Proprietor/Partner
(With complete address & Seal)

(To be filled & submitted by the Tenderer in E-Tender Bid Part –I)

DEVIATIONS FROM TERMS AND CONDITIONS OF E-TENDER DOCUMENT/ FORM A&B & OTHER TERMS & CONDITIONS OF UPPCL/P.V.V.N.L.

AGAINST **SHORT TERM** TENDER NO. **44**/E. Workshop C./MRT/ 2022-23

I/We the undersigned have carefully examined {The General Conditions of contract form A and other terms & conditions of the tender specification} and I/We hereby confirm that all the terms & conditions contained in form A and other terms and conditions of tender specification under reference are acceptable to me/us with the following deviations :

Sl. No.	Description of Clause No. etc.	Stipulated in UPPCL/ P.V.V.N.L. specification	Deviation offered	Remark, if any
1	2	3	4	5

Signature of contractor with seal

Date

Place:

Address:

Short Term E-Tender No. 44/E. Workshop C./MRT/2022-23

Tenderers are requested to go through the instructions carefully and furnish complete information, alongwith their tender offer, failing which their offers may not be considered at all tenders shall be received in two parts {Part-I (Fee & pre qualifying Conditions) and Part-II–Price Bid} will be filled up in E-Tender Website http://etender.up.nic.in

➢ Tenderer shall upload following documents on e-tender portal www.etender.up.nic.in using his digital signature.

➢ The bidders have to fulfil following minimum conditions of experience and financial competence in order to qualify for consideration this tender:

➢ The Tender submissions of bidders, who don not qualify the minimum eligibility criteria, is liable to be rejected and shall not be considered for further evaluation.

➢ **JV(Joint Venture) is not allowed.**

➢ निविदाकार को निविदा के भाग–प्रथम मे अधोलिखित **Pre-Qualifying Conditions** के अनुसार प्रपत्र **E-Tender Website http://etender.up.nic.in** पर **Upload** करना आवश्यक होगे। उक्त प्रपत्र मण्डल कार्यालय में **physical** रूप में स्वीकार नहीं किये जायेंगे । उक्त निविदा का द्वितीय भाग, केवल उन्हीं फर्मो को खोला जायेगा, जो अधोलिखित **Pre-Qualifying Conditions** में अर्ह करेगी ।

1- Eligibility Criteria/Pre-Qualifying Conditions for Part-I

a. Technical Requirement: -

(i) **Copy of RTGS/NEFT Bank Receipt on a/c of Tender Cost in single transaction from the Firm,s Current Account which shall be deposited in the current bank A/c. of Executive Engineer, Electricity Workshop Division, Meerut through RTGS/NEFT in Bank A/c No. 1403900519, IFSC no. CBIN0282337, Central Bank of India, Jail Chungi, Meerut.**

(ii) **Copy of RTGS/NEFT Bank Receipt on a/c of Earnest Money in single transaction from the Firm,s Current Account which shall be deposited in the current bank A/c. of Executive Engineer, Electricity Workshop Division, Meerut through RTGS/NEFT in Bank A/c No. 1403900519, IFSC no. CBIN0282337, Central Bank of India, Jail Chungi, Meerut.**

(iii) **The bidder should have a valid G.S.T Registration. (Provide copy) Provisional Certificate not be accepted.**

(iv) **The bidder should have a valid PAN card copy. (upload copy)**

(v) **Copy of (AY-2021-22)/latest Income Tax Return Acknowledge Certificate. (upload copy)**

(vi) **Under taking as per (Annexure-VI enclosed) on Rs. 10.00 non judicial stamp paper for Not black listed/debarred from business in any Govt./Semi Govt./PSU/local Bodies etc.with bid in tender PART-I (uploading copy mandatory)**

(vii) **Declaration as per (Annexure-V enclosed) on Rs. 10.00 non-judicial stamp paper about proposal in response to the above invitation shall not be withdrawn within 180 days from the date of opening.**

(viii) **The bidder should have a minimum average annual turnover (MAAT) of Rs. 103.59 Lac (150% of Estimated cost) per annum for the best three financial years out of the last five financial years. The audited balance sheet / CA's certificate with UDIN Number shall be enclosed in support of above failing which the bid shall not be considered. (upload copy)**

(ix) **Net worth of the bidder should be positive. Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets with UDIN Number shall be enclosed in support of above failing which the bid shall not be considered.**

(x) **The bidder should have a minimum solvency of Rs. (25% of estimated cost) or credit facility not older than 12 Months from the Ist. date of opening of Part-I of this tender on E-Tender Website http://etender.up.nic.in and it should be issued from Nationalized/ scheduled bank Only.**

(xi) **The bidder should have a minimum of ISO 9001 certificate for software development or IT and software related activities.**

(xii) **The bidder must have Successfully implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in Govt/ Semi Govt. Organization.(Copy to be enclosed)**

(xiii) **The bidder must have implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in the last Five year as prime contractor in Govt/ Semi Govt. Organization from the date of opening of bid part-1. (Agreement/ Order are to be enclosed) as below:-**

A-Bidder Should have successfully implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in single order having minimum order value 80% of estimated cost of similar nature or higher rating work.

<div align="center">or</div>

B- Bidder Should have successfully implemented/order for Web bases IT solution in Power Distribution utility for Workshop Management/Inventory management/Material management in maximum two order having minimum order value 50% of estimated cost of similar nature or higher rating work.

<div align="center">or</div>

C- Bidder Should have successfully implemented/order for Web bases IT solution in Power distribution utility for Workshop Management/Inventory management/Material management in maximum three order having minimum order 40% of estimated cost of similar nature or higher rating work.

<div align="center">

Signature of Tenderer
With Seal

</div>

In Case of Firm's is a Limited Company / Pvt. Limited Company/ Partnership Firm or Authorized signatory is different from Firm's Proprietor . Tenderer has to submit a valid Board Resolution, Partnership deed & Singing Authority letter, Power attorney with tender document, failing which Bid Part-II(Price Bid) will not be opened of such Tenderer.

Short Term E-Tender No. 44/E. Workshop C./MRT /2022-23

Tender Bid Part- II: It shall contain Price Bid only and shall be uploaded on www.etender.up.nic.in:

Important Note: Tender Bid Part-II of only those firms shall be opened which comply by uploading of desired documents of pre qualifying conditions Part-I in E-Tender of the Bid. Part-II of those firms which fail to submit the above records shall not be considered.

1.02   In case of any inconsistency with the provisions of Form A of UPSEB/UPPCL the provisions under special conditions of the tender will prevail.

1.03   Tenderers are requested to submit the price schedule appendix duly filled in (item by item) as required and should strictly follow the instructions to facilitate the tendering authority to prepare Comparative Statements.

1.04   Any portion of "Terms & conditions" as laid down in the condition of the contract, Form A & B of UPSEB/UPPCL along with nature of work etc, which is not clear to the tenderer should be got clarified before submission of the tender. Tenderers are requested to adhere to all clauses of the contract Form A of UPSEB/UPPCL to facilitate finalization of the contract. In case, they are unable to do so, should state the particular clause of the conditions which may not be acceptable to them & should support alternative for consideration.

1.05   The tendering authority does not suggest /pledge to accept the lowest of any tender & reserves to himself the right of rejecting the whole or any portion of the tender as he may think fit without assigning any reason for non acceptance or selection.

1.06   Tendering authority reserves the right to revise or amend the tender. Such revision & amendment, if any, will be communicated to all tenderers as amendment or addenda to this invitation of the tender.

1.07   Any action on the part of the tenderer to revise the price/prices and/or the change the structure of price/prices at his own instance after opening of tenders may result in rejection of tender & also debarring him form submission of the tenderers to the P.V.V.N.L./ Corporation at least for one year.

1.08   Any approach etc., officially or otherwise on the part of the tenderer or his representative shall tantamount to his offer liable to be summarily rejected.

1.09   Tender fee in single transaction which shall be deposited in the current bank A/c. of Executive Engineer, Electricity Workshop Division, Meerut through RTGS/NEFT in Bank A/c No. 1403900519, IFSC no. CBIN0282337, Central Bank of India, Jail Chungi, Meerut.

1.10   Earnest Money in single transaction which shall be deposited in the current bank A/c. of Executive Engineer, Electricity Workshop Division, Meerut through RTGS/NEFT in Bank A/c No. 1403900519, IFSC no. CBIN0282337, Central Bank of India, Jail Chungi, Meerut.

1.11   Copies of Bank receipt (RTGS/NEFT) for document cost and earnest money should by uploaded in Part-I of tender.

1.12   The Tender fee once deposited will not be refunded under any circumstance whatsoever.

1.13   In case of ambiguous or self contradictory terms/conditions mentioned in the tender specification, interpretations as advantageous to the P.V.V.N.L./Corporation shall be taken without any reference to accept the deviations or not.

1.14   Any overwriting /omitting/erasing etc. in the tender should be duly signed & stamped.

1.15   In no case payment will be made by the Letter of Credit.

1.16   The Earnest Money deposited by the tenderer will be refunded after finalization of tender, in the event of his tender being rejected/not accepted. In the event of tender being accepted, the Earnest Money shall be retained by the tendering authority and adjusted against the security deposit specified under and shall be released only on satisfactory completion of work.

2.00   Only tender of those tenderers shall be considered who have sufficient experience for execution of such type of works during past & have necessary resources & organization to undertake the work tendered for to the satisfaction of the tendering authority.

3.01   All the tenderers must furnish a list of agreements executed by them during last five years.

3.02   All the tenderers must submit past performance reports of any of such type of works carried out by them.

3.03   **VALIDITY OF OFFER:** Tenderers shall ensure that their rates are firm and will be valid for 180 days from the date of opening of the tender & are not subject to variation on any account.

4.00   **COMPLETION PERIOD:** Period for the execution of work is One Year From the date of LOI/Agreement/Order. The term shall be initially for a period of One year, extendable/renewable on a year to year basis for such period as mutually agreeable, subject to the total period will not be extended further beyond Five Years.

5.00   **PRICES:**

5.01   The Tenderers must quote their prices (item wise) in the Price Schedule (BOQ) uploaded on e-tender website.

5.02   The quoted prices shall be firm & firm in all respect throughout period of the Contract/agreement. No variation in the prices shall be allowed in any circumstances.

5.03   Tenderer should note clearly that the tenders with variable prices shall not be considered at all.

5.04   Any other charges/duties/taxes/levies etc. should be specifically mentioned separately in the price schedule.

6.00   **SCHEDULE OF DEVIATION FROM GENERAL CONDITIONS OF FORM A &B & SPECIAL CONDITIONS:**

The tenderers should clearly state whether all the provisions of tender specification application to this tender, are acceptable to them & incase of any deviations the same should be clearly mentioned and submitted along with their tender in the enclosed proforma.

7.00   **PAYMENT**:

Running payment may be made on month wise basis as per agreement subject to the availability of the funds.

8.00   **DISPUTE:**

For any dispute arising out of this tender in between the tendering authority and the contractor. The Director (Tech.), P.V.V.N.L., Meerut will decide the dispute and his decision will be binding on both the parties.

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1. **INFRASTRUCTURE REQUIRMENT**:

   1) The bidder should have adequate number of professionals on regular roll of the tenderer as mentioned below, whose/personal, educational and other qualifications and experience details must be furnished in specified formats.
      a) Professional experts in computer programming/operation.
      b) Electrical Engineers with degree from recognized institute.
      c) Professionals trained in accounting & Commercial aspects.
      d) Professional experts in design & development of billing and energy accounting software.

   2) The bidder must have adequate member of Computers, Internet connections, Telephone hand held computers and other petty items , so that the work is done efficiently.

   3) The firm will be responsible to deduct the amount of E.P.F, E.S.IO from the wages of their employees and contribution of the firm, will be got deposited with the E.P.F, E.S.I Department as per applicability, rules and regulation and provide a photocopy of Deposited E.P.F.E.S.I amount in PVVNL. The contractor is required to abide by the provisions of the labour/ industrial laws such as payment of minimum wages to labour engaged by them for execution of work etc. as per applicability.

2. **SITE VISITS**

   The bidder may in his own interest, before submitting his bid, examine the system used in PVVNL. Bidder can examine present system , forms used, report generated etc at any working day at above mention office. No claim for change in the bid or terms and condition of the contract shall be entertained on the ground that the conditions are different from what were contemplated.

3. **AMENDMENTS TO BID DOCUMENT**

   At any time prior to the last date for submission of bid as well as designated date for opening of Part-II price bid, PVVNL may for any reason, whether of its own or by way of clarification given at the request of prospective bidder, modify the bid document by issue of amendment which shall form part of it.

The amendment(s) shall be sent in writing to prospective bidders, who shall return one copy of it duly signed with their bid. Suitable extension to the due date, if considered necessary will be allowed to afford reasonable time to take into account, such amendments.

4. **SIGNING OF AGREEMENT**

   The successful bidder shall, on receipt of Letter of Intent (LOI), enter into a contract with Superintending Engineer, Electricity Workshop Circle, Meerut by jointly signing an Agreement. The Agreement shall be executed within fifteen days thereafter. The person signing the Agreement must be duly authorized by the bidder.

5. **PERFORMANCE SECURITY**

   Within 30 days of receipt of the LOI, the successful bidder shall furnish a performance security @ 10% of the yearly contract value for the specified amount for the entire term, in any one of the following formats to guarantee faithful performance of the Contract. On submission of which the earnest money deposit shall be refunded: -

FDR/TDR/CDR duly pledged in favour of Executive Engineer, Electricity Workshop Division, Meerut payable at Meerut issued by any Indian Nationalised Bank.

Or

Bank guarantee in favor of Executive Engineer, Electricity Workshop Division, Meerut of the concerned town as per the Performa to be provided by PVVNL. The BG shall be valid till completion of contracted period along with extra 6 months as claim period.

The performance security shall be refunded to the contractor after 6 months of completion of the contract as per the Agreement. The bidder has to first furnish the performance security amount and then commence work. Failure in furnishing the performance security shall result in annulment of the award and forfeiture of the earnest money.

6. SUBLETTING OF CONTRACT

The Contractor shall not assign or sublet the contract / work to any other party/ person with out prior written approval from the Engineer of the contract.

7. HANDING OF DATA BASE AND SOFTWARE

Upon the termination of the contract the software developed will be the property of PVVNL and software with source code and entire related database shall be handed over to PVVNL. Upon the termination of the the agreement the bidder authority to act in the area shall immediately cease.

8. CONDUCT OF BIDDER STAFF

If any of the bidder staff / Employee shall in the opinion of PVVNL is guilty of the misconduct or incompetence or negligence , then if so directed by PVVNL the bidder shall atonce remove such employee and replace him by a qualified and competent substitute for the aforesaid work.

9. GENERAL

In case of ambiguous or contradictory terms and conditions mentioned in the bid, interpretations as made by PVVNL shall be final and binding on all parties.

PVVNL reserves the right to amend the nature or scope of the proposed contract, reject or accept any bid, cancel the bid process or/and reject all applications.

PVVNL shall neither be liable for any action nor be under any obligation to inform the bidders of the grounds for any of its actions.

The General Condition of Contract Form "A" shall be applicable to this tender.

10. TERMS OF PAYMENT:

Payment shall be made as per monthly activities undertaken by the agency. The payment shall be made on monthly basis after submission of required monthly bills.

11. TERMS OF CONTRACT:

The term shall be initially for a period of One year, extendable/renewable on a year to year basis for such period as mutually agreeable, subject to the total period will not be extended further beyond Five Years.

12. OFFER FOR ENGAGEMENT OF AGENCY

For Operation and Maintenance of web enable Workshop Automation software for PVVNL

13. Timelines:

Timelines are the essence of the project and since the project is a highly sensitive project, bidder will have to adhere with the given timelines, failing which the appropriate action shall be taken against the bidder including but not limited to termination of the bidder.

S No	Activity	Timelines
1	Operations and Maintenance of existing system and deployment of manpower	7 days
2	Enhancements in the existing system and integration with Store and new proposed system	7 days
3	Mobile backend and Mobile Apps for existing system	15 days
4	Mobility and installation management system	15 days
5	Hierarchical data creation or integration with existing systems for creation user for all concerned officers of PVVNL (Approx 1000)	15 days

14. Integration with existing systems

Bidder will have to integrate the system with the existing system of PVVNL as per requirement of Technical specification with this tender document.

1. Workshop automation system
2. Store and inventory management system
3. Customer care center software

15. Tax:
GST shall be paid extra as applicable

16. Name and Communication Details

1.1 Full Legal Name Of The Firm
1.2 Registered Office Address
1.3 Address For Correspondence
1.4 Telegraphic Address
1.5 Telephone No.
1.6 E-Mail
1.7 Facsimile
1.8 Authorized Person to be contacted
1.9 Names & Address of the Proprietors/Partners

17. Status
Is The bidder:
Indian Resident
Indian Company
Nature/status of firm (Whether sole Proprietary/Partnership/Private Ltd./Public Ltd.

18. Organizational Capabilities
3.1 Field organization and resources for the proposed job.
3.2 Qualification and experience of personnel at different levels.

19. System Proposed

This should include a brief write-up and plans about the proposed development of web enable Workshop Automation software for PVVNL.

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S. No.	Item Description	Unit	Period
1	System Administration & Technical support charges for 1 year with DTC/issue management and fleet management for all main Associated Repairing of Damage Transformer & Replacement at site under Area of PVVNL.	Service/per Month	12 Months
2	Web Application Server and Database server hosting Minimum space 8 GB Ram 100 MBPS connectivity RDBMS 2 GHz, 4 Core CPU	Service/per Month	12 Months
3	Backup Web Application Server and Database server hosting Minimum specs 4 GB Ram 100 MBPS connectivity RDBMS 2 GHz, 4 Core CPU	Service/per Month	12 Months
4	Data Entry Operator at workshops and Division office under EWC, Meerut.	25 No./ Per Month	12 Months
5	Project Manager at EWC, Meerut office for 1 years	01 No./ Per Month	12 Months
6	Mobility and installation management system.	Service/per Month	12 Months
	Total		

All statuary taxes and levies will be borne by the bidder except GST which will be paid extra as applicable

Note: -

1. Quantity of data entry operator may vary upto 50%

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Technical specification of the proposed system:

Proposed system overview:

1. Operation and maintenance of the existing Workshop automation system

2. Enhancements in the existing workshop automation system including

    a. New Developments related to issue and receive from distribution division

    b. Development of Mobile backend and native android, iOS based mobile applications for the existing system

3. Development of Mobility and installation management system which includes the following

    a. Proposed integrated Mobile app and Web based system for transformer replacement process management

    b. Proposed system/integration with existing system to maintain the centralized hierarchy of the DISCOM

    c. Fleet management to manage the database of the transport vehicles and track their utilization/work allotment.

4. New Integrations with the existing inventory management system ERP (SAP) as per requirement

Block diagram of the proposed system
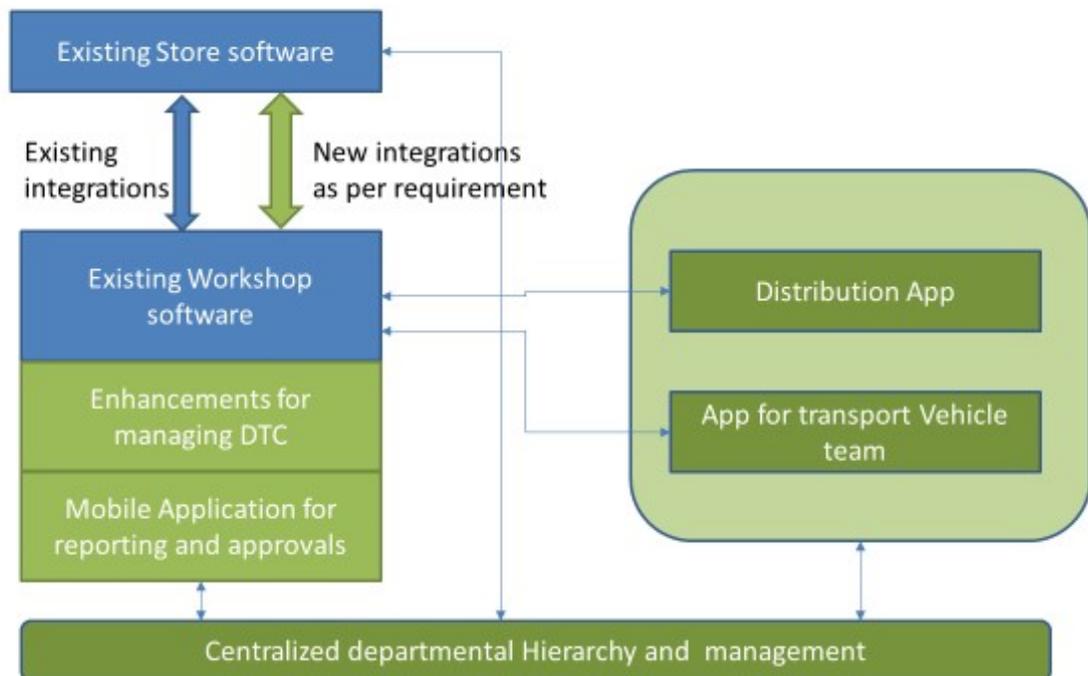
Technical Specification of the existing system:-

Master Data	
Organization mapping	System should be able to map the complete organization structure of the DISCOM as well as the operational structure. There should be a provision to create/edit/remove following 1. Discom/Company 2. Distribution Zone within Discom 3. Distribution Circle within Distribution Zone 4. Distribution Division within Distribution Circle 5. Distribution Sub-Division within Distribution Division 6. Workshop Circle within DISCOM 7. Workshop Division within Workshop Circle 8. Workshop Sub-Division within Workshop Division
Workshop Mapping	System should be able to create masters for different workshops and should be able to map it with stores and distribution circles
Staff Master	The operational hierarchy should be properly matched to organization structure. There should be a provision to create different roles 1. MD 2. Directors 3. SE 4. XEN etc
Material master	There should be a provision to add/remove/edit the materials type, code and other parameters related to materials. Materials are linked to different schemes and work and there should be the provision to create different schemes/Work and map the materials to them. ERP Code Should also be incorporated and to be made mandatory.
Vendor Master	System should have provision to create different vendor in different categories. Systems should have provision add/modify/delete vendors. All vendors related tracking should be linked with vendor master. Vendor Details from ERP and Related data should be synchronised.
Scrap Master	There should be a provision to add/remove/edit the scrap material type, code and other parameters related to scraps. There should be linking between the scrap and the materials and estimated scrap material logic should be built into the system
Machinery Master	There should be a provision to add/remove/edit Machinery Master. Machines will be categorized into different types. System should be able to track the warranty and Guarantee of the machines

Work Flow	
	The Proposed solution must be able to provide procedural automation of the existing and proposed business processes by management of the sequence of work activities and the invocation of appropriate human and/or IT resources associated with the various activity steps.
	Work flow should handle the routing of request and approval
	The workflow system should provide sufficient flexibility to cope with any change in the business process as and when required
	The workflow component shall maintain proper audit trails and facilitate reports of all transactions performed on the system.
	All repairs request and approval should be handled by this tool
Work flow	System should be able to map the complete process for repair and should enforce the rules and workflows

System should have provision to create different types of job cards as per PVVNL Workshop requirements.	
Job Card	this should contain the detailed information about the material to be issued and consumer details
Job Card(R/R)	Repair and renovation are handled through this
Job Estimation	System should have provision to allow job estimation based on the material to be repaired. There should be in-built rules which should assist in easy job estimation. These job estimation rules should be configurable by SE workshop.
Warranty/Guarantee tracking	System should allow the workshop to efficiently track the warranty and guarantee's of the materials
Material Analysis	On the basis of job estimation, system should be able to generate the material list available with the DISCOM and the third party components required. System should then allow the tracking of third party material procurement
Job creation	Based on the analysis, system should be able to create the job and devide the material and labour components and should be able to calculate the estimated cost of repair.

Design criteria	System should be able to create and store the design rules and should be assist in standardizing the repair process throughout the discom

Receiving	
Receiving from Stores	System should be integrated with the existing Workshop and inventory management solution ERP (SAP) and should be able to accept the materials for repair from the store.PR, Invoice and gate pass against which the material is taken from the store should be tracked. The received material should be accepted and GRN should be generated
Receiving from other work shops	System should be able to receive the materials from other workshops. System should be able to receive materials to be repaired as well as spare parts and other materials required for repair
Receiving from Vendors	System should be able to receive the materials back from the vendors against the issues made to vendors for repairs

Issue of materials within Workshop	
Invoice creation	System should be able to track different types of invoice covering the following 1. Division: Invoice against the job card 2. Internal transfer: System should be able to create invoice for material transfer within the utility based on the approval
material tracking	System should be able to track the transformers on the basis on invoice and unique serial number
Gate pass	system should allow tracking of Gate pass against the invoice
partial gate pass	system should allow creation of partial list of material from the invoice and should be able to track the balance material for invoice
Invoice and job card linking	System should be able to relate the invoice to the job card and vice-versa.
Partial issue against job card	System should be able to keep track of partial issue against the job card and keep the details including material issued, data and receiving authority
Tracking of recipient	System should keep track of the recipient of the materials along with the date for the particular job cards.

Tracking of transformer Repairing Activates.	
Stages of repair	Transformer received goes through various stages after receipt in the workshop and system should track the transformer in different stages and various income and output parameters for the stages
Dismantle stage	If the transformer is in Guarantee period, system should mark the transformer for returning to store else transformer should be sent for dismantling. System should be able to record the details of the oil and other components of the transformer
Cleaning stage	Core of the transformer are sent for cleaning and packaging
	Tank is sent for cleaning and then painting
	If the coil is damaged, then winding of same design are arranged
Assembly	After the cleaning stage, transformer is assembled and then kept in Owen
Test results	After taking transformer from owen, transformer is tested and results are stored
Oil filling	The transformer which passes the test are filled with oil
Test results stage 2	After filling oil, transformer is tested and results are stored
Welding	The transformer which passes the test are filled are welded and issued to store

Material tracking for Repairing of Damage Transformers.	
Material Master	There should be a provision to add/remove/edit the materials type, code and other parameters related to materials. Materials are linked to different schemes and work and there should be the provision to create different schemes/Work and map the materials to them
Material receiving tracking	System should be able to keep the track of materials and from where the materials are received.
Material usage tracking	System should allow the tracking of materials used for repairs. System should be able to generate the list of left over materials. There should be a provision to return the leftover materials to Stores and other workshops if required
Scrap estimation	System should be intelligent to estimate the scrap that will be generated

	using repair and if material is discarded
Scrap tracking	System should be able to keep track of scrap generated and should be able to track the sending of scrap back to the stores.

Material tracking	
Oil usage tracking	System should allow the tracking of oil of the transformers. System should keep track of initial oil level in the transformers and number of days of transformer usage.
Reclaimed oil	System should keep track of oil reclaimed from the damaged transformers which can be reused
Fresh oil	System should keep track of fresh oil received from vendors
Damage oil tracking	Damaged oil is given to vendors and refined oil is taken back from the vendor. System should be able to track the complete process and should help in quality control of oil also

Details of Reports	
Configurable reporting Engine	System should allow the user to generate and configure the reports.
Daily/weekly/monthly /total reports	System should be able to generate various Daily/weekly/monthly/total reports including material receipt, material issued, transformers repaired, materials consumed, labor component etc
Capacity wise transformer tracking	System should be able to track capacity wise transformer status like transformer repaired, pending for repair, repair in process etc
Other reports	There will about 25 custom reports and the system should be able to generate the generic as well as specific reports for the workshops and also as per requirement of PVVNL/Workshop.

Repaired Transformer testing Tracking.	
Test scheduling and tracking	System should be able to schedule the test for the transformer to be repaired and should be able to track the test conducted on the transformer
Template creation	System should have configurable tool to create different templates for different types of test and should allow capturing of test results in those templates

Capacity wise transformer tracking	System should be able to track capacity wise transformer status like transformer repaired, pending for repair, repair in process etc
Other reports	There will about 25 custom reports and the system should be able to generate the generic as well as specific reports for the work shops

Integration	
1	System needs to be integrated with the legacy applications like ERP (SAP) and inventory management system already running in the DISCOM as per Further requirement of PVVNL.
2	There should be a provision in the system for integration with upcoming applications like ERP/SAP etc.
Feature	Functionality
Modular Design	Applications, systems and infrastructure are to be characterized as service-oriented, component-based & reusable. The system will be modular in design, operations and implementation.
System Architecture	The supplier is to balance the adoption of standards used by market leading vendors and products, and adherence to industry standards and open architectures. Systems are to be acquired, developed, or enhanced in such a way that business processes; application and infrastructure services and data can be shared and integrated across the Utility and with potential business partners.
Application Architecture	Application architectures must be highly granular and loosely coupled. This is focused on loosely coupling systems compliant to Service Oriented Architecture to facilitate application recovery. This is to ensure that the failure of one component does not cascade to others. A tier can also be scaled to run separate applications to optimize performance.
Web Based design	All the application designed for this purpose shall be web based and the Purchaser at workstation shall be able to access through the latest available version of the web browser such as Internet Explorer, Fire Fox etc. Any add-on required must be integrated with latest version released by the developer at the time of Bid opening
Business Process Requirement	Application requirements will be based on PVVNL business processes and the functional requirements that derive from them. The application system should empower the Business Users in defining the business processes by process modeling.

Basic system architecture and Unified Access framework	The applications system should be built upon WS* specifications using open industry standards of Web services using XML, SOAP, WSDL and UDDI and should have the unified access framework compliant to W3C portal specifications for people, process and information by integrating the backend applications with single sign-on feature, role based, request based and hybrid user type access, searching and collaborative environment.
Message Based interface	As per the requirement, Interfaces between separate systems (both internal and external systems) will be messaged based compliant to W3C XML standard/OPC/DDE/ODBC interface.
Application Integration	Integration technologies must be industry proven standards. They must be scalable in capacity and provide for essential extensive functionality. WS* based Web Services Integration specifications shall be used for integrating disparate systems, such as: Web Services Messaging Specifications including SOAP Web Services Reliable Messaging Web Services metadata Specifications including WSDL Web Services XML Specifications Web Services Business Process Specifications including BPEL4WS Web Services Management Specifications EDIFACT and ANSI Rich Internet application
Data Access	The applications will access data through business rules i.e. the applications must not access data directly without going through APIs managed by business rules/ validation/workflow. Data should be collected once and used many times.
Central data storage	Data shall be stored at central data center. The Data acquisition server located at Sub division will acquire the meter data and store in it's own local database and upload to central database at periodic interval as agreed between owner and bidder during implementation stage.
Application Scalability	The application portfolio and the IT infrastructure are to be vertically and horizontally scalable in size, on demand with virtualization capacity, and functionality to meet changing business and technical requirements, thereby enabling the utility to be adaptable to change.
Data Ownership	Irrespective of the Operation/ Outsourcing option adopted for operation of the system, the ownership and physical possession of the data will always remain with the PVVNL. The application should provide the flexibility of system disintegration/aggregation of information and application in case of outsourcing, acquisition, and merger of PVVNL.

Login wise, Rights group	The system will be able to grant specific access rights to each login or group of logins, as per the business requirement and policy of PVVNL with unique identify across the enterprise system. System shall also permit temporary transfer of access rights within his group to officers for employees reporting to him.
Data Backup System	Will be required to maintain daily backups of the database on reliable backup media.
Interface with other system	As per the requirement, system will exist in conjunction with several other systems. It would therefore be required to interface with other systems for seamless flow of business information in Web Services or W3C XML industry format/OPC/DDE/ODBC Interface.
Report Generation	The system will provide a report generating tool, which can be used to generate customized reports at any level. The reports generated should be stored in various user configurable "bins". The access to bins should be configurable by having security roles in the system.
MIS Reports	The system should allow for a graphical interface to view the summary data in MIS reports. This would include trend graphs, graphs indicating how much of the target has been met etc.

DATABASE MANAGEMENT: A relational Database Management System shall be used to manage the database. The database management functions shall be able to operate interactively from any terminal. It shall be possible for multiple users to edit the global database concurrently, protected by record-level interlocks. The database manager shall ensure database integrity; and provide for backup and recovery of database files. The database structures shall be subject to review and approval by employer. Extensive reasonability, integrity, and referential integrity checks shall be made on user entries to detect errors at the time of entry. Invalid entries, such as entering an invalid data type or invalid parameters characteristics for a database item, shall be detected and reported to the user in an error message. A utility function shall be provided that creates, from the database, a new global database file, suitable for editing, that reflects any changes made to the database since the last time the database was compiled.

DATA RETENTION:

The database generation process shall retain and utilize data values from the current database in the newly generated database, even when a newly generated database contains structure changes. Data to be retained across database generation cycles shall include, but not be limited to, quality codes, manual entries, tags, historical data, and program tuning parameters

Data Ownership:

All the data created as the part of the project would be owned by PVVNL. All the Data will be Property of PVVNL & in no circumstances should be shared or communicated to any other entity/Organization without prior permission of competent Authority, not below the rank of SE, EWC,PVVNL Meerut.

Successful Bidder shall take utmost care in maintaining security, confidentiality and backup of this data.

Enhancements in the existing workshop automation system

Some of these processes have been added in the existing system, but major enhancement work needs to be done and some of the processes needs to be added in the existing system.

Workshops in PVVNL are going through lot of changes and bidder shall factor in the change requirements.

S.No	Activity	Details
1	Invoice of repaired/new Transformer To distribution Division	Invoice to distribution division New/Repaired Transformer received from Store and repaired Transformer from Workshop
2	Capture and save Details Information of distribution division Invoice	Like Distribution division to village, place and Plinth Code/Pole Code
3	Invoice Transformer to other workshop	Invoice Transformer to other workshop, received from stores New/Repaired
4	Invoice Transformer to Store	Invoice Transformer to Store, received from store
5	Create Service for sending New/Repaired Transformer invoice in Store Software online	
6	Invoice Damage Transformer to store	Damage Transformer in GP received from Distribution division
7	Create Service for sending Damage Transformer invoice in Store Software online	
8	Received Damage Transformer from distribution division	Received Damage Transformer from DD against Invoice Given to DD
9	Send Damage Transformer to store	In primary inspection mark Damage Transformer to send store in GP
10	Receive New And repaired Transformer from Stores	
11	Create Web service for receive online Invoice from Store Software	
12	Receive new/Repaired Transformer from other Workshop	Receive new/Repaired Transformer from other Workshop
13	Issue Report JE Wise	
14	Issue Report Distribution Division Wise	
15	Fleet management	

Development of Mobile backend and native android, iOS based mobile applications for the existing system

To bring in the efficiency in the system, PVVNL intends to have a mobile app for reporting and controlling the existing workshop system. Existing system is developed in .net with MS SQL as a database. Bidder will have to create all the services required for generating the reports.

1. Provide major reports on Mobile apps
    a. Repaired Transformer balances
    b. Transformer in repairing cycle
    c. New transformers received from store
    d. Stock balances of materials
2. Approval mechanism
    a. Inter-workshop transaction approvals in same sub-division

b. Inter-workshop transaction approvals in same division
c. Inter-workshop transaction approvals in different division
3. Provide reports for distribution officers to see transformer related details
a. Transformers to be replaced
b. Transformers replaced
c. Transformers MIS

Proposed integrated Mobility and installation management system

Key outcomes

1. Timely information dissemination to officers concerned.
2. Improved planning and execution
3. Timely information capturing and updation in CRM, 1912 SYSTEM, Store, workshop, ERP (SAP) and other systems.
4. Complete field tracking and updates
5. Option to capture location and photos.

Integration with existing systems - Mobile app needs to be integrated with existing systems, including

1. ERP (SAP)
2. Workshop Management System (WMS)
3. Outage Management System (1912 SYSTEM)

Functionality

1. All transformer complaints will be visible to JE/AE distribution and other officers on App
2. JE/AE distribution shall confirm with customer regarding the complaint and update in the App
3. In case complaint is not related to transformer change, AE distribution will enter details of complaints for further action. Same will be updated in 1912 SYSTEM.
4. Once confirmed by JE/AE distribution, Complaint shall be shown as pending for transformer replacement. This activity has to be completed in a time bound manner by JE/AE distribution.
5. JE/AE distribution will also filter out the duplicate complaints and will merge them into a single complaint.
6. JE/AE will also enter the information about the transformer damage complaints which are not received through 1912 system in order to create a consolidated list of the transformers which needs to be replaced.
7. All transformer replacement request will be shown as pending to Workshop/Store for dispatch of material.
8. Dispatch will be done roaster wise, for example roaster can be

Complaint received	Confirmation by JE Dist	Confirmation by AE Dist	Dispatch of Transformer	AE Workshop/ XEN workshop
8 am to 4 pm	Till 8 pm	Till 10 pm in case confirmation not received from JE	Next day between 8 am to 9 am	
4 pm to 8 am	Till 11 am	Till 12 PM in case confirmation not received from JE	Same day around 2 pm	
Balance of the previous complaints			Next day between 12 pm to 1 pm	Between 4 Pm to 5 PM: Verification of pending dispatch by AE workshop with JE distribution. Review by XEN Workshop between 10:30 am to 11:00 am

9. All transformer ready for dispatch shall be entered in Workshop software. The same shall be sending as notification to concerned AE/JE distribution.
10. Once material is dispatched, the same shall be notified to JE, AE and XEN distribution.
11. Mobile App will also be used by transporter for field tracking. Driver shall update site reached status in App. Facility to update via SMS will also be given.
12. Once it is informed that driver has reached the site, area Lineman, JE and others will be notified via SMS for change of transformer.
13. Driver will again notify when he leaves the site with old transformer
14. Once transformer is changed, Je will update the same in Mobile App. The same will be updated in 1912 SYSTEM automatically.
15. Reports as required at all level will be generated through system.
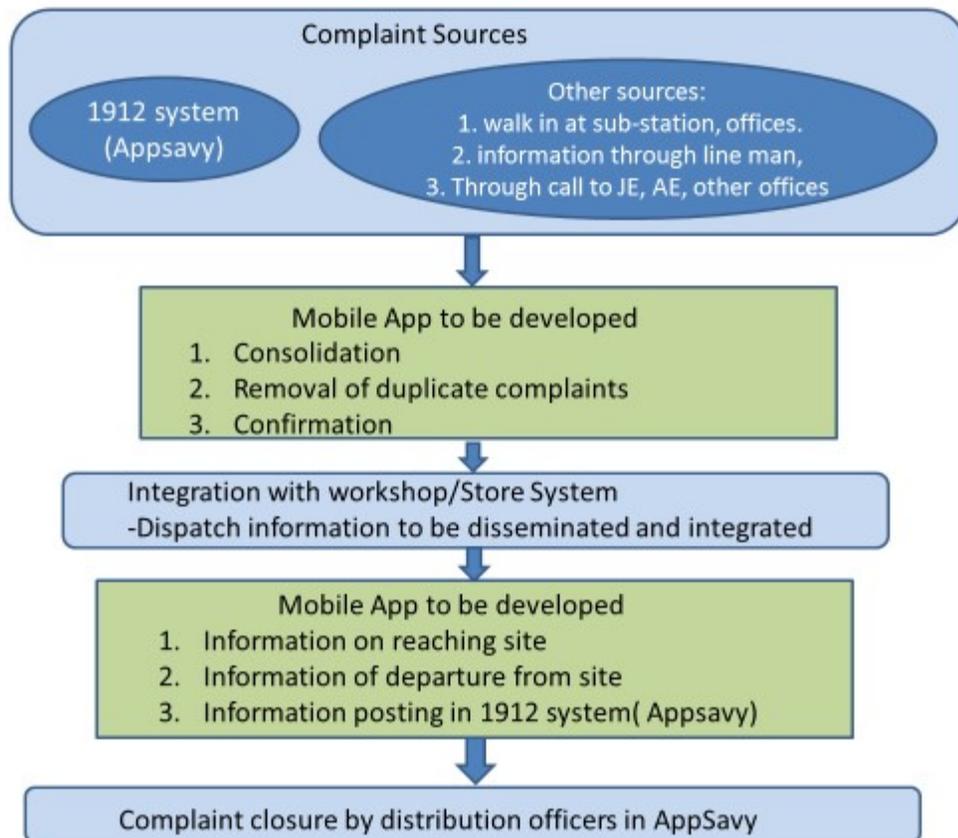
Proposed system/integration with existing system to maintain the centralized hierarchy of the DISCOM

There are more than 1000 officers in PVVNL in various Roles/Designation which includes but not limited to the following

1. Managing Director
2. Directors (Technical, Commercial, HR, Finance)

3. Distribution officers (Zone, Circle, Division, Sub-division, sub-station)
4. Test Divisions(Division, Lab)
5. Workshop Circle(Circle, Division, sub-division, workshop)
6. Stores Circle (Circle, Division, sub-division, store)
7. Material Management wing

There are various IT systems running in PVVNL like

- IT systems under RAPDRP project
- IT systems for Non-RAPDRP area
- Customer care center solution
- Workshop Automation system
- ERP (SAP)

Bidder will have to either integrate with the existing IT systems to maintain the organization hierarchy or bidder needs to create its own hierarchy system. In both the case, bidder will have to demonstrate the methodology of maintaining and updating the hierarchy of PVVNL as this is critical for smooth functioning of the system.

New Integrations with the existing inventory management system as per requirement

Existing workshop automation system is integrated with ERP (SAP) and inventory management system running in PVVNL. Since workshop processes and store processes have undergone substantial changes in last six months, lot of new process needs to be developed and as per requirement, integration needs to be done with ERP (SAP) and inventory management system. Integration will be done in case of changes either in ERP (SAP) or WAS or both the modules and bidder shall have to do any number of integrations as per requirement.

Signature of Tenderer
With Seal

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                    ┌─────────────────────────┐
                    │   Damaged Transformer    │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │  Dismantled at Workshop  │
                    └─────────────────────────┘
              ┌──────────────┴───────────────────────────┐
              ▼                                           ▼
   ┌─────────────────────────┐              ┌─────────────────────────┐
   │ Scrap Received (HT & LT  │              │ Washing & Cleaning of    │
   │         Coil)            │              │ Core & Tank              │
   └─────────────────────────┘              └─────────────────────────┘
              │                                           │
              ▼                                           ▼
   ┌─────────────────────────┐              ┌─────────────────────────┐
   │   Design HT & LT Coil    │              │      Tank Painting       │
   │   According to T/f       │              └─────────────────────────┘
   └─────────────────────────┘                           │
              │                                           ▼
              ▼                                ┌─────────────────────────┐
   ┌─────────────────────────┐      ─────────▶│  Transformer Tanking     │
   │      Coil Winding        │               └─────────────────────────┘
   └─────────────────────────┘                           │
              │                                           ▼
              ▼                                ┌─────────────────────────┐
   ┌─────────────────────────┐               │  Testing of Repaired T/f  │
   │      Coil Assembly       │               └─────────────────────────┘
   └─────────────────────────┘                           │
              │                                           ▼
              ▼                                ┌─────────────────────────┐
   ┌─────────────────────────┐               │    All The Repaired      │
   │         Oven             │───────────────│ Transformer Numbers are  │
   └─────────────────────────┘               │ tag with ERP(SAP) T/f    │
                                              │       Numbers            │
                                              └─────────────────────────┘
```

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                        ┌─────────────────────────┐
                        │   Damaged Transformer   │
                        └────────────┬────────────┘
                                     │
                                     ▼
        ┌──────────────────────────────────────────────┐
        │   Complaint Register by Consumer at 1912       │
        └────────────────────────┬───────────────────────┘
                                 │
                                 ▼
              ┌──────────────────────────────────────────────┐
              │ JE(D) verify and Annexure-D Sent to Workshop   │
              │              For Replacement                    │
              └────────────────────────┬──────────────────────┘
                                       │
                                       ▼
┌──────────────────────────┐
│ Transformer Replaced By  │◄───────────────
│ Electricity Workshop     │
└────────────┬─────────────┘
             │
             ▼                              ┌──────────────────────────┐
┌───────────────────────────────┐          │   Is Damaged T/f in GP ?  │
│ After Replacement of Damaged  │───────▶  └──────────┬────────────┬───┘
│ transformed according to 1912 │                     │            │
│ Complaints, Damaged transformer│            ┌────────▼───┐   ┌────▼────┐
│ Received at Workshop           │            │   If Yes   │   │  If No  │
└───────────────────────────────┘            └─────┬──────┘   └────┬────┘
                                                    │               │
                         ┌──────────────────────────┴───┐           │
                         │                              │            │
                         ▼                              ▼            │
        ┌──────────────────────────┐   ┌──────────────────────────────┐
        │ If New Transformer is in │   │ If Workshop Repair Transformer │
        │           GP             │   │          is in GP.             │
        └────────────┬─────────────┘   └──────────────┬─────────────────┘
                     │                                 │
                     ▼                                 ▼
      ┌──────────────────────────┐   ┌────────────────────────────────┐
      │ Damaged Transformer would│   │ Damaged Transformer would sent  │
      │ sent to Firm via Store   │   │ to Electricity Workshop for     │
      │ Center                   │   │ repairing.                      │
      └──────────────────────────┘   └────────────────────────────────┘
```