To

Member Secretary,
SRPC, Bengaluru

> **Sub: Report on Technical Demonstration given by M/s PRDC Pvt. Ltd. and M/s Siemens Ltd. on 23.06.2017 and 24.06.2017 respectively as part of their technical bid requirements in respect of SRPC Tender Project, "Procurement of Web-based Management Software and Protection Setting Calculation Tool for Southern Region" (NIT No: 02/ 2017; SRPC/ SE-III/ PMS/ 2017/ Dated: 23rd March, 2017)**

> Ref: Bid Evaluation Committee (BEC) Report on completeness of Technical Bid Documents of various bidder issued vide SRPC letter no: SRPC/ SE-III/ PMS/ 2017/ dated 02.06.2017

Sir,

Consequent to acceptance of the recommendations given by BEC vide their report cited under reference by Member Secretary, SRPC, M/s PRDC Pvt. Ltd. (PRDC) and M/s Siemens Ltd. (SIEMENS) had been invited to present technical demonstration (DEMO) of various features of their respective soft-wares to BEC on 23.06.2017 and 24.06.2017 respectively.

During the DEMO, BEC had evaluated the technical capability of each bidder w.r.t. the Items given at Annexure – A (I) and Annexure – A (II) of the tender document. The observations & recommendations of BEC w.r.t. each bidder's performance are detailed in the following Sections for kind reference.

1. Observations & Recommendations of BEC w.r.t. Technical Demonstration presented by M/s PRDC Pvt. Ltd. (PRDC)

For each and every Item (total 21 in number) mentioned in Annexure – A (I) of tender document, PRDC had successfully demonstrated their capability using their own in-house developed soft-wares that are proposed to be deployed as part of the tender project execution.

As regards various Items (total 164 in number) mentioned in Annexure – A (II) of tender document, it was noted that PRDC had submitted 100 % compliance as part of their technical bid documents.

To ascertain the same, BEC had randomly selected certain features, and asked PRDC to demonstrate them. The remarks of BEC w.r.t. some of the features tested on PRDC were as follows:

Item No.	Item Description	Remarks of BEC w.r.t. PRDC's performance ('√' indicates satisfactory)	Nature of Deviation
20	Provision for importing of Geographic coordinates and generating the network.	√	---
32	Optimal load flow uses Fast De-Coupled technique. The differ optimizations available are • P – Optimization • Q – Optimization • P & Q Optimization.	√	---
40	Simple and Detailed Wind Turbine Model considering all the four IEEE/WECC generic wind turbines models (WT1 to WT4)	√	---
41	Modeling suitable for individual Solar plant, Wind Turbine and Wind Farm (Group of Wind Turbines)	√	---
43	FACTS devices namely – SVC, STATCOM, TCSC, SPS and UPFC are modeled	√	---
116	Specific Features of Forward Power and Reverse Power Protection 1. Automatic computation of Different Stages of Power Protection. 2. View existing and newly computed relay settings simultaneously 3. Provision to enter existing relay settings. 4. Program Computed Power Relay settings. Program Computed Operating Time	√	---
132	Customized Printing: Printing of only required area on the viewer	√	---
155	Provision to attach documents to relay template and relay data will be available.	√	---
160	Reports: • Shall be possible to generate reports as per user requirement. Some of these are: ➢ Tripping Event Analysis Report ➢ Sequence of Events Operation as viewed from SLDC Operation ➢ Sequence of Breakers Tripped as viewed from Substation ➢ Relays operated on each element-wise User shall be able to export generated reports to the standard formats like .xls, pdf,	√ (partial) (Okay but not demonstrated satisfactorily)	MINOR

After thorough evaluation, BEC is of the opinion that, by and large, PRDC have successfully demonstrated various features included under Annexure – A (I) & Annexure – A (II) of tender document.

Since the technical bid documents submitted by PRDC had already been verified and found to be in order as brought out in BEC report dated 02.06.2017 cited under reference, with above successful technical demonstration by PRDC, BEC is of the opinion that PRDC's bid is technically qualified as per Clause F.7 of Tender Document.

In light of above, BEC recommends that PRDC's price bid may be considered for further evaluation.

2. Observations & Recommendations of BEC w.r.t. Technical Demonstration presented by M/s Siemens Ltd. (SIEMENS)

It was noted that SIEMENS has planned utilize the service of M/s IPS – Intelligent Process Solutions GmbH (IPS) for providing Protection Data Management System (PDMS) that is proposed to be deployed along with their various in-house developed soft-wares as part of tender project execution. However, since no agreement to that effect had been furnished as part of their technical bid documentation, BEC had allowed technical demonstration by SIEMENS and IPS subject to furnishing of proper agreement between them to SRPC later:

The observations of BEC w.r.t. technical capability of SIEMENS in demonstrating various Items (total 21 in number) mentioned in Annexure – A(I) of the tender document were given below:

TABLE - 1			
Item No.	Item Description	Remarks of BEC w.r.t. SIEMENS' performance ('√' indicates satisfactory)	Nature of Deviation
1	Protection database software demonstration – It should be able to produce SLDs showing key protection elements along with the CT, PT, and different type of Relays modeled, run a sample base case LF on data provided, add/update various relay settings in the database and show their operation by simulating a fault.	√	---
2	Key protection simulation functionality as at **Annexure-B** (Technical Bid) shall be complied and confirmation documents shall be submitted along-with the bid. The same shall be demonstrated for the technical evaluation committee of SRPC.	√ (partial) [Deviations had been observed w.r.t. certain features; when asked about the same, SIEMENS informed that those features were under development, and time-frame by which they would be provided would be intimated soon. The deviations observed were detailed in evaluation of	MAJOR

			Annexure – A (II) Items]	
3	Web-based Protection Database Management System with User Role management and tracking the details	√	---	
4	Enhanced database creation including detailed modeling of all relay elements with standard libraries	√	---	
5	Possible to create user defined Relay template and life cycle management of the relay	√	---	
6	Possible to reduce Regional/ Bigger Transmission Network to equivalent network and to perform EMTP Simulation	√	---	
7	Distance Relay simulation and showing the zone of Operation in the graph of R/X plot	√	---	
8	Relay co-ordination can be conducted for relays of all make and with user defined characteristics for distance, over-current and earth fault relays.	√ (partial) (Okay but coordination among over current relays & coordination among earth fault relays had not been shown on global scale (i.e., for complete network)	MINOR	
9	Automatic / Interactive / Manual Primary-Backup relay pairs generation	NOT DEMONSTRATED (It was informed by SIEMENS that the feature was under development, and time-frame by which it would be provided would be intimated soon)	MINOR	
10	Simulation of relay responses for the program Computed & Existing Field settings of the relays	√	---	
11	Highlighting of Relay Operational Sequence after the analysis.	√	---	
12	Fault simulation and relay trip currents plotted on the SLD for different type of fault currents including user defined fault current.	√ (partial) (The feature was shown for a specified value of impedance instead of specific value of fault current. As it is cumbersome to calculate fault impedance corresponding to a fault current, SIEMENS was asked to provide provision for the same. SIEMENS informed that they would take steps to provide the same)	MINOR	
13	Fault Simulation and Relay trip sequence on the SLD and showing the sequence of relay pick-up.	√ (partial) (It was noted that there was no high-lighting of operational sequence of relays; instead, all participating relays were shown to be high-lighted simultaneously. When asked about the same, SIEMENS informed that they would take steps to provide the same)	MINOR	
14	Unit protection of Transformers/lines	√ (partial) (Unit protection of transformers was only demonstrated. It was	MAJOR	

		informed by SIEMENS that unit protection features for lines were under development, and time-frame by which they would be provided would be intimated soon)	
15	Attaching the COMTRADE file to the Relay for analysis.	√	---
16	Performing the analysis of the single COMTRADE file for the associated relay through the network element modeled.	√	---
17	Viewing of Analog and Digital plots of disturbance files stored in the relay using the COMTRADE Viewer.	√	---
18	Merging of two existing COMTRADE files received from disturbance recorder and removing unwanted channels and storing as a new COMTRADE file for further processing.	√	---
19	EMTP analysis for the given network and generating COMTRADE files to match with the disturbance records as part of the Post-mortem analysis.	√	---
20	Under frequency and df/dt relay modeling and simulation of load shedding schemes.	√	---
21	Modeling user defined control block for simulation of AVR, Governor and special protection schemes.	√	---

As regards various Items (total 164 in number) mentioned in Annexure – A (II) of tender document, it was noted that SIEMENS had submitted only 90 % compliance as part of their technical bid documents. To ascertain the completeness of complied Items, BEC had randomly selected certain features, and asked SIEMENS to demonstrate them. The remarks of BEC w.r.t. some of these features tested on SIEMENS were as follows:

TABLE - 2			
Item No.	Item Description	Remarks of BEC w.r.t. SIEMENS' performance ('√' indicates satisfactory)	Nature of Deviation
5	Provision for exporting the Single Line diagram to AutoCAD/EMF,BMP, GIF, JPEG, PNG, TIF,XLS	NOT DEMONSTRATED (When asked about the requirement to export SLD to AutoCAD so that it can be edited there, SIEMENS informed that it would be provided)	MINOR
8	Module for creating SLD has advanced features as in a professional drafting / drawing package like AutoCAD. For e.g. layering, panning, zooming, real-time zoom, scaling to fit any paper size (A5toA0), printing / plotting of full diagram, selected window, current	NOT DEMONSTRATED (When asked about the provision to print part-diagram, selected window, SIEMENS informed that it would be provided)	MINOR

	window, copy and paste options etc.		
32	Optimal load flow uses Fast De-Coupled technique. The different optimizations available are • P – Optimization • Q – Optimization • P & Q Optimization	NOT DEMONSTRATED (SIEMENS replied in affirmative; however the features were not shown)	MINOR
40	Simple and Detailed Wind Turbine Model considering all the four IEEE/WECC generic wind turbines models (WT1 to WT4)	NOT DEMONSTRATED (SIEMENS replied in affirmative; however the features were not shown)	MINOR
41	Modeling suitable for individual Solar plant, Wind Turbine and Wind Farm (Group of Wind Turbines)	NOT DEMONSTRATED (SIEMENS replied in affirmative; however the features were not shown)	MINOR
43 *	FACTS devices namely – SVC, STATCOM, TCSC, SPS and UPFC are modeled	NOT DEMONSTRATED (SIEMENS replied in affirmative; however the features were not shown)	MINOR
62	Wind Turbines contribution to Faults for all the four IEEE/WECC generic wind turbines models (WT1 to WT4) and Solar Inverter contribution to Faults.	NOT DEMONSTRATED (SIEMENS replied in affirmative; however the features were not shown)	MINOR
63 - 82	Transient Stability (Dynamic) Studies.	NOT DEMONSTRATED [When asked to demonstrate features relating to dynamic studies, SIEMENS replied that their software is capable of accomplishing features from 63 – 82, but did not show any of them. It was noted that they had not brought the relevant software (PSSE) to demonstrate the sought features]	MAJOR
116	Specific Features of Forward Power and Reverse Power Protection 1. Automatic computation of Different Stages of Power Protection. 2. View existing and newly computed relay settings simultaneously 3. Provision to enter existing relay settings. 4. Program Computed Power Relay settings. Program Computed Operating Time	NOT DEMONSTRATED (It was informed by SIEMENS that the features were under development, and time-frame by which they would be provided would be intimated soon)	MAJOR
126	Automatic Fault Analysis based on multiple COMTRADE Files provided to the system by User. The COMTRADE files shall be attached to the PDMS once it is made available in SRPC server. The same shall be downloaded by the constituent members. Based on the incident operating database updation and available COMTRADE files in PDMS, Constituent members shall be able to simulate and conduct the analysis of the incidents in the local designated PC.	NOT DEMONSTRATED (SIEMENS merely showed a 3-min video on the software proposed. They had not demonstrated the specific software proposed to be utilized for carrying out automatic fault analysis. The sample report on the same was also not shown)	MAJOR
132	Customized Printing: Printing of only	√ (partial)	MINOR

	required area on the viewer	(When asked about the feature, SIEMENS informed that it would be provided)	
133 - 140	Network Modification Module	√ (partial) (The features relating to static equivalents were only demonstrated; that relating to dynamic equivalents were not demonstrated)	MINOR
160	Reports: • Shall be possible to generate reports as per user requirement. Some of these are: ➢ Tripping Event Analysis Report ➢ Sequence of Events Operation as viewed from SLDC Operation ➢ Sequence of Breakers Tripped as viewed from Substation ➢ Relays operated on each element-wise User shall be able to export generated reports to the standard formats like .xls, pdf,	√ (partial) (These were not demonstrated satisfactorily)	MINOR

It was noted that SIEMENS had given non-compliance w.r.t. the following features, and intimated that the time-frame by which they would be provided would be intimated soon.

TABLE - 3		
Item No.	Item Description	Nature of Deviation
88	There shall be a provision for manual selection of primary and backup relays.	MINOR
100	Possible to model Restricted Earth Fault Protection	MAJOR
104	Transformer over fluxing computations	MINOR
108	Features of Restricted Earth Fault Relay 1. Choice of relay library based on the manufacturer. 2. User choice of Current or voltage setting 3. Provision to enter current setting range details like minimum, Maximum and step Sensitive or Normal selection will be from the REF data. 4. User choice of voltage setting details in % or volts. 5. Choice of continuous, uniform or discrete voltage setting variation. 6. Provision to add and delete voltage setting records. 7. User defined bias slope setting for Low Impedance RE/F application 8. Provision to enter CT details for 2 winding and 3 winding Transformers along with Neutral CT details. 9. Provision to enter existing relay settings.	MAJOR

	10. Program Computed Restricted Earth Fault settings. 11. Program Computed Operating Time	
109	Features of Line Pilot Relay 1. User defined Line Pilot relay characteristics 2. Choice of pilot wire voltage (either 5 or 15 kV) 3. Choice of Loop Resistance between measured and computed data 4. Provision to input isolation transformer data 5. Provision to input CT data 6. Padding resistance as a computed output.	MAJOR
110	Features of Bus Bar Differential 1. Provision to enter relay details like max, min and step values of current in %. 2. Provision to enter relay details like max, min and step values of alarm in %. 3. Provision to enter relay details like max, min and step values of time in seconds. 4. Variable resistor Values: Enter Minimum, Maximum and step values 5. Provision to input Pick up Characteristics data for minimum, maximum and step details for over current setting in %, Stabilizing factor (selective), stabilizing factor (check zone) and Time in ms. 6. Provision to view computed and existing stabilizing resistance simultaneously Features of Line/Cable Differential 1. User defined values for minimum, maximum and step values in % for differential set, switch on, high set and 2nd harmonic restraint. 2. Provision to view computed and existing settings simultaneously.	MAJOR
111	Features of Generator Overall, Generator Transformer and Unit Differential Protection 1. Choice of relay library based on the manufacturer. 2. User defined bias slope setting 3. Provision to enter CT details for 2 and 3 and Multiple winding (for Overall differential)Transformers 4. Provision to enter existing relay settings. 5. Program Computed Transformer differential settings. 6. Program Computed Operating Time.	MAJOR
112	Features of Generator Inter-turn Differential Protection. 1. Choice of relay library based on the manufacturer. 2. User choice of Current or voltage setting 3. Provision to enter current setting range details 4. User choice of voltage setting details in % or volts. 5. Provision to enter CT details 6. Provision to enter existing relay settings. 7. Program Computed Generator Inter-turn Differential Protection settings. 8. Program Computed Operating Time	MAJOR
113	Features of Generator Stator Earth Fault Protection (Both 95% and 100% protection	MAJOR

	1. Choice of relay library based on the manufacturer. 2. User choice of Selection of 100% Generator Stator Earth Fault Protection (20Hz or Third Harmonic Principle) 3. Provision to enter Voltage setting range details 4. User choice of voltage setting details in % or volts. 5. Provision to enter CT details (for 20Hz Principle) 6. Provision to enter existing relay settings. 7. Program Computed 95% and 100% Stator Earth Fault Protection settings. 8. Program Computed Operating Time.	
114	Features of Generator Rotor Earth Fault Protection 1. Choice of relay library based on the manufacturer. 2. User choice of Selection of Rotor Earth Fault Protection 3. Provision to enter Voltage & Ohms setting range details 4. User choice of voltage setting details in % or volts. 5. Provision to enter existing relay settings. 6. Program Computed Rotor Fault Protection settings. 7. Program Computed Operating Time.	MAJOR
115	Features of Generator Loss of Excitation Protection(Field Failure) (with and without Under voltage) 1. Automatic computation of Different Stages of Loss of Excitation 2. Standard Relay Characteristics 3. View existing and newly computed relay settings simultaneously 4. Impedance seen by the relay. 5. Provision to enter existing relay settings. 6. Program Computed Rotor Fault Protection settings. 7. Program Computed Operating Time	MAJOR
116	Features of Forward Power and Reverse Power Protection 1. Automatic computation of Different Stages of Power Protection. 2. View existing and newly computed relay settings simultaneously 3. Provision to enter existing relay settings. 4. Program Computed Power Relay settings. 5. Program Computed Operating Time	MAJOR
117	Features of Back-Up Impedance protection 1. computation of zone setting 2. Standard Relay Characteristics (example: mho, circular etc. 3. View existing and newly computed relay settings simultaneously 4. Impedance seen by the relay for faults 5. Quick Solve	MAJOR
118	Features of Generator Inadvertent energization 1. Choice of relay library based on the manufacturer. 2. User choice of Selection of Generator Inadvertent energization.	MAJOR

		3. Provision to enter Voltage & current setting range details 4. User choice of voltage setting details in % or volts. 5. Provision to enter existing relay settings. 6. Program Computed Generator Inadvertent energization settings. 7. Program Computed Operating Time.	
119		Features of Generator Negative Sequence Protection 1. Choice of relay library based on the manufacturer. 2. User choice of Selection of Generator Negative Sequence. 3. Provision to enter Voltage & current setting range details 4. Provision to enter existing relay settings. 5. Program Computed Generator Negative sequence settings. 6. Program Computed Operating Time.	MAJOR
120		Features of Generator Thermal Overload Protection 1. Choice of relay library based on the manufacturer. 2. User choice of voltage setting details in % or volts and necessary curves. 3. Choice of continuous, uniform or discrete voltage setting variation. 4. Provision to enter existing relay settings. 5. Program Computed Generator Thermal Overload Relay settings. 6. Program Computed Operating Time	MAJOR

In view of the above observed deviations (in **TABLES – 1 & 2 & 3**], the following correspondence was undertaken with SIEMENS to obtain required details:

S1: SRPC mail dated 25.06.2017 requesting SIEMENS to furnish (in hard-copies) by 29.06.2017 the time-frame for providing pending software features, sample copy of comprehensive report generated by automatic fault analysis software, and Consortium agreement (showing consortium arrangement between SIEMENS and IPS) or Teaming agreement (showing prime-contractor and sub-contractor arrangement between SIEMENS and IPS) entered into by SIEMENS with IPS prior to the date opening of technical bids (i.e., 11.05.2017) for executing SRPC tender project.

S2: SIEMENS mail dated 29.06.2017 furnishing clarifications sought in soft-form

S3: SRPC mail dated 30.06.2017 requesting SIEMENS to clarify by 04.07.2017 the meaning of intended time-frame of September, 2018 for providing the pending software features. It was also clearly informed vide this mail that hard-copies of documents (requested vide S1 and S3) received on or before 04.07.2017 only would be considered for evaluating SIEMENS' bid.

S4: SIEMENS mail dated 04.07.2017 clarifying that the intended time-frame for providing pending software features is Dec'17 before the testing phase of the project. SIEMENS also requested vide this mail to allow time extension up to 06.07.2017 to submit hard-copies of the documents sought.

S5: Submission of documents by SIEMENS in person to SRPC on 06.07.2017.

S6: SIEMENS mail dated 14.07.2017 intimating that since the features from 108 – 120 are available in their proposed Protection Data Management System (PDMS), and would be provided as part of Protection Setting Calculation Tool (PSCT) by December, 2017, they are at no deviation in

providing these features as clarified vide Item no. 68 in SRPC replies to pre-bid queries document dated 21.04.2017.

S7: SRPC mail dated 14.07.2017 intimating SIEMENS that the issue was not w.r.t. the placement of these features (either in relay library or as PSCT features as clarified vide above referred pre-bid document), but non-demonstration of their functionality for a typical network considered in SIGUARD/ SINCAL environment, which is required as per Item No. 2 of Annexure-A (I) of Tender Document. It was also informed since the pending software features were stated to be under development and would be made available only by December, 2017, decision w.r.t. observed non-compliance would be taken by BEC appropriately.

S8: SRPC mail dated 15.07.2017 requesting to furnish compliance w.r.t. observed deviations w.r.t. their technical offer deviations (as agreed during technical demonstration) by 17.07.2017.

S9: SIEMENS mail dated 17.07.2017 requesting for time-extension up to 19.07.2017 for furnishing reply w.r.t. S8.

S10: SRPC mail dated 17.07.2017 requesting SIEMENS to furnish sought compliance w.r.t. technical offer deviations by 12:00 pm, 19.07.2017. It was also intimated clearly that any documents received beyond this period would not be considered for evaluating SIEMENS bid. It was also reiterated that non-compliance w.r.t pending software features as pointed out vide S7 would be appropriately dealt with by BEC.

S11: SIEMENS mail dated 18.07.2017 furnishing compliance w.r.t. technical offer deviations.

From above, it was noted that the following documents had been furnished:

➢ A copy of bilateral multilateral non-disclosure and restricted use agreement dated 20.02.2017 that SIEMENS and IPS had entered into to extend each other's portfolio towards the other to jointly pursue among other things the business opportunities for Protection Data Management Software, Power & Protection System Simulation Software and related services.

➢ Authorization letter dated 27.04.2017 from IPS authorizing SIEMENS to submit a bid which includes IPS software products and further to negotiate and sign the contract with SRPC against the tender project.

➢ Sample copy of report generated by automatic fault analysis software.

➢ Compliance w.r.t. technical offer deviations.

➢ Time-frame for providing pending software features, which were stated to be under development, was indicated as December, 2017.

After perusal of all documents furnished, BEC is of the opinion that SIEMENS and IPS had proper tie-up (teaming) agreement between them to jointly bid for SRPC tender project in the capacity of SIEMENS as the main contractor and IPS as the sub-contractor.

However, Dec'17 time-frame stated by SIEMENS for providing all pending features of proposed software is not a minor deviation since it involved various important protections like Busbar differential, Line/ Cable differential, and various protections associated with transformer and Generator. The significance/ criticality of the issue involved may be gauged by the fact there is a mapping bridge, or an interfacing application between PDMS software of IPS and SIGUARD/SINCAL software of SIEMENS that makes possible various features of the relays residing in PDMS to be

accessed from SIGUARD/ SINCAL software, and carry out various protection related studies (settings calculation, coordination studies, etc.). The December, 2017 time-frame literally translates into non-verifiability of the functionality of these features in a typical network considered in SIGUARD/ SINCAL environment. It is understood that the originally sought time-frame of September, 2018 vide S3 is towards the development of the above mapping bridge & other software applications, which they subsequently revised to Dec'2017 vide S4 & S5.

It may also be noted that in case the completion of pending software features is delayed beyond Dec'17, it will have rippling effect on achieving various milestones [esp. training program on the desktop based protection setting calculation tool and Site Acceptance Test (SAT) with one pilot state system] for the project.

Further, SIEMENS had not demonstrated various features as brought out in Table – 1 & 2, except for saying that their software is capable of accomplishing the stated features with the support of presentation and videos only.

Considering all above, BEC is of the opinion that SIEMENS's technical capability for the offered protection suite does not meet tender requirements due to the fact that (i) the observed deviations are major and cannot be ignored, and (ii) the inability to functionally demonstrate full capabilities of their soft-wares before December, 2017. Since, as per the terms of the tender project (as also clarified vide SRPC replies to pre-bid queries document dated 21.04.2017), the participating bidders are supposed to fully demonstrate functionality of all features of proposed software during their technical demonstration, SIEMENS could not fulfill this requirement. As such, SIEMENS' bid fell short of fulfilling the mandatory qualifying requirements for technical evaluation as brought out by Clause F.4 (vii) of Tender Document.

> *[Clause F.4 (vii): Key protection simulation functionality as at __Annexure - A (II)__ shall be complied and confirmation documents shall be submitted along-with the bid. The same shall be demonstrated for the technical evaluation committee of SRPC as part of the technical evaluation.]*

Thus, even though the technical bid documentation submitted by SIEMENS was found to be in order as per BEC report dated 02.06.2017, S5 and S11, BEC is of the opinion that SIEMENS' bid is not qualified technically as per Clause F.7 of Tender Document, As such, as per Clause F.3 of Tender Document, the bid submitted by SIEMENS can be conclusively treated as technically non-responsive.

In light of above, BEC recommends that SIEMENS' price bid may NOT be considered for further evaluation.

3. Observations & Recommendations of BEC w.r.t. Technical Bid submitted by M/s DNV GL (DNVGL)

You are kindly aware that BEC vide their report dated 02.06.2017 cite under reference had recommended for rejecting the bids submitted by M/s DNV GL (DNVGL) and M/s ABB India Ltd. (ABB) in accordance with the Clauses C.14, C.29, C.38, C.40 and F.3 of the Tender Document since

they had based their bids on the technical capability of M/s NEPLAN Ltd. (NEPLAN), but had not furnished any consortium or joint venture agreement entered into by them respectively with NEPLAN prior to the date of opening of technical bids (i.e., 11.05.2017) for executing SRPC tender project. Here the attraction of Clause F.3 of the Tender Document was due to their non-fulfillment of the mandatory qualifying requirements for technical evaluation as brought out by Clause F.4 (i) of Tender Document.

> *[Clause F.4 (i): The Bidder must have executed protection system data base modeling and analysis for a big transmission utility. They should have completed at least 1 Job with the protection modeling, database building, simulations and protection setting calculation to a large transmission utility with more-than 100 sub-stations in the last seven years ending 31.03.2016. The documentary evidence for the same shall be submitted in the form of documents like PO/WO/Completion Letter/Reference letter/Payment received should be submitted along with the bid.]*

However, DNVGL vide their mail dated 08.06.2017 had furnished a reference letter dated 06.06.2017 from M/s 50Hertz Transmission GmbH (50Hertz) stating that DNV GL, KEMA - IEV GmbH has experience in power system studies on transmission level, and has been supporting them in transmission planning activities for several years. DNVGL wanted their bid to be considered on the basis of their own capability substantiated by above reference letter. On this, the following correspondence was undertaken with DNVGL to ensure that no loose ends are left out:

D1: SRPC mail dated 17.06.2017 requesting DNVGL to furnish certain clarifications in hard-form by 23.06.2017

D2: DNVGL mail dated 23.06.2017 furnishing therewith soft-copies of sought clarifications.

D3: SRPC mail dated 25.06.2017 to furnish certain clarifications in hard-form by 29.06.2017.

D4: SRPC reminder mail dated 29.06.2017 to furnish clarifications sought vide D3 in hard-form by 04.07.2017. It was also clearly informed vide this mail that hard-copies of documents (requested vide D1 and D3) received on or before 04.07.2017 only would be considered for evaluating DNVGL's bid.

D5: Submission of documents by DNVGL in person to SRPC on 04.07.2017.

From above, the new reference letter from 50Hertz and purchase order copy placed by 50Hertz on DNVGL had been considered to ascertain whether DNVGL and their holding company KEMA – IEV GmbH had executed a project similar to the tender project as required by Clause F.4 (i). However, from the furnished purchase order copy, it was clear that 50Hertz had merely engaged the services of one personnel from DNVGL, KEMA-IEV GmbH to provide for support services in the area of MP-C among other things for conducting simulations and calculations for the NEP, and had not executed any project similar to tender project.

Since the above in no way qualifies DNVGL in terms of fulfilling the mandatory qualifying requirement for technical evaluation as brought out by Clause F.4 (i) of Tender Document, as per Clause F.3 of Tender Document, the bid submitted by DNVGL can be conclusively treated as technically non-responsive.

It is also brought to your kind attention DNVGL vide their mail dated 13.07.2017 [D6] requested to consider their bid again on the basis of the technical capability of NEPLAN for which they had already submitted a reference letter from ESO EAD attesting concerned project execution by M/s NEPLAN. It may be mentioned at this juncture that this Case had already been dealt with by BEC in their report dated 02.06.2017 cite under reference. Since the said project was executed by NEPLAN, the only way DNVGL can make use of NEPLAN's capability is by submitting the relevant consortium or joint venture agreement entered into by DNVGL with NEPLAN prior to the date of opening of technical bids (i.e., 11.05.2017) for executing SRPC tender project. However, since no such documents had been furnished, it can be seen that DNVGL's bid again fell short of fulfilling the mandatory qualifying requirements for technical evaluation as brought out by Clause F.4 (i) of Tender Document. As such, the bid submitted by DNVGL can be conclusively treated as technically non-responsive as per Clause F.3 of Tender Document.

In light of above, BEC again recommends that the bid submitted by DNVGL be rejected in accordance with the Clauses C.14, C.29, C.38, C.40, GCC – 5, and F.3 of the Tender Document.

Yours faithfully,

1. N. Manjunatha, Superintending Engineer, SRPC

2. N.R.L.K. Prasad, Executive Engineer, SRPC

3. S. P. Kumar, DGM, SRLDC, POSOCO

4. B. Sridhar, Chief Manager, PGCIL, SRTS-II

5. B. V. Girish, Executive Engineer, KPTCL

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