Amendment – I dated 01.02.2019 on the RFQ Document issued for short listing of Bidders as Transmission Service Provider to establish Transmission System for "Western Region Strengthening Scheme – 21 (WRSS-21) Part-A - Transmission System Strengthening for relieving over loadings observed in Gujarat Intra-State System due to RE Injections in Bhuj PS" through Tariff Based Competitive Bidding Process

<table>
<tr><th>Sl. No.</th><th>Clause No./ Ref.</th><th>Existing Provisions</th><th>New / Revised Provisions</th></tr>
<tr><td>1.</td><td>Project Name</td><td>"Transmission System Strengthening for relieving over loadings observed in Gujarat Intra-State System due to RE Injections in Bhuj PS"</td><td>All the reference to project name to be read as:

"Western Region Strengthening Scheme – 21 (WRSS-21) Part-A - Transmission System Strengthening for relieving over loadings observed in Gujarat Intra-State System due to RE Injections in Bhuj PS"</td></tr>
<tr><td>2.</td><td>Sr. No. 2 on Pg. 3</td><td>REC Transmission Projects Company Ltd. (hereinafter referred to as BPC) hereby invites ----------on build, own, operate & maintain basis:

<table><tr><th>S. No.</th><th>Scope of the Transmission Scheme</th></tr><tr><td>1.</td><td>Establishment of 2x1500MVA, 765/400kV Lakadia PSwith 765kV (1x330MVAR) & 400kV (1x125 MVAR) bus reactor

• 2x1500MVA, 765/400kV
• 400kV ICT bay-2
• 765kV ICT bay-2
• 400kV line bay-4
• 765kV line bay-2
• 1x330MVAr, 765 kV, 1x125MVAr, 420 kV
• 765kV Reactor bay- 1</td></tr></table></td><td>REC Transmission Projects Company Ltd. (hereinafter referred to as BPC) hereby invites ----------on build, own, operate & maintain basis:

<table><tr><th>S. No.</th><th>Scope of the Transmission Scheme</th></tr><tr><td>1.</td><td>Establishment of 2x1500MVA, 765/400kV Lakadia PS with 765kV (1x330MVAR) & 420kV (1x125 MVAR) bus reactor

• 2x1500MVA, 765/400kV
• 400kV ICT bay-2
• 765kV ICT bay-2
• 400kV line bay-4
• 765kV line bay-2
• 1x330MVAr, 765 kV, 1x125MVAr, 420 kV
• 765kV Reactor bay- 1</td></tr></table></td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Clause No./ Ref.</th><th>Existing Provisions</th><th>New / Revised Provisions</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>• 400kV Reactor bay -1

<u>Future provisions:</u>

Space for:
i) 765/400kV ICTs along with bays: 2 nos.
ii) 400/220kV ICTs along with bays: 8 nos.
iii) 765kV line bays:4 nos.
iv) 400kV line bays: 6 nos.
v) 220kV line bays: 16 nos
vi) 765kV bus reactor along with bays: 1no
vii) 400kV bus reactor along with bays: 1no</td></tr>
<tr><td>2.</td><td>LILO of Bhachau – EPGL 400kV D/c (triple) line at Lakadia PS</td></tr>
<tr><td>3.</td><td>Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
<tr><td>4.</td><td>2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
</table>
Note:
a. POWERGRID to provide space for2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td><td>
<table>
<tr><td></td><td>• 420kV Reactor bay -1

<u>Future provisions:</u>

Space for:
i) 765/400kV ICTs along with bays: 2 nos.
ii) 400/220kV ICTs along with bays: 8 nos.
iii) 765kV line bays:4 nos.
iv) 400kV line bays: 6 nos.
v) 220kV line bays: 16 nos
vi) 765kV bus reactor along with bays: 1no
vii) 400kV bus reactor along with bays: 1no</td></tr>
<tr><td>2.</td><td>LILO of Bhachau – EPGL 400kV D/c (triple) line at Lakadia PS</td></tr>
<tr><td>3.</td><td>Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
<tr><td>4.</td><td>2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
</table>
Note:
a. POWERGRID to provide space for2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line.
b. POWERGRID to implement conversion of existing 2x63MVAR line reactors at Bhachau end of Bhachau – EPGL 400kV D/c line to switchable line reactors.</td></tr>
<tr><td>3.</td><td>Clause 1.2 of Section of Request for</td><td>The TSP will be required to establish the following Transmission System for Transmission System strengthening for relieving over loadings observed in</td><td>The TSP will be required to establish the following Transmission System for Transmission System strengthening for relieving over loadings observed in Gujarat</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Clause No./ Ref.</th><th>Existing Provisions</th><th>New / Revised Provisions</th></tr>
<tr><td></td><td>Qualification</td><td>Gujarat Intra-state system due to RE injections in Bhuj PS (hereinafter referred to as 'Project') on build, own, operate and maintain basis.

Table 1:

<table>
<tr><th>S. No.</th><th>Scope of the Transmission Scheme</th></tr>
<tr><td>1.</td><td>Establishment of 2x1500MVA, 765/400kV Lakadia PSwith 765kV (1x330MVAR) & 400kV (1x125 MVAR) bus reactor

• 2x1500MVA, 765/400kV
• 400kV ICT bay-2
• 765kV ICT bay-2
• 400kV line bay-4
• 765kV line bay-2
• 1x330MVAr, 765 kV, 1x125MVAr, 420 kV
• 765kV Reactor bay- 1
• 400kV Reactor bay -1

<u>Future provisions:</u>

Space for:
i) 765/400kV ICTs along with bays: 2 nos.
ii) 400/220kV ICTs along with bays: 8 nos.
iii) 765kV line bays:4 nos.
iv) 400kV line bays: 6 nos.</td></tr>
</table></td><td>Intra-state system due to RE injections in Bhuj PS (hereinafter referred to as 'Project') on build, own, operate and maintain basis.

Table 1:

<table>
<tr><th>S. No.</th><th>Scope of the Transmission Scheme</th></tr>
<tr><td>1.</td><td>Establishment of 2x1500MVA, 765/400kV Lakadia PS with 765kV (1x330MVAR) & 420kV (1x125 MVAR) bus reactor

• 2x1500MVA, 765/400kV
• 400kV ICT bay-2
• 765kV ICT bay-2
• 400kV line bay-4
• 765kV line bay-2
• 1x330MVAr, 765 kV, 1x125MVAr, 420 kV
• 765kV Reactor bay- 1
• 420kV Reactor bay -1

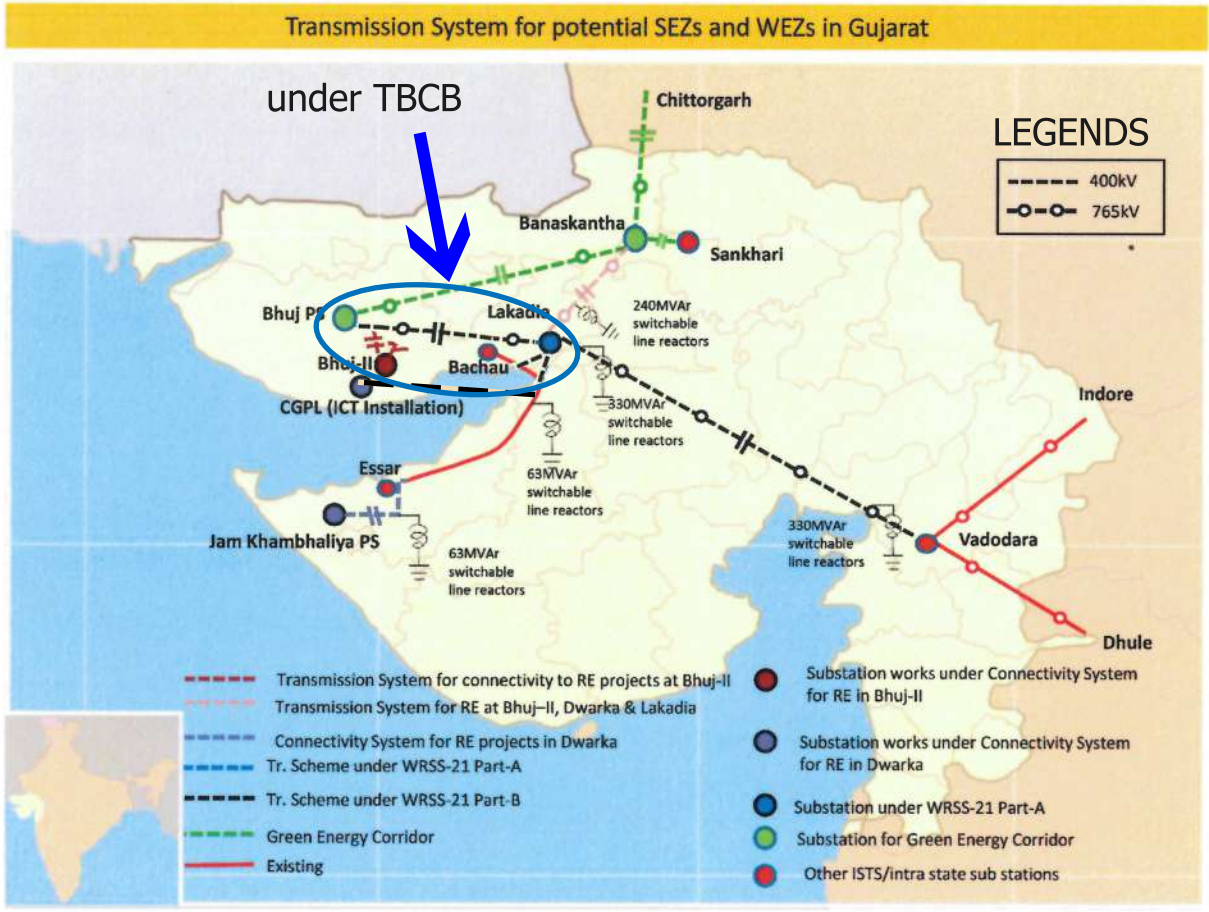
<u>Future provisions:</u>

Space for:
i) 765/400kV ICTs along with bays: 2 nos.
ii) 400/220kV ICTs along with bays: 8 nos.
iii) 765kV line bays:4 nos.
iv) 400kV line bays: 6 nos.</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Clause No./ Ref.</th><th>Existing Provisions</th><th>New / Revised Provisions</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>v) 220kV line bays: 16 nos
vi) 765kV bus reactor along with bays: 1no
vii) 400kV bus reactor along with bays: 1no</td></tr>
<tr><td>2.</td><td>LILO of Bhachau – EPGL 400kV D/c (triple) line at Lakadia PS</td></tr>
<tr><td>3.</td><td>Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
<tr><td>4.</td><td>2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
</table>
Note:
a. POWERGRID to provide space for2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td><td>
<table>
<tr><td></td><td>v) 220kV line bays: 16 nos
vi) 765kV bus reactor along with bays: 1no
vii) 400kV bus reactor along with bays: 1no</td></tr>
<tr><td>2.</td><td>LILO of Bhachau – EPGL 400kV D/c (triple) line at Lakadia PS</td></tr>
<tr><td>3.</td><td>Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
<tr><td>4.</td><td>2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line</td></tr>
</table>
Note:
a. POWERGRID to provide space for2 nos of 765kV bays at Bhuj PS for Bhuj PS – Lakadia PS 765kV D/c line.
b. POWERGRID to implement conversion of existing 2x63MVAR line reactors at Bhachau end of Bhachau – EPGL 400kV D/c line to switchable line reactors.</td></tr>
<tr><td>4.</td><td>Clause 1.3 of Section of Request for Qualification</td><td>Project Description
The project has been planned to relieve over loadings observed in Gujarat Intra-state system due to RE injections in Bhuj PS. In the 3rd meeting of Empowered Committee on Transmission (ECT) held on 21.12.2018, it was decided that the scheme may be implemented through TBCB.</td><td>Project Description
Govt. of India has set a target for establishing 175 GW renewable capacity by 2022 which includes 100 GW Solar, 60 GW Wind generation capacity. This includes wind potential of about 6GW in Bhuj complex, 2GW in Lakadia and 1.5GW in Dwarka. For integration and evacuation of power from generation projects in the above areas, a high capacity 765kV and 400 kV transmission system interconnecting Bhuj, Lakadia, Banaskantha, Vadodara & Dwarka along with establishment of 765/400/220kV new substation at Bhuj-II & Lakadia and 400/220kV new substation at Jam Khambhaliya (Dwarka) have been planned.</td></tr>
</table>

Sl. No.	Clause No./ Ref.	Existing Provisions	New / Revised Provisions
			The subject transmission scheme involves establishment of 765/400kV Lakadia Pooling station along with LILO of Bhachau – EPGL 400 kV D/c (triple) line at Lakadia PS and Bhuj PS – Lakadia PS 765kV D/c line which helps in transfer of power from RE sources in the Kutch area of Gujarat (Bhuj Complex) to Lakadia for onward dispersal of power to their respective beneficiaries. **The proposal has been agreed in the 1st meeting of Western Region Standing Committee on Transmission (WRSCT) held on 5.9.2018. The same was agreed in the 3rd ECT meeting held on 21.12.2018 for implementation through TBCB route with a commissioning schedule of December, 2020.**
5.	Section 1 Clause 1.4	Transmission Grid Map	**The Transmission Grid Map is attached as Annexure-1**

Annexure-I


Transmission System for potential SEZs and WEZs in Gujarat
under TBCB
Chittorgarh
LEGENDS
400kV
765kV
Banaskantha
Sankhari
Bhuj PS
Lakadia
240MVAr switchable line reactors
Bhuj-II
Bachau
CGPL (ICT Installation)
330MVAr switchable line reactors
Indore
Essar
63MVAr switchable line reactors
Jam Khambhaliya PS
63MVAr switchable line reactors
330MVAr switchable line reactors
Vadodara
Dhule
Transmission System for connectivity to RE projects at Bhuj-II
Transmission System for RE at Bhuj–II, Dwarka & Lakadia
Connectivity System for RE projects in Dwarka
Tr. Scheme under WRSS-21 Part-A
Tr. Scheme under WRSS-21 Part-B
Green Energy Corridor
Existing
Substation works under Connectivity System for RE in Bhuj-II
Substation works under Connectivity System for RE in Dwarka
Substation under WRSS-21 Part-A
Substation for Green Energy Corridor
Other ISTS/intra state sub stations