



Agenda
for
86th PCC Meeting

Date: 18.12.2019
Eastern Regional Power Committee
14, Golf Club Road, Tollygunge
Kolkata: 700 033

EASTERN REGIONAL POWER COMMITTEE

AGENDA FOR 86TH PROTECTION SUB-COMMITTEE MEETING TO BE HELD AT ERPC, KOLKATA ON 18.12.2019 (WEDNESDAY) AT 11:00 HOURS

PART – A

ITEM NO. A.1: Confirmation of minutes of 85th Protection sub-Committee Meeting held on 19th November, 2019 at ERPC, Kolkata.

The minutes of 85th Protection Sub-Committee meeting held on 19.11.19 circulated vide letter dated 10.12.2019.

Members may confirm the minutes of 85th PCC meeting.

PART – B

ANALYSIS & DISCUSSION ON GRID INCIDENCES OCCURRED IN NOVEMBER, 2019

ITEM NO. B.1: Disturbance at Liluah substation on 27.11.2019 at 02:36 Hrs.

At 02:36 Hrs, 132 KV BUS PT at Liluah S/s burst resulting tripping of 132 KV Liluah-Howrah Q/C.

At the time of incident, CESC system was synchronized to rest of the grid at Howrah point (132 KV Southern-Howrah, 132 KV Southern-Botanical-Howrah D/c) which got islanded as synchronization relay at Southern operated to disconnect CESC system from rest of the grid. CESC started running in island mode for 9 minutes.

At 02:45 Hrs, when re-synchronization attempt was taken at Howrah, 2 running Units (U#1, U#3-264 MW generation) at BudgeBudge tripped, thereby around 260 MW load loss occurred in CESC area.

Generation Loss: 264 MW & Load Loss: 260 MW

CESC may explain.

ITEM NO. B.2: Disturbance at Teesta – III Generating Station on 25.11.2019 at 15:18 Hrs.

During synchronization of unit #5 of Teesta III, breaker got stuck and bus I at Teesta III tripped resulting tripping of 400kV Teesta-III-Dikchu S/C.

At same time, 400kV Teesta-III-Kishangunj S/C also tripped resulting tripping of both the evacuating lines from Teesta III and leading to generation loss of 303 MW at Teesta III.

Generation Loss: 303 MW

NHPC may explain.

ITEM NO. B.3: Disturbance at Arambagh substation on 05.11.2019 at 06:52 Hrs.

At Arambagh substation, isolator got stuck while changing the isolator position and this leads to bus fault at 400 kV Bus. As CT supervision function (cable cut) blocked the bus bar protection, bus bar protection did not clear the fault.

All the lines tripped either from remote end on Zone-2/3 or in Zone 4 from Arambagh end. Also, ICT 4 tripped from 220 kV side on directional over current.

Load Loss: 104 MW

WBSETCL may explain.

ITEM NO. B.4: Tripping of 220 KV Gaya Sonenagar D/C on 27.11.2019 at 15:30 Hrs.

At 15:30 Hrs, 220 KV Gaya Sonenagar D/C tripped at Sonenagar end only due to DT receipt. No tripping was reported at Gaya end. Load loss was at Aurangabad, Sonenagar and Japla.

Load Loss: 53 MW

BSPTCL may explain.

ITEM NO. B.5: Disturbance at Jorethang on 04.11.2019 at 14:18 Hrs.

220 kV Jorethang - New Melli - I was under shutdown. At 14:18 hrs successful A/R occurred for 400 kV Kishangunj - Rangpo S/C on B-N fault (fault distance was 175.5 km from Kishangunj).

At the same time, 220 kV Rangpo - New Melli S/C and 220 kV Jorethang - New Melli - II tripped resulting generation loss of 38 MW at Jorethang due to loss of evacuation path.

Name	Relay Indication at End 1	Relay Indication at End 2
220 kV Rangpo - New Melli S/C	DT received	E/F, IN = 300 A
220 kV Jorethang - New Melli – II	E/F, IN = 232 Amp	Yet to be received

Generation Loss: 38 MW

Powergrid may explain.

ITEM NO. B.6: Tripping of 400 kV Kishangunj - Rangpo S/C and 220 kV Jorethang - New Melli D/C on 11.11.2019 at 10:58 Hrs.

At 10:58 hrs, successful A/R occurred for 400 kV Kishangunj - Rangpo S/C on Y-N fault.

At the same time, 220 kV Jorethang - New Melli D/C tripped only form Jorethang end resulting tripping of JLHEP unit #1 due to loss of evacuation path

Generation Loss: 43 MW

Powergrid may explain.

ITEM NO. B.7: Disturbance at HVDC Talcher station on 05.11.2019 at 10:55 Hrs.

HVDC Talcher Kolar pole I has been blocked at 10:55 Hrs on dtd 05.11.2019 due to "ESOF" from Kolar side resulting Pole 2 in metallic return mode.

SPS operated at JITPL & GMR, subsequently generation reduce by 70MW & 150MW respectively. Power flow through HVDC Talcher Kolar reduced from 2000 MW to 1000 MW.

After that, JITPL & GMR increased their generation after bypassing SPS. SPS was taken into service at 13:35 and 13:53 hrs respectively.

Generation Loss: 220 MW

ITEM NO. B.8: Disturbance at Koderma Generating station on 26.11.2019 at 05:56 Hrs.

At 05:56 Hrs, R phase shunt capacitor of GCB burst while synchronizing U#2 at Koderma, which is connected through Bus#1.

Subsequently, all elements connected to bus I tripped and bus I became dead.

No Generation/Load Loss.

DVC may explain.

ITEM NO. B.9: Tripping Incidences in the month of November, 2019.

Other tripping incidences occurred in the month of November, 2019 which needs explanation from constituents of either of the end is given in **Annexure-B9**.

In 36th TCC, all the constituents were advised to use the PDMS on-line portal for uploading the single line tripping details along with DR (comtrade files), EL and other relevant files for all trippings of August 2017 onwards. Otherwise, it will be considered as violation of compliance of clause 5.2(r) & 5.9 of IEGC.

In 74th PCC, all the constituents were requested to submit the disturbance report along with DR through the new version of on-line portal which was implemented from 01st Jan. 2019.

Members may discuss.

PART- C:: OTHER ITEMS

ITEM NO. C.1: FOLLOW-UP OF DECISIONS OF THE PREVIOUS PROTECTION SUB-COMMITTEE MEETING(S)

The decisions of previous PCC Meetings are given at **Annexure-C1**.

In 73rd PCC, it was observed that latest status on the implementation of the previous PCC recommendations were not updated by the constituents regularly. All the constituents were advised to update the latest status of the recommendations as per the list given in Annexure.

Members may update the latest status.

ITEM NO. C.2: Schedule of training program to be conducted by PRDC

PRDC, as per the AMC, is going to conduct 2nd training programme on PDMS and PSCT in state utility premises of Eastern Region. The tentative schedule is given below:

SL NO.	State	Date	Training
1	West Bengal(Siliguri)	04.02.2019-05.02.2019	On PDMS
	West Bengal(Durgapur)	08.02.2019-09.02.2019	On PDMS
2	Bihar	08.04.2019-09.04.2019	On PDMS
		10.04.2019-11.04.2019	On PSCT
3	Sikkim	11.06.2019-12.06.2019	Relay Setting analysis and Protection Co-ordination
4	Odisha	22.07.2019-23.07.2019	On PDMS
5	Jharkhand	25.08.2019-26.08.2019	On PDMS
6	For all state	In December 2019	On PSCT

PRDC informed that the training programme on PDMS has already been completed in West Bengal, Bihar, Sikkim & Odisha as per the schedule.

Members may update.

ITEM NO. C.3: Status of Third Party Protection Audit

The compliance status of 1st Third Party Protection Audit observations is as follows:

Name of Constituents	Total Observations	Complied	% of Compliance
Powergrid	54	46	85.19
NTPC	16	14	87.50
NHPC	1	1	100.00
DVC	40	26	65.00
WB	68	49	72.06
Odisha	59	42	71.19
JUSNL	34	25	73.53
BSPTCL	16	5	31.25
IPP (GMR, Sterlite and MPL)	5	5	100.00

** Pending observations of Powergrid are related to PLCC problems at other end.*

The substation wise status of compliance is available at ERPC website (Observations include PLCC rectification/activation which needs a comprehensive plan).

In 77th PCC, BSPTCL has submitted the updated status.

In 79th & 80th PCC, BSPTCL was advised to submit the details of the compliance report.

BSPTCL may update.

ITEM NO. C.4: Non-commissioning of PLCC / OPGW and non-implementation of carrier aided tripping in 220kV and above lines.

According to CEA technical standard for construction of electric plants and electric lines -Clause 43(4) (c), transmission line of 220 KV and above should have single-phase auto-reclosing facility for improving the availability of the lines. However, from the tripping details attached June-August, 2016 it is evident that the some of 220kV above Inter & Intra-Regional lines do not having auto-reclose facility either at one end or at both ends. Out of these for some of the lines even PLCC/OPGW is not yet installed and carrier aided protection including Autorecloser facility is not yet implemented. Based on the trippings of June- August, 2016 and PMU analysis a list of such lines has been prepared and as given below:

List of line where auto reclose facility is not available(Information based on PMU data analysis)							
S. No	Transmission Lines name	Date of Tripping	Reason of Tripping	Owner Detail		Present Status	
				End-1	End-2	OPGW/ LCC Link available	AR facility functional
13	<u>220KV BUDIPADAR-KORBA-II</u>	23.06.16	Y-N FAULT	OPTCL	CSEB	PLCC available	will be activated in consultation with Korba
17	<u>220 KV TSTPP-RENGALI</u>	17.07.16	EARTH FAULT	NTPC	OPTCL		by March 2018
18	<u>220KV BUDIPADAR-RAIGARH</u>	21.07.16	EARTH FAULT	OPTCL	PGCIL	PLCC defective	
20	<u>220 KV FARAKKA-LALMATIA</u>	03.08.16	B-N FAULT	NTPC	JUNSL	Yes	Old Relay and not functional. 7-8 months required for auto re-close relay procurement.
23	<u>220 KV MUZAFFARPUR - HAZIPUR - II</u>	10.08.16	B-N FAULT	PGCIL	BSPTCL		Voice established. For carrier required shutdown
24	<u>220 KV ROURKELA - TARKERA-II</u>	11.08.16	B-N FAULT	PGCIL	OPTCL	OPGW available	Expected to install protection coupler by Jan 17
27	<u>220 KV BIHARSARIF-TENUGHAT</u>	07.09.16	B-N FAULT	BSPTCL	TVNL		
33	220KV Jamshedpur-Jindal-SC						

34th TCC advised all the respective members to update the above list along with the last tripping status in next PCC meeting.

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TCC further advised all the constituents to give the latest status of PLCC of other 220kV and above lines under respective control area.

OPTCL:

1. 220kV Rengali(PG)-Rengali S/Y (Proposal for Commn. in OPGW is pending): *PSDF appraisal committee accepted the proposal*
2. 220kV Indravati(PG)-Indravati(PH) (Proposal for Commn. in OPGW pending): *PSDF appraisal committee accepted the proposal*
3. 132kV Baripada(PG)-Baripada (Tendering in Progress for OPGW): *Contract awarded*
4. 132kV Baripada(PG)-Rairangpur (Tendering in Progress for OPGW): *Contract awarded*

BSPTCL:

SI No.	Lines	Status
1	220 kV Purnea(PG)-Madhepura	<i>Protection through PLCC is working properly</i>
2	220 kV Biharsharif-BTPS new	<i>Commissioning of PLCC is under progress.</i>
3	220 kV BTPS new- Begusarai	<i>Commissioning of PLCC is under progress.</i>
4	220 kV Biharshariff-Bodhgaya line LILO at Khizersarai	<i>OPGW is present. Protection is done through DPC.</i>
5	220kV MTPS-Motiari line	<i>OPGW is installed.</i>
6	220KV Madhepura-New Purnea D/C	<i>Protection through PLCC is working properly</i>
7	220KV Muzaffarpur-Hajipur D/C line	<i>Protection through PLCC is working properly</i>
8	220KV Patna-Khagaul-SC	<i>PLCC Panel working properly.</i>
9	220 kV DMTCL(Darbhanga)-Laukhi Circuit-I	<i>PLCC Panel working properly</i>
10	220 kV Tenughat-Biharsharif S/C	<i>PLCC to be commissioned</i>
11	220 kV Gaya-Sonenagar New circuit-I	<i>Communication through OPGW</i>
12	220 kV Pusauli-Dehri S/C	<i>PLCC not working</i>
13	220 kV Begusarai-Purnea(PG) D/C	<i>PLCC working properly</i>
14	220 kV DMTCL-Motipur ckt-II	<i>PLCC to be commissioned.</i>
15	220 kV Dehri- Gaya D/C	<i>PLCC working properly</i>
16	220 kV Kishanganj(PG)-Kishanganj(B)-II	<i>PLCC working properly</i>

In 79th PCC, BSPTCL submitted PLCC status of some of the lines. The details have been updated in above table.

In 80th PCC meeting, BSPTCL was advised to rectify the PLCC & Autoreclose issues in coordination with their communication wing.

Members may update.

ITEM NO. C.5: Any additional agenda – with permission of the Chair.

List of important transmission lines in ER which tripped in November, 2019

S.NO	LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Relay Indication LOCAL END	Relay Indication REMOTE END	Reason	Fault Clearance time in msec	DR/EL RECEIVED FROM LOCAL END	DR/EL RECEIVED FROM REMOTE END	Primary observation/ Remarks	PCC Deliberation
1	220KV-PUSAULI-DEHRI-1	03-11-2019	11:34	03-11-2019	17:53	Z1, B-N, 7.3 kA, DIST-10.32				YES	NO	No Auto-reclose operation	
2	220KV-CHANDIL-STPS(WBSEB)-1	04-11-2019	16:30	04-11-2019	21:01	Master trip relay operated		Master trip relay operated at Chandil end		YES	NO	Why Master trip operated at Chandil ?	
3	400KV-NEW PPSP-NEW RANCHI-2	06-11-2019	09:02	06-11-2019	09:22	Tripped only at New Ranchi		DT received at New Ranchi		NO	YES	Why DT was send from NEW PPSP ?	
4	400KV-NEW PPSP-NEW RANCHI-2	07-11-2019	09:10	07-11-2019	09:29	DT received at New Ranchi		DT received at New Ranchi		NO	YES	Why DT was send from NEW PPSP ?	
5	220KV-NEW PURNEA-MADHEPURA-2	07-11-2019	12:16	07-11-2019	12:35	R_N, 21.72 KM, 6.01 kA, A/r	R_N, 70.9 KM, 1.6 kA	R-N Fault	< 100 msec	YES	NO	No Auto-reclose operation at Madhepura may be explained	
	220KV-MADHEPURA-NEW PURNEA-1	16-11-2019	11:23	16-11-2019	11:52	R_N, 48.4 KM, 2.24 kA	A/r Successful, R_N, 46.23 KM, 3.1 kA	R-N Fault	< 100 msec	YES	YES		
6	220KV-FSTPP-LALMATIA-1	11-11-2019	11:30	11-11-2019	18:12	TRIPPED FROM FSTPP		TRIPPED FROM FSTPP	500 msec	NO	NO	High fault clearance time and No Auto-reclose operation may be explained	
7	400KV-PARULIA-ARAMBAGH-2	12-11-2019	02:03	12-11-2019	18:20		Y-N , Z-1 , F/C-3.5KA , 33KM	Y-N Fault		NO	NO	No fault observed in PMU, DR may be sent and Tripping may be explained	
8	400KV-BARIPADA-KHARAGPUR-1	15-11-2019	11:20	15-11-2019	11:54	A/R successful, Y_N Fault, 45.85 KM,4.28 kA	Y_N, 63.66 KM, 4.43 kA	Y-N Fault		NO	YES	A/R lock-out at Kharagpur may be explained	
9	220KV-MUZAFFARPUR(PG)-DHALKEBAR-2	16-11-2019	16:42	16-11-2019	17:16	Muzaffarpur-Spurious Tripping	Tripped from Muzaffarpur end only	Tripped from Muzaffarpur end only		NO	NO	No fault observed in PMU, tripping may be explained	

S.NO	LINE NAME	TRIP DATE	TRIP TIME	RESTORATION DATE	RESTORATION TIME	Relay Indication LOCAL END	Relay Indication REMOTE END	Reason	Fault Clearance time in msec	DR/EL RECEIVED FROM LOCAL END	DR/EL RECEIVED FROM REMOTE END	Primary observation/ Remarks	PCC Deliberation
10	400KV-KODERMA-BOKARO-1	19-11-2019	01:27	19-11-2019	22:22	B-N, 53.7 Km, 5.05 KA @ Koderma		B-N Fault		NO	NO	DR may be sent, A/R operation may be explained.	
11	400KV-KODERMA-BIHARSARIFF(PG)-2	20-11-2019	11:56	20-11-2019	13:07	TRIPPED ONLY FROM BIHARSARIF END	R-N fault	R-N Fault	< 100 msec	NO	NO	No Auto-reclose operation from Biharshariff may be explained	
12	220KV-CHANDIL-STPS(WBSEB)-1	21-11-2019	12:35	21-11-2019	13:20	Y-N,3..89 KA ,20.5 KM, Z1, AR LOCKOUT	Z2,Y-N ,84.5 KM,2.19 KA	Y-N Fault	< 100 msec	NO	NO	A/R Lockout at Chandil may be explained	
13	220KV-DEHRI-GAYA-1	22-11-2019	12:43	22-11-2019	01:02	A/R successful as per DR	R-N fault 41km, I = 3.87 kA	R-N Fault		YES	NO	No A/R operation at Gaya may be explained	
14	220KV-GAYA-SONENAGAR-1	26-11-2019	21:28	26-11-2019	21:45	R_N, 27.1 KM, 5.45 kA, A/r successful		R-N Fault		NO	NO	No A/R operation at Sonenagar may be explained	
15	220KV-RANCHI-HATIA-1	29-11-2019	15:40	29-11-2019	16:45	DT received at Ranchi		DT received at Ranchi		NO	NO	DR may be sent, Reason for DT sent from Hatia may be explained	
16	400KV-ARAMBAGH-NEW CHANDITALA-1	10-11-2019	01:26	10-11-2019	17:02	O/V voltage at Arambagh (423 KV)		O/V voltage at Arambagh (423 KV)		NO	YES	O/V mal-operation at Arambag and step taken to solve the issue may be may be explained	
		27-11-2019	02:50	27-11-2019	07:55	O/V relay operated at Arambagh	DT received	O/V relay operated at Arambagh		NO	YES		
		28-11-2019	22:01	29-11-2019	09:58	O/V operated due to problem in line CVT	DT Receipt	O/V operated due to problem in line CVT at Arambag		NO	YES		

SI No.	Name of the incidence	PCC Recommendation	Latest status
85th PCC Meeting			
1.	Tripping of 400 kV Angul – JITPL D/C on 17.10.2019 at 08:11 Hrs	PCC decided to discuss the issue in next PCC meeting wherein JITPL should explain the following: <ol style="list-style-type: none"> Reason for initiation of master trip (86) contact of unit 1 DC earth fault persisting in the switchyard DC system 	
2.	Multiple tripping at Budipadar S/s on 08.10.2019 at 19:26 Hrs.	PCC advised OPTCL to check the earthing within the substation and tower footage resistance close to Budipadar S/s. PCC also observed that DR configuration is not proper at Budipadar S/s, PCC advised to rectify the same.	
3.	Disturbance at Teesta – III Generating Station on 26.10.2019 at 15:43 Hrs	PCC advised Dikchu to review the GT neutral Over-current setting.	
4.	Tripping of 220 kV FSTPP - Lalmatia S/C & 132 KV KhSTPP-Lalmatia S/C on 22.10.2019 at 11:55 Hrs	PCC advised NTPC to submit the tripping details to ERPC and ERLDC	
5.	Multiple tripping incident at Indravati on 17-09-2019 at 16:03 hrs	PCC advised Powergrid to analyze the reason for sudden voltage rise.	
6.	Implementation of Zone 4 reduced time setting at Sipara Substation and enabling of back up protection in 220 kV Patna-Sipara T/C Differential protection	PCC advised BSPTCL to share the details to ERLDC and ERPC.	
84th PCC Meeting			
7.	Disturbance at Talcher HVDC station on 04.09.19 at 16:59 Hrs.	Powergrid informed that the issue has been referred to M/s Siemens for analysis. PCC noted this and asked powergrid to share the findings.	<i>LOA placed. OEM would visit the site in January 2020.</i>
83rd PCC Meeting			

8.	Total power failure at 220 kV Darbhanga (BSPTCL) S/s on 16.08.2019 at 22:23 Hrs.	PCC observed that DR configuration at DMTCL end is not in order. PCC advised DMTCL to configure the DR settings as per the standard.	
9.	Disturbance at 400 kV New Purnea S/s 29.08.2019 at 08:08 Hrs	From the DRs submitted by BSPTCL, it was observed that the sampling frequency was set at 200 Hz which hampers in capturing the correct information. PCC advised BSPTCL to properly configure the DR settings as per the standard approved by PCC.	<i>BSPTCL informed that they will set sampling frequency at 1000 Hz.</i>
82nd PCC Meeting			
10.	Total Power failure at 220 kV Jorethang, 220 kV Tashiding & 220 kV New Melli S/s on 14.07.2019 at 10:35 Hrs.	<p>PCC advised DANS Energy to take the following actions to avoid the unwanted tripping of the lines:</p> <ul style="list-style-type: none"> • Since the line length of the transmission lines are less than 20 km, differential protection may be implemented for 220kV Tashiding-New Melli line and Jorethang-New Melli line to improve the reliability. • Distance relay reach settings and selection of primary/secondary in the relay configuration settings to be reviewed at both Tashiding and Jorethang end. • Exact impedance of the line to be measured using off line fault location and the relay settings are to be reviewed accordingly. <p>Distance relays at Tashiding and Jorethang end should be tested to verify the correct operation.</p>	
11.	Disturbance at 220 kV Siliguri S/s on 22.07.19 at 03:57 Hrs.	<p>PCC advised Powergrid to take the following corrective actions:</p> <ul style="list-style-type: none"> • Time synchronization of DRs need to be checked and rectified at Dalkhola end. • As carrier was sent from dalkhola end in zone-2 initiation, Powergrid was advised to check overreach scheme in the relay settings at Dalkhola end and to review the settings. 	<i>Powergrid informed that the module for time synchronisation was found corrupt and they have issued the order for procurement for new module. They also informed it will take two months</i>

			<i>time for new installation.</i>
81st PCC Meeting			
12.	Disturbance at 400 kV Dikchu S/s on 30.06.2019 at 09:55 Hrs.	<p>The time setting for the DEF relay at Jorethang end was 500 msec. PCC advised Jorethang to review the timer setting of DEF protection at Jorethang end.</p> <p>PCC advised Chuzachen to review the zone settings for 132 kV Chuzachen-Rangpo line.</p> <p>PCC advised TPTL to do line patrolling for 400 kV Rangpo-Dikchu line to find out the cause of such high resistive fault in the line.</p>	
13.	Disturbance at 220 kV Budhipadar(OPTCL) S/s on 12.06.2019 at 00:37 Hrs.	<p>PCC advised OPTCL to properly configure the DRs for 220 kV Budhipadar – Korba D/C & 220 kV Budhipadar-Raigarh circuit at Budhipadar end and for 220 kV Budhipadar – Lapanga - II at Lapanga end as per the DR standard finalised in 79th PCC Meeting.</p> <p>PCC also advised OPTCL to check the time synchronisation</p>	<i>OPTCL informed that they will replace the old relays at the earliest.</i>
14.	Disturbance at 400 kV Meramundali (OPTCL) S/s on 03.06.2019 at 01:15 Hrs.	For voltage rise issue, PCC advised to check for any CVT related issues in the substation. PCC also advised to carry out earthing audit of the complete substation.	<i>OPTCL informed that they have issued tender for the earthing audit of the substation.</i>
15.	Disturbance at 220/132 kV Dumka(JUSNL) S/s on 19.06.2019 at 13:02 Hrs.	PCC advised for time synchronization of the DR outputs at both Maithon & Dumka end.	<p><i>JUSNL informed that there was antenna and cable fault in the time synchronisation module.</i></p> <p><i>JUSNL informed that it will be rectified within a</i></p>

			<i>month.</i>
76th PCC Meeting			
16.	Disturbance at 400kV Gaya(PG), 220kV Gaya and Bodhgaya on 05-01-19 at 11:20 hrs	PCC advised BSPTCL to review the Khijasarai end relay settings to avoid unwanted tripping at Khijasarai end and submit the relay settings to ERPC for inclusion in PDMS.	<i>BSPTCL informed that they will send the relay settings at the earliest.</i>
72nd PCC Meeting			
17.	HVDC TFR triggering standardization and reporting requirements.	PCC advised POWERGRID to submit TFR triggering criteria and TFR signal list for all HVDC station as well as STATCOMs of Eastern region to ERLDC.	<i>It was informed that required information was received from Talcher HVDC station.</i>
71st PCC Meeting			
18.	Disturbance at 220/132 kV Motipur(BSPTCL) S/s on 15.08.18 at 13:00 hrs.	PCC advised BSPTCL to check the disturbance recorders of all the lines in 220 kV Motipur S/s and communicate the findings to ERPC/ERLDC at the earliest.	
19.	Disturbance at 400 kV Farakka S/s on 19.08.18 at 15:26 hrs.	PCC advised to check the reason for not sending carrier from Farakka to Kahalgaon and non-operation of Autorecloser.	<i>NTPC informed that the carrier healthiness will be checked in December 2019.</i>