

Government of India Central Electricity Authority

PFA Monitoring Division

Sewa Bhawan, R K Puram, New Delhi-110066 cepfacea@rediffmail.com, ce.pfam.cea@gov.in Telefax:011-2671 5396 Ph:011-2673 2607



(आई एस ओ 9001-2008)

No. 07/03/CEA/PFAM/(Distribution Plan)/2016/550-559 Dated: 06.12.2016

Sub: Constitution of Committee for Preparation of Perspective Plan for Distribution Sector in North Eastern Region – Regarding

This is in continuation to our earlier letter even dated 8-11-2016 addressed to Secretaries/Principal Secretaries of State/UTs and dated 1-11-2016. addressed to CMD REC and PFC. It has now been decided to constitute a Committee comprising of the Members from respective Distribution Companies, REC Ltd, PFC Ltd and CEA for preparation of a perspective plan for distribution sector as below:

1. Chief Engineer (PFAM), CEA

-Chairman

2. Director(DP&D), CEA

-Member

- 3. CMD, REC ltd, New Delhi
- 4. CMD, PFC ltd, New Delhi
- 5. Chairman & Managing Director, APDCL, Guwahati, Assam
- 6. Chairman, MeECL, Shillong, Meghalaya
- 7. Managing Director, MSPDCL, Manipur
- 8. Chief Engineer, Power & Electricity Department, Aizwal, Mizoram
- 9. Chief Engineer, Department of Power, Kohima, Nagaland
- 10. Chairman & Managing Director, TSECL, Agartala (Tripura)
- 11. Chief Engineer (Power), Power Department, Itanagar, Arunachal Pradesh
- 12. Director (PFAM), CEA

-Member Secretary

The Terms of Reference(TOR) of the Committee shall be as below:

1. Prepare the Discom /State wise Perspective plan for Distribution segment upto 2021-22 considering the projected Energy Requirement in NEP/EPS for the components such as-Electrical Infrastructure, Village and Households electrification, Feeder Segregation, Measures for AT&C loss reduction along with Metering of Consumers, DTs and Feeders, Measures for improvement of Reliability and Quality of Power, implementations of communication connectivity of SCADA, OFC and V-Sat, GPS based GIS mapping, IT enablement, Fund requirement, availability & gap etc.

- 2. Perspective Plan shall include the components as indicated above already Existing, Present status of ongoing projects and projects planned under the schemes/programme such as IPDS, DDUGJY, State plans and other plans/schemes, if any upto 2021-22.
- 3. Members of the Committee from Discoms of States/UT shall prepare the Perspective plan upto 2021-22 for respective Discoms/Power departments in consultation with members from REC ltd and PFC ltd, wherever required, in the prescribed proforma.

Timeline

It is kindly requested to nominate a member for this Committee (Director/Executive Director level for PFC/REC and Chief Engineer(Tech) or equivalent for Discoms/Power Deptt.). Nominations should reach this office by 15th December 2016.

Above data in the prescribed proforma should be submitted within 02 months for finalization of distribution perspective plan upto 2021-22 within 4 months by the Committee.

The meeting notice will be circulated shortly.

Yours faithfully

Encl: As above

(M.M. DHAKATE) Director(PFAM)

То

- 1. Director(DP&D), CEA, New Delhi
- 2. CMD, REC Ltd., New Delhi
- 3. CMD, PFC Ltd., New Delhi
- 4. Chairman and Managing Director, Assam Power Distribution Company Limited (APDCL), Guwahati, Assam India
- 5. Chairman, Meghalaya Energy Corporation Limited (MeECL), Shillong (Meghalaya)
- 6. Managing Director, Manipur State Power Distribution Company Limited (MSPDCL), Manipur
- 7. Chief Engineer, Power & Electricity Department, Government of Mizoram, Aizwal (Mizoram)
- 8. Chief Engineer, Department of Power, Government of Nagaland, Kohima (Nagaland)
- 9. Chairman & Managing Director, Tripura State Electricity Corporation Limited, Agartala (Tripura)
- 10. Chief Engineer (Power), Power Department, Government of Arunachal Pradesh, Itanagar (Arunachal Pradesh)

A. Electrical Infrastructure -Addition of New capacity & augmentation

- 1.0 Please state the Status of Load Flow study carried out for existing and for future expansions- for Each Discoms/Power Deptt of State
- 1.1 Please Note that the Electrical Infrastucture to be created/augmented is based on Future requirement, Load flow study etc, pl give a write up for Each Discoms/Power Deptt of State
- 1.2 The Infrastructure required new capacity addition/augmentation be based on the ongoing Schemes-DDUGJY, IPDS and other State schemes etc.
- 1.4 PI furnish a write up on issues on achieveing the Plan/targets for Each Discoms/Power Deptt of State
- 1.5 PI mention the Scheme/Programme of Coverages suitably. Confirmation of figure with PFA documents may be made clearly mentioned.
- 1.6 Status and Plan for Electrical Infrasturucture in Rural and Urban areas/Towns/cities for Each Discoms/Power Deptt of State
- 1.7 Pl give details (Name of Power S/s, Feeders or location/areawise DTs, Feeders(including underground cables etc.)
- 1.8 No column should be left blank. If No details are available then please write "NA".

Name of		Existing upto	New	Electrical	Infrastruc	ture Plan	upto 202	1-22	Auamen	ted Electri	ical Infras	tructure P	lan upto	2021-22	Remarks
Discom/Powe		2015-16, as on					·						· ·		
r Deptt, State	Item/Description	31.03.2016							2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
A1) Capacity A	ddition : Electrical Infrastructure in	Rural Areas (In	cluding un	der the on	going sch	emes DDL	JGJY and	others)							
	Power														
	SubStations(66/33/22),Nos														
	Capacity of Power														
	SubStations(66/33/22),MVA														
	Feeders of Power														
	SubStations(66/33/22KV), Nos														
	Capacitor bank, Nos														
	Nos of Distribution Transformers,														
	Nos														
	Capacity of Distribution														
	Transformers(11/0.433KV),KVA														
	Feeders (11KV), Nos														
	Feeder segregation														
	Length of Feeders (11KV), CKM														
	Length of LT Feeders (.433KV,														
	.215KV), CKM														
	Capacitor bank, Nos														
A2) Capacity A	ddition:Electrical Infrastructure in	Urban areas (Inc	luding und	der the on	going sche	mes IPDS	and Othe	ers)							
	Nos of Power	,			, ,			ľ							
	SubStations(66/33/22),Nos														
	Capacity of Power														
	SubStations(66/33/22),MVA														
	Feeders of Power														
	SubStations(66/33/22KV), Nos														
	Capacitor bank, Nos														
	Nos of Distribution Transformers,														
	Nos														
	Capacity of Distribution														
	Transformers(11/0.433KV),KVA														
	Feeders (11KV), Nos														
	Feeder segregation														
	Length of Feeders (11KV), CKM														
	Length of LT Feeders (.433KV,														
	.215KV), CKM														
	Capacitor bank, Nos							<u> </u>						<u> </u>	
		!											<u> </u>	<u> </u>	

B. Electrification of Villages and Households

- 1.0 please Note that the Villages inhibited and Urban/town/cities, HouseHolds are as per Census 2011, if Not, pl give a write up for Each Discoms/Power Deptt of State
- 1.1 please state the basis of Nos of BPL Hosuseholds-whether based on SECC 2011 or others(specify) in a separate writeup for Each Discoms/Power Deptt of State
- 1.2 PI furnish a write up on issues on achieveing the Plan/targets for Each Discoms/Power Deptt of State
- 1.3 Status and Plan for Village Electrification, Urban areas/Towns/cities and House Holds for Each Discoms/Power Deptt of State
- 1.4 No column should be left blank. If No details are available then please write "NA".

Name of			Electrified a	ıs on 31-03														
Discom/Pow		Particulars	201	16	Name of		Plan up	to 2021-2	22(grid co	nnected)			Plan	upto 20	21-22(off-	grid)		Remarks
er Deptt,		as per	Grid		Scheme/P													
State	Item/Description	census 2011	connected	off-Grid	rogramme	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
	Village																	
	Electrification																	
	Electrification of Urban areas(Towns/cities)																	
1	Total Households in Villages/Rural Areas																	
	Total Households in Urban area(towns/Cities)																	
	BPL Households in Villages																	
	BPL Households in Urban areas(Towns/Cities)																	

Note-1) PI mention if figures match with PFA documents/DDUGJY scheme

2) PI give details (Name of Village, Towns ,Rural areas, with HH numbers) for electrfication

C. Measures for AT&C loss reduction/ trajectory

- 1.0 Whether any study/assesment for AT&C loss for Each Discoms/Power Deptt of State is done for reduction
- 1.1 If Yes, Please mentioned the observations/findings, recommendations, timelines etc for Discom/Powerdeptt of State for reduction of losses
- 1.2 Pl furnish a writeup on measures adopted, and proposed, issues on achieveing the Plan/targets for Each Discoms/Power Deptt of State
- 1.3 PI mention whether target is as per MOP upto 2021-22 or upto 2018-19 or as per UDAY
- 1.4 PI give details (Name of Power S/s, Feeders(including underground cables etc.), consumers: existing and covered under metering.
- 1.5 No column should be left blank. If No details are available then please write "NA".

C1) Status and Plan for AT&C loss Reduction-

		Present Status in			Plan up	to 2021-22			Remarks
Name of Discom/Power		2016-17, as on							
Deptt, State	Item	31.10.2016	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
C2 2) Metering (olan in Urban areas (Including und	ler the ongoir	na schemes	IPDS and	Others)				
oz.z) Wetering [ler the origon	lg sorierries	Bo and					
	Feeders of Power								
	SubStations(66/33/22KV), Nos								
	Distribution Transformers, Nos								
	Feeders (11KV), Nos								
	Metering of all Consumers, Nos		•	•		•	•	•	
	Domestic								
	Commercial								
	Industrial (LT)								
	Industrial (HT)								
	Public Lighting								
	Traction (including DMRC)								
	Agriculture								
	Public water works & Sewage								
	Pumping								
	Miscellaneous								

D. Funds for Electrical Infrastructure -Addition of New and Augmentation of Capacity

- 1.0 The Fund requirement for Infrastructure required(new and augmentation capacity addition) to be based on the ongoing Schemes-DDUGJY, IPDS and other State schemes
- 1.1 Please state the Status of Funds , sanctioned and released, Gaps for future expansions in line with estimation in PFA documents- for Each Discoms/Power Deptt of State
- 1.2 PI furnish a write up on issues on achieveing the Plan/targets for Each Discoms/Power Deptt of State
- 1.4 No column should be left blank. If No details are available then please write "NA".

				-16, as c																				
			31.	03.2016	1			I	Requir	<u>ement</u>	of Fu	nds, Av	vailabi	Ity, Ga	p in P	<u>lannni</u>	ng up	to 202	1-22, i	in Rs C	rs			
							Avalab			Avalab		Requir	Avalab		Requir	Avalab		Requir	Avalab)	Requir	Avalab		
Name of		Total Fund							ement	ility in	Gap in	ement	ility in	Gap in							ement	ility in		
Discom/Power		Requirement, in Rs	Require	Avalab		in	2016-	2016-	in	2017-	2017-	in	2018-				2019-		2020-	2020-	in	2021-	2021-	
Deptt, State	Item/Description			ility	Gap	2016-	17		2017-			2018-	19	19	2019-	20	20	2020-	21	21	2021-	22	22	Remarks
	for Capacity Addition:Electrical	Infrastructure in Rura	al Areas (Includir	g und	der the o	ngoing	scheme	s DDUG.	IY and o	thers)													
	Power SubStations																							
	(66/33/22/11KV)-New																							
	Addition																							
	Power SubStations																							
	(66/33/22/11KV)-																							
	Augmentation																							
	Feeders of Power SubStations																							
	(66/33/22/11KV)-New																							
	addition																							
	Feeders of Power SubStations																							
	(66/33/22/11KV)-																							
	Augmentation																							
	Distribution Transformers-																							
	New Addition																							
	Distribution Transformers-																							
	Augmentation																							
	Feeders (11KV)-New Addition																							
	Feeders (11KV)-augmentation												1											
	Capacitor bank, Nos-new																							
	additions																							
	Capacitor bank, Nos-																							
	Augmentations																							
	Feeder Segregation, 11KV									1		ļ	1	ļ	ļ	ļ	1	ļ	<u> </u>	1	ļ	ļ	ļ	
	LT Feeders-New Addition									1		ļ	1	ļ	ļ	ļ	1	ļ	<u> </u>	1	ļ	ļ	ļ	
	LT Feeders-augmentation									1		ļ	1	ļ	ļ	ļ	1	ļ	<u> </u>	1	ļ	ļ	ļ	
	Metering of Feeders-																							
	66/33/22KV									ļ			1	1			1			 		 		
	Metering of Feeders-11KV									ļ			1	1			1			 		 		
	Metering of DTs									ļ		<u> </u>	1	ļ	<u> </u>	<u> </u>	1		<u> </u>	1	<u> </u>	 		
	Metering of all Consumers									ļ		<u> </u>	1	ļ	<u> </u>	<u> </u>	1		<u> </u>	1	<u> </u>	 		
	Fund for IT/communication									ļ		<u> </u>	1	ļ	<u> </u>	<u> </u>	1		<u> </u>	1	<u> </u>	 		
	optic fibre link									1		ļ	1	ļ	ļ	ļ	1	ļ	<u> </u>	1	ļ	ļ	ļ	
	SCADA											ļ	<u> </u>	<u> </u>	ļ	ļ				<u> </u>	ļ	ļ		
	V-SAT											ļ	<u> </u>	<u> </u>	ļ	ļ				<u> </u>	ļ	ļ		
	GIS incl. mapping and																							
	indexation																			<u> </u>		ļ		
	Smart meter-AMI											l				l								

			2015	-16, as		1			Doguir	omont	of Eur	nds, Av	railahi	ltv Ca	n in D	lannni	na un	to 202	1 22	in Dc C	rc			т —
			2013	-10, as	OII	Requir			Requir		UI Fu	Requir			Requir			Requir		III KS CI	Requir	1		-
						ement	Avalah			Avalab			Avalab			Avalab		ement				Avalab		
Name of		Total Fund						Gap in		ility in				Gap in		ility in				Gap in		ility in		
Discom/Power		Requirement, in Rs	Doguiro	Avolob		2016-	2014	2014	2017	2017	3017	2018-	2010	3010	2010	2010	2010	2020	2020	2020-	2021	2021	2021-	
Deptt, State	Item/Description		ment		Gap		2010- 17	17	18	18	2017- 18	19	19	19	2019-	2019-	2019-	2020-	2020-	2020-	2021-	2021-	2021-	Remarks
	for Capacity Addition of Electric											19	19	119	20	20	20	21	Z I	ZI	22	22	22	Kemarks
D.2) Status of Fullus	Power SubStations	cai illirastructure ili o	i Daii ai ea	15 (11101	uairig	unaer tr	ie origoi	ng sche	illes IPD	3 and Ot	ners)	1	1	1	1	1		1	1	1	1	1		
	(66/33/22/11KV)-New																							
	Addition																							
	Power SubStations				1			-	-	-		-	-		-	-		-	1			1	├	+
	(66/33/22/11KV)-																							
	Augmentation																							
	Augmentation																			1	1		├──	+
	Feeders of Power SubStations																							
	(66/33/22/11KV)-New																							
	addition																							
	audition											1								1				+
	Feeders of Power SubStations																							
	(66/33/22/11KV)-																							
	Augmentation																							
	Distribution Transformers-																						<u> </u>	
	New Addition																							
	Distribution Transformers-																				1			1
	Augmentation																							
	Feeders (11KV)-New Addition																							
	Feeders (11KV)-augmentation																							
	Feeder Segregation, 11KV																							
	LT Feeders-New Addition																							
	LT Feeders-augmentation																							
	Metering of Feeders-																							
	66/33/22KV																						<u> </u>	
	Metering of Feeders-11KV																							
	Metering of DTs																							
	Metering of all Consumers																							
	Fund for IT/communication																							
	optic fibre link																							
	SCADA																							
	V-SAT																							
	GIS incl. mapping and																							
	indexation				<u> </u>	<u> </u>								<u> </u>							<u> </u>		<u> </u>	1
	Smart meter-AMI																							

E. Communication Connectivity through SCADA, OFC, V-SAT etc on Electrical System- Existing and Augmentation

- 1.0 Please state the Status of implementation of SCADA, OFC and V-SAT for existing Electrical system for Each Discoms/Power Deptt of State
- 1.1 PI furnish a write up on issues on achieveing the Plan/targets on implementation of SCADA, OFC and V-SAT for Each Discoms/Power Deptt of State
- 1.2 Pl give details (Name of Power S/s, Feeders or location/areawise DTs, Feeders including underground cables etc.) covered under SCADA, OFC and V-SAT as may be applicable.
- 1.3 The Fund required for implementation of SCADA, OFC and V-SAT etc may be included in "Funds required for Electrical Infratructure"
- 1.4 PI fill the data as applicable for Scada, OFC, Vsat etc.

1.5 No column should be left blank. If No details are available then please write "NA".

Name of		Present st	atus in 2015						_				
Discom/Power			31.03.2016			lan for 2016			n for 20			n for 2018	
Deptt, State	Item/Description	SCADA	OFC		SCADA	OFC	V-Sat	SCADA	OFC	V-Sat	SCADA	OFC	V-Sa
	E.1) SCADA, OFC and V-	SAT on Elec	trical Syster	n in Rural A	reas (Includ	ling under th	ne ongoing s	chemes	DDUGJ	and othe	rs)	1	
	Power												
	SubStations(66/33/22/11KV), Nos												
	Feeders of Power												
	SubStations(66/33/22/11KV),												1
	Nos												
	Distribution Transformers, Nos												
	Capacity of Distribution Transformers(11/0.433KV),KV												
	A												
	Feeders (11KV), Nos												
	Length of Feeders (11KV), CKM												
	Length of LT Feeders (.433KV, .215KV), CKM												
	E.2) SCADA, OFC and	/-SAT on Flo	ectrical Syste	em in Urbar	areas (Inc	uding under	the ongoin	a scheme	es IPDS	and Other	5)		
	Power										-,		
	SubStations(66/33/22/11KV),												
	Nos												<u> </u>
	Feeders of Power												
	SubStations(66/33/22/11KV), Nos												
	Distribution Transformers,												
	Nos												
	Capacity of Distribution												
	Transformers(11/0.433KV),KV												1
	Α												
	Feeders (11KV), Nos												
	Length of Feeders (11KV), CKM												
	Length of LT Feeders (.433KV,												
	.215KV), CKM												<u> </u>
	Length of LT Feeders (.433KV,												ĺ
	.215KV), CKM	1					1						i

E. Communication Connectivity through SCADA, OFC, V-SAT etc on Electrical System- Existing and Augmentation

- 1.0 Please state the Status of implementation of SCADA, OFC and V-SAT for existing Electrical system for Each Discoms/Power Deptt of State
- 1.1 PI furnish a write up on issues on achieveing the Plan/targets on implementation of SCADA, OFC and V-SAT for Each Discoms/Power Deptt of State
- 1.2 PI give details (Name of Power S/s, Feeders or

location/areawise DTs, Feeders including

- 1.3 The Fund required for implementaion of SCADA, OFC and V-SAT etc may be included in "Funds required for Electrical Infratructure"
- 1.4 PI fill the data as applicable for Scada, OFC, Vsat etc.
- 1.5 No column should be left blank. If No details are available then please write "NA".

Name of					ite NA.					
Discom/Power			for 201			n for 2020)-21		an for 2021	-22
Deptt, State	Item/Description	SCADA	OFC	V-Sat	SCADA	OFC	V-Sat	SCADA	OFC	V-Sat
ical System in Rura	al Areas (Including under the or	1								
	Power									
	SubStations(66/33/22/11KV),									
	Nos									
	Feeders of Power									
	SubStations(66/33/22/11KV),									
	Nos									
	Distribution Transformers,									
	Nos									
	Capacity of Distribution									
	Transformers(11/0.433KV),KV									
	Α									
	Feeders (11KV), Nos									
	Length of Feeders (11KV),									
	СКМ									
	Length of LT Feeders (.433KV,									
	.215KV), CKM									
trical System in Ur	ban areas (Including under the	(
	Power									
	SubStations(66/33/22/11KV),									
	Nos									
	Feeders of Power									
	SubStations(66/33/22/11KV),									
	Nos									
	Distribution Transformers,									
	Nos									
	Capacity of Distribution									
	Transformers(11/0.433KV),KV									
	A									
	Feeders (11KV), Nos									
	Length of Feeders (11KV),									
	СКМ									
	Length of LT Feeders (.433KV,									
	.215KV), CKM									
	Length of LT Feeders (.433KV,			1						
	.215KV), CKM									

F. GPS based GIS mapping for Electrical System- Existing and Augmentation

- 1.0 Please state the Status of implementation of GIS for existing Electrical system for Each Discoms/Power Deptt of State
- 1.1 PI furnish a write up on issues on achieveing the Plan/targets on implementation of GIS for Each Discoms/Power Deptt of State
- 1.2 PI give details (Name of Power S/s, Feeders or location/areawise DTs, Feeders(including underground cables etc), consumers covered under GIS mapping
- 1.3 The Fund required for implementaion of GIS may be included in "Funds required for Electrical Infratructure"
- 1.4 PI fill the data as applicable for GIS. No column should be left blank. If No details are available then please write "NA".
- 1.5 No column should be left blank. If No details are available then please write "NA".

Name of		Present status in 2015-16, as on						
Discom/Power		31.03.2016			Plan un	to 2021-22		
Deptt, State	Item/Description	GIS	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	cal System in Rural Areas (Including	under the ongoing	schemes DDU	IGJY and othe	ers)			
	Power SubStations(66/33/22/11KV),Nos							
	Feeders of Power SubStations(66/33/22KV), Nos							
	Distribution Transformers, Nos							
	Feeders (11KV), Nos							
	LT Feeders (.433KV, .215KV),Nos							
	Consumer indexing,Nos							
F.2) GIS on Electric	cal System in Urban areas (Including Power SubStations(66/33/22/11KV),Nos	under the ongoing	schemes IPD	S and Others)				
	Feeders of Power SubStations(66/33/22KV), Nos							
	Distribution Transformers, Nos							
	Feeders (11KV), Nos		_					
	LT Feeders (.433KV, .215KV),Nos							
	Feeder wise Consumer indexing							

G. IT enablement in Electrical System- Existing and Augmentation

- 1.0 Please state the Status of implementation of IT enablement in existing Electrical system for Each Discoms/Power Deptt of State
- 1.1 Pl furnish a write up on issues on achieveing the Plan/targets on implementation of IT enablement for Each Discoms/Power Deptt of State
- 1.2 Pl give details (Name of Power S/s, Feeders or location/areawise DTs, Feeders(including underground cables etc), consumers covered under GIS mapping
- 1.3 The Fund required for implementation of IT enablement may be included in "Funds required for Electrical Infratructure"
- 1.4 PI fill the data as applicable for IT enablement. No column should be left blank. If No details are available then please write "NA".
- 1.5 No column should be left blank. If No details are available then please write "NA".

Name of Discom/Power		Present status in 2015-			IT onablemen	t Dian unto 20	21 22		
Deptt, State	Item/Description	16, as on 31.03.2016	2016-17	2017-18	2018-19	t Plan upto 20 2019-20	2020-21	2021-22	Remarks
	Electrical System in Rural Area					2017-20	2020-21	2021-22	Kemarks
	Data Center(DC)		<u> </u>						
	Disaster Recovery centre								
	IT Intergration with DC/DRC								
	Enterprise Resource Planning III enablement of Feeders								
	(11KV), Nos								
	Customer Care Center								
G.2) IT enablement	Electrical System in Urban area	as (Including under the or	ngoing schem	es IPDS and C	Others)				
	Data Center(DC)								
	Disaster Recovery centre								
	IT Intergration with DC/DRC								
	Enterprise Resource Planning								
	IT enablement of Feeders								
	(11KV), Nos								
	Customer Care Center								