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02 Week Program on Distribution Loss Reduction

July 23 – August 7, 2010
CIRE, Hyderabad,
Andhra Pradesh, India



CENTAL INSTITUTE FOR RURAL ELECTRIFICATION (CIRE) OF REC

TRAINING PROGRAMME SCHEDULE
OF
"DISTRIBUTION LOSS REDUCTION"
(FOR AFGHAN POWER EXECUTIVES)

DATE	SESSION	SCHEDULE	RESOURCE PERSON Details
23/07/2010 Friday	4pm	Registration and Time table distribution/discussion	
		<u>Inauguration</u>	
		Welcome Address: Course Overview: Key note Address by : Inaugural Address: Vote of Thanks: High Tea:	Mr. Vinod Behari , Executive Director (HR), REC, New Delhi Mr. D. S. Sarma , Consultant/Training Coordinator, CIRE Mr. S. Padmanaban , Regional Programme Director, SARI/Energy, USAID Dr. J. M. Pathak , CMD, REC, New Delhi Mr. Ramesh Kode , Additional Director, CIRE Allure Hall, Le-Meridian
	Group Discussion		
24/07/2010 Saturday	1, 2	1. Visit to Agra 2. Discussion with Dakshinanchal Vidyut Vitaran Nigam Ltd. at Agra	D S Sarma / M Mohan Rao
	3,4	Field visit in Agra - Demonstration of Distribution Sub-station	
25/07/2010 Sunday	1,2 & 3	Agra to Delhi (on the way, they will be shown the distribution equipment & possible Loss Reduction Measures)	D S Sarma / M Mohan Rao
	4 & 5	Travel from Delhi Airport to CIRE, Hyderabad	
26/07/2010 Monday	1	Pre-test	Ch Narasimha Murthy/J Dakshina Murthy
	2	Power Sector Scenario and Reforms Concept	G Shanker

	3	Distribution System Planning	Ch Narasimha Murthy
	4 & 5	Field Visit: Components of Distribution System -- <ul style="list-style-type: none"> i. LT & 11KV lines comprising poles, insulators, cross arms and conductor ii. Distribution Transformer Structure, components, earthing & Metering arrangements 	Ch Narasimha Murthy/J Dakshina Murthy
27/07/2010 Tuesday	1 & 2	Class-room session: Metering -- <ul style="list-style-type: none"> ➤ Various concepts and Basic Principles; ➤ CT metering ➤ HT metering ➤ MF calculation 	J Dakshina Murthy
	3,4 & 5	Field Visit: <ul style="list-style-type: none"> i. LT industrial service (CT operated meter) ii. HT Service iii. Pertinent points to be observed while releasing LT industrial service & HT Service iv. Preventive measures of tampering v. Sealing arrangements 	Ch Narasimha Murthy/J Dakshina Murthy
28/07/2010 Wednesday	1 & 2	Class room session: <ul style="list-style-type: none"> ➤ Concepts & Principles of Distribution Losses ➤ Energy Accounting & Energy Audit 	J Dakshina Murthy
	3,4 & 5	Field Visit: Meter Testing Lab --- <ul style="list-style-type: none"> i. Testing of LT& HT meters ii. Pilfer- proof box arrangements for CT meters 	Ch Narasimha Murthy/J Dakshina Murthy
29/07/2010 Thursday	1	Class room session: <ul style="list-style-type: none"> ➤ Metering, Billing & Collection ➤ Advance Metering -- AMR, RMR, Prepaid Metering, Spot Billing etc., 	D S Sarma
	2	Out sourcing of Metering, Billing & Collection	G Shanker
	3,4 & 5	Automated Distribution Management (Consumer Analysis Tool, Transformer Information Management System & Meter Information Management System etc.)	G Shanker
30/07/2010 Friday	1, 2	Class room session: <ul style="list-style-type: none"> ➤ Tariff Philosophy, Subside Concept, Retail Tariff, Cost benefit analysis of distribution losses 	D S Sarma

	3,4 & 5	Field Visit: <ol style="list-style-type: none"> 1. Pole erected metering and Aerial Bunched Cabling 2. 33/11 KV sub-station --- <ol style="list-style-type: none"> i. 33 and 11 KV bus bar arrangements ii. Power Transformers, Lightning Arresters, Circuit Breakers, Instrument Transformers, Control & Relay Panels, Battery and charger 	Ch Narasimha Murthy/ J Dakshina Murthy
31/07/2010 Saturday	1 to 5	Field Visit: High Voltage Distribution System (HVDS)	Ch Narasimha Murthy/ J Dakshina Murthy
02/08/2010 Monday	1	Class-room session: <ul style="list-style-type: none"> ➤ Reactive Power Management in Distribution Systems 	J Dakshina Murthy
	2	Safety Aspects in Distribution Systems	V Padmaiah
	3,4 & 5	Field Visit: <ol style="list-style-type: none"> i. SCADA Centre ii. Trouble Call Management Centre 	Ch Narasimha Murthy/ J Dakshina Murthy
03/08/2010 Tuesday	1,2	Class-room session: Best Practices in Technical Loss Reduction	Ch Narasimha Murthy
	3,4 & 5	Field Visit: Measurement of -- <ol style="list-style-type: none"> i. Soil Resistivity ii. Earth Resistance 	Ch Narasimha Murthy/ J Dakshina Murthy
04/08/2010 Wednesday	1,2	Class-room session: Best Practices in Commercial Loss Reduction	VVSR Narasimha Rao
	3,4 & 5	Field Visit: <ol style="list-style-type: none"> i. Consumer Meter Reading & Issue of Bills through Spot Billing Machine ii. Downloading of data at the Centralised Computer Centre 	Ch Narasimha Murthy/J Dakshina Murthy
05/08/2010 Thursday	1 to 5	Field Visit: M/s. Vijay Electricals, Manufacturers of <ol style="list-style-type: none"> i. Completely self protected transformers ii. Amorphous core transformers iii. Power Transformers iv. Circuit Breakers v. Instrument Transformers 	Ch Narasimha Murthy/ J Dakshina Murthy
06/08/2010 Friday	1,2	Case Studies on Distribution System Loss Reduction	Ch Narasimha Murthy
	3,4 & 5	Field Visit: <ol style="list-style-type: none"> i. Customer Care Centre ii. e-Seva Centre iii. Exposure to various payment options for the consumers 	Ch Narasimha Murthy/ J Dakshina Murthy

07/08/2010 Saturday	1	Post test	Ch Narasimha Murthy/ J Dakshina Murthy
	2 & 3	Group Discussion	G Shanker / J Dakshina Murthy
	4 & 5	Feedback and Valediction	

***Each Session Duration: 1 hour, 30 minutes**