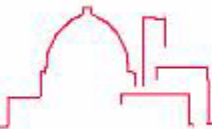


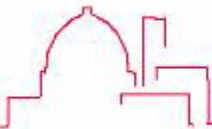
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Associate Engineer Training



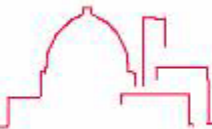
Associate Engineer Training

- District & Business Unit Training
 - Orientation
 - Mandatory & Required
 - Safety
- Rotational & On-The-Job Training
 - Short Rotational Assignments
 - Job Specific OJT
- Formal Training
 - Instructor Led (SME/Vendor)
 - Online



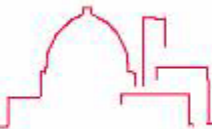
Recommendations for Associate Electrical Engineers

- Required Knowledge/Skills
 - AutoCAD
 - Line Design – Basic Skills
 - Substation --- Intermediate
 - Algebra & Trigonometry
 - Reading and interpreting map symbols according to the legend
 - Reading technical material
 - Attention to detail
- Desired Knowledge and Skills
 - Customer service skills/experience
 - Construction print reading
 - Electrical theory and distribution equipment knowledge
 - Distribution system design experience
 - Electric Utility work experience



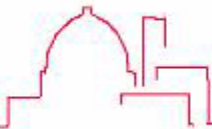
Associate Engineer Training Content

- Associate Engineer Training content consists of a wide range of courses from system operations, protection and reliability to system design and load forecasting.
- Courses are normally provided on an as-needed/requested basis.
- Most classroom instruction includes field and/or practical components as part of the curriculum.

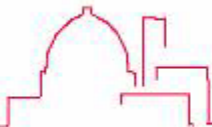


Associate Engineer Training – Modules

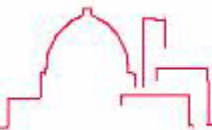
Module	Status	Assessment	SME/Trainer
Orientation	DS NEO	No	DS Staff
Safety	DS NEO	No	DS Staff
Process	DS NEO	No	DS Staff
System Operations	Available Online	Yes	Online
System Reliability	TBD	TBD	TBD
Rates, Rules & Regulations	Available through Performance Solutions	Unknown	Katrina Kelly
Power Relationship	PowerPoint	TBD	
Economics	Available	Unknown	Tracy/Troncale
Protection 2 – Fault Duty	AVAILABLE	UNKNOWN	SOUDI
Protection 1 - Coordination	AVAILABLE	UNKNOWN	SOUDI
Protection 3 – Protective Devices & Equipment	Available	Unknown	Soudi
Power Quality	TBD	TBD	TBD
Voltage Drop & Flicker	POWERPOINT	YES	DAVID FUKE
System Voltage & Reactive Support	PowerPoint	TBD	Dave Brown
Transformer Loading, Configurations & Connections	PowerPoint	2 Quizzes	Tom Lyons



Load Forecasting	TBD	TBD	STEVE BREECE
Standards Application & Applicable Codes	PowerPoint	TBD	Ed Stockman
Distribution Apparatus/Nameplates	TBD	TBD	DAVE ANDREWS
OH Sags & Tensions	POWERPOINT	TBD	LAMAR HINDS
Pole Structural Analysis (Site, Class, & Wind Loading)	PowerPoint	TBD	Lamar Hinds
Cable Loading/Design & Pulling	POWERPOINT	TBD	DAVID FUKE
Print Reading	TBD	TBD	TBD
Substation Design Configuration	TBD	TBD	UWM/CHAPLY
Substation Design Process	TBD	TBD	UWM/CHAPLY
Substation Grounding	TBD	TBD	UWM/CHAPLY
SynerGEE	VENDOR	UNKNOWN	ADVANTICA
GIS	AVAILABLE	UNKNOWN	
OMS	AVAILABLE	UNKNOWN	JIM HAYES
SCADA/EMS	TBD	TBD	BRUCE OLIVER
Cogeneration/DG	TBD	TBD	DAVE BROWN
Meter & Service	PowerPoint	TBD	Erick Crans
Testing Equipment – Fault Location, Doble, Megger, TTR	TBD	TBD	Garry Sparks
Troubleshooting Process	TBD	TBD	TBD



Questions?



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DS Non-Supervisory Leadership Development Training

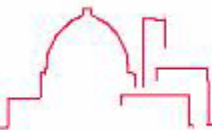


Leadership Development Training

- Training for DS Non-Supervisory Leads
 - Principal & Senior Engineers (System, Design & Civil)
 - T & D/Substation Maintenance Planners
 - Engineering Designer IVs
 - Senior Line Inspector
 - Construction Management Inspector III
- Six Modules – 18 Months
 - Essentials of Leadership
 - Coaching for Success
 - Strategic & Operational Overview
 - Introduction to Project Management
 - Job & Work Analysis
 - Series Capstone



Questions?



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