

EMERGING LEADERS FORUM



Agenda

- Introductions
- Grid Mod History
- Lessons Learned
- Stage Gate Process
- Digital Estimation - Powercompass

Introductions



DANIEL MILLER
Electrical Engineer
Burns & McDonnell



Caroline Vaughan
Sr. Project Manager
Entergy



SANTOSH BHADULE
Section Manager - Technology
1898 & Co. part of Burns & McDonnell



Mylan Perrin
Grid Modernization Engineer
Entergy

Utility Strategy: Grow, Modernize and Transform

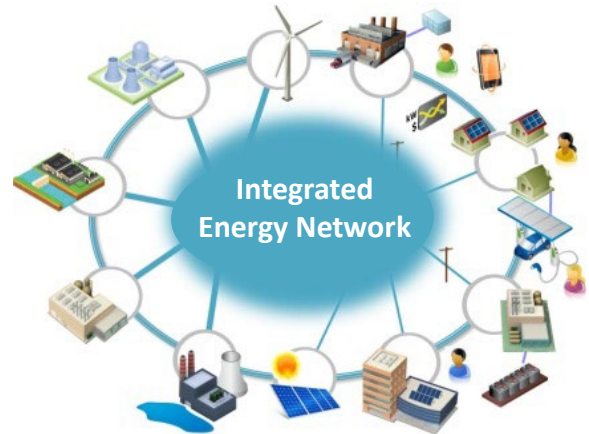
Same business model... an evolving operating model

Grow our utility business...

- Investment opportunities for the benefit of our customers
- Develop innovative products and services
- Execute modernizing and transformative projects
- Regulatory engagement and regulatory constructs



In a customer-facing manner...



That creates a more robust and modernized grid...

SECTION III RATE SCHEDULES		Page 611
SECTION III RATE SCHEDULE		Page 11.1
ENERGY TEXAS, INC.	Sheet No. 111	
Electric Service	Effective Date: 11-1-13	
SCHEDULE DCCP	Reason: D	
	Supplement: New Schedule	
	Schedule Contexts of One Sheet Plus	
	Attachment A	
DISTRIBUTION COST RECOVERY FACTOR RIDER		
I. PURPOSE		
The Distribution Cost Recovery Factor Rider ("Rider DCCP") defines the procedure by which Energy Texas, Inc. ("ETI" or "Company") shall implement and adjust rates for recovery of incremental distribution costs as defined under P.U.C. SUBR. R. 25.243. The purpose of the Rider is to provide a mechanism for recovery of incremental distribution costs not included in the Company's ratemaking process as presented before the Public Utility Commission of Texas ("Commission").		
II. APPLICABILITY		
This rider is applicable to electric service provided by the Company to all customers served under applicable retail rate schedules set forth in Attachment A to the Rider DCCP, whether renewed or amended, subject to the jurisdiction of the Commission.		
III. DISTRIBUTION COST RECOVERY RATES		
The rates associated with Rider DCCP ("Distribution Cost Recovery Rates") shall be set forth in Attachment A to the Rider DCCP by application of the DCCP Formula as defined under P.U.C. SUBR. R. 25.243 (b)(7).		
The Rider Distribution Cost Recovery Rates shall be based on the costs as defined under P.U.C. SUBR. R. 25.243 associated with the Company's distribution network capital that was placed into service between April 1, 2010 and May 31, 2014 in records of the Distribution cost and set forth in Attachment A to the Distribution & Settlement Agreement in Contract No. 47711 as approved by the Commission. The Rider Distribution Cost Recovery Rates as determined shall become effective for usage on and after January 1, 2015 and shall remain in effect until superseded.		
IV. TOMB		
Subject to the incorporation provisions of P.U.C. SUBR. R. 25.243(b), this Rider DCCP shall remain in effect until modified or terminated in the absence of any rider DCCP proceeding or the electric utility's ratemaking proceeding providing for recovery of any remaining unrecovered costs subject to the Rider DCCP.		

With regulatory support for effective recovery

Entergy's Opportunity to Grid Modernization

Evolving Customer Demands

The needs and preferences of electric customers across the country, including Entergy's, are evolving to place greater emphasis on hyper-reliability, access to information, local sustainable generation, greater energy efficiency, etc.



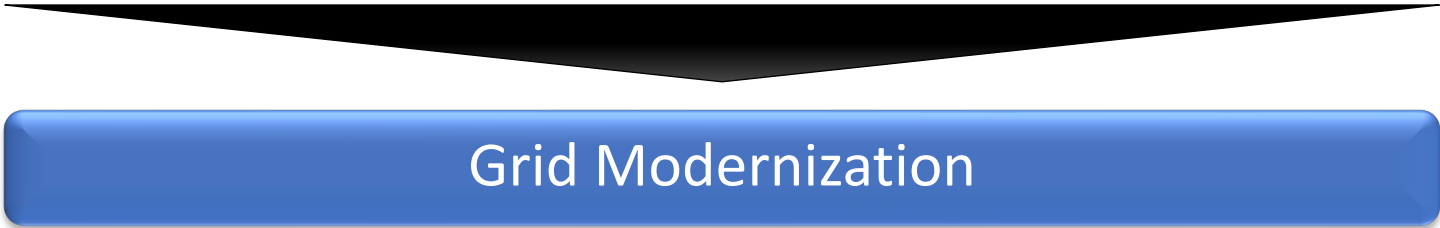
Aged Assets & Systems

For Entergy to meet these evolving customer needs, we must address the aging asset fleet with enhanced asset health awareness and renewal investment.

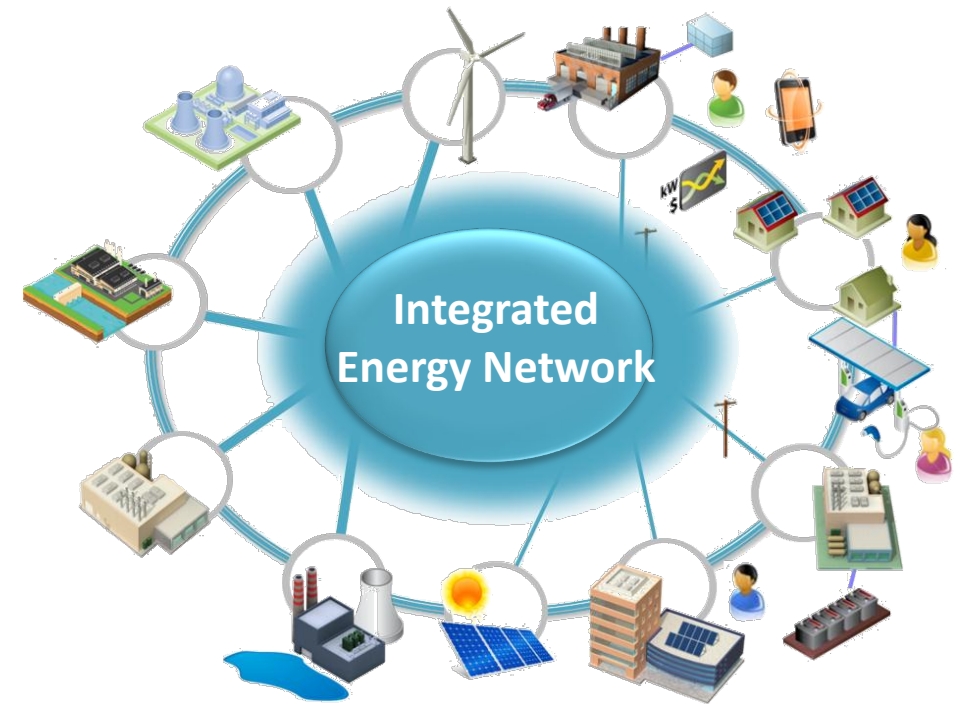
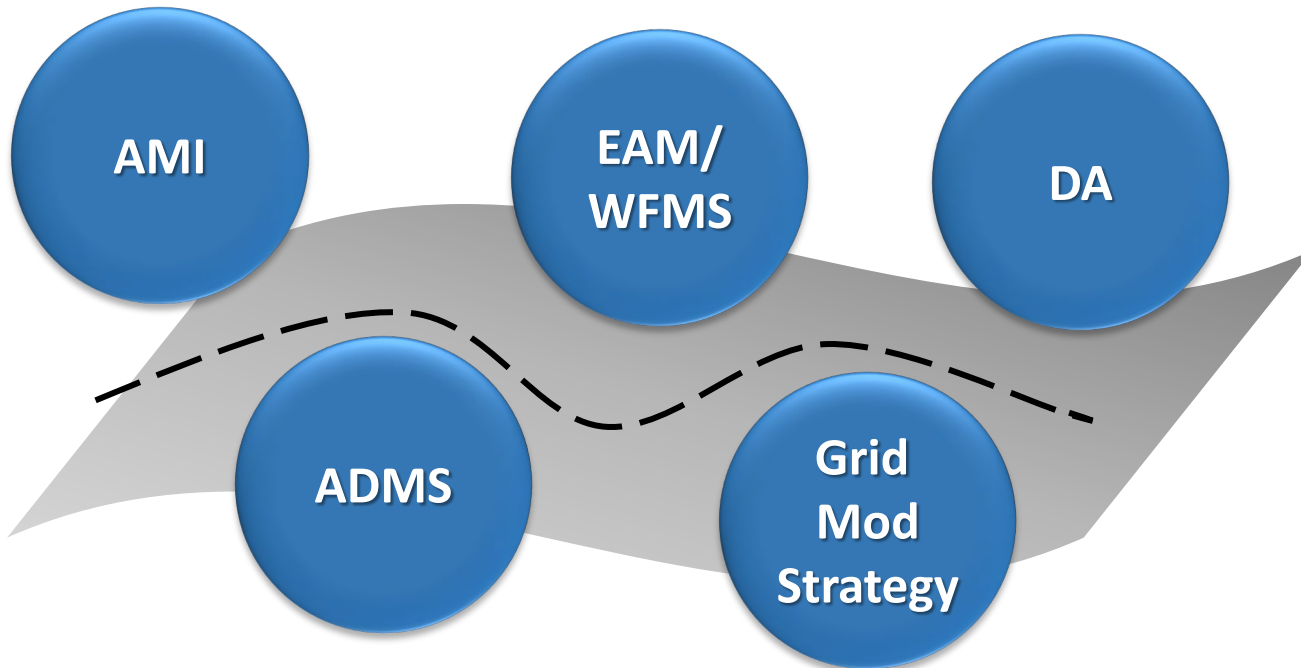


New Technologies

In addition to addressing asset age and health, new technologies are now mature and available to help meet these customer needs and further reduction in risk exposure, increase operational efficiencies and enable new products and services.



Entergy's journey to Grid Modernization



- New technologies and systems
- Modernization of assets
- Devices and sensors for grid intelligence

Grid Modernization Engineering Study (GMES)

Partnered with Burns and McDonnell (2015)

Objectives of Grid Study

Translate thesis into **specific, prioritized projects** to pursue

- Evaluate representative set of assets for potential projects
- Prioritize based on benefits
- Develop detailed scope of work, including expected capital budget
- Draw a line on the sand Grid Mod Standards

Link projects to **specific quantified benefits**, including:

- O&M savings; operational excellence
- Reliability (SAIDI/SAIFI) improvement
- Fuel consumption optimization
- Enablement of future technologies

Support **internal approvals packaging and regulatory filings**, as needed

- Robust plan & benefits case to build internal approvals package
- Support development of regulatory strategy by OpCo

Grid Study Deliverables

Phase I: Define Engineering Standards, identify representative circuits, and complete pilot analytics

Phase II: Perform circuit level Engineering analysis across identified representative circuits, synthesize results into prioritized, and state executable plan

Phase III: Support regulatory and internal approvals and institutionalize process and tools

Setting Standards for the Future

Drawing a line in the sand to make a change for the future

Simplified Materials

- Greater buying power
- Ease of installation
- Consistency across Entergy system

Distribution Automation

- Communication and visibility to field equipment
- Faster restoration times
- Minimize customer exposure
- Utilize new technology for future **IRP** use cases

Legacy Guidance

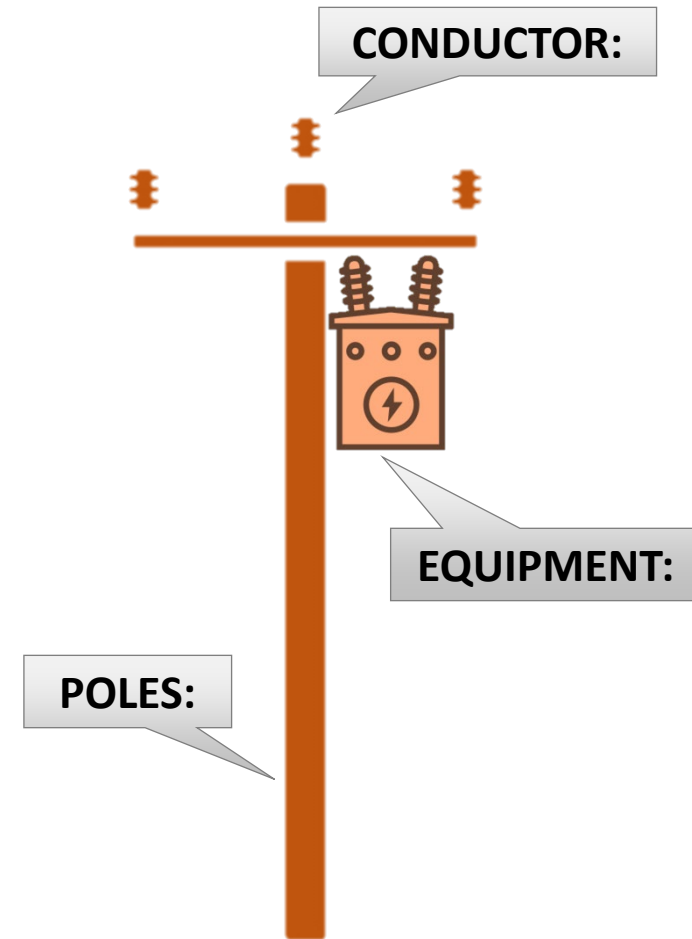
- Set a point of no return to require rebuild to new standard
- Simplified maintain vs upgrade criteria

2 Way Power Flow

- Increased line capacity by lowering conductor rating guidelines
- Enabling self-healing networks
- Support distributed generation and dynamic switching

Line Routing

- Establish best practices to minimize vegetation and back lot maintenance
- Single circuit construction
- No transmission under build



Develop Projects and Refined Business Cases

Grid Modernization Strategy



Build to Serve



Targeted & Strategic Projects



Transformer Contingency



Feeder Exposure

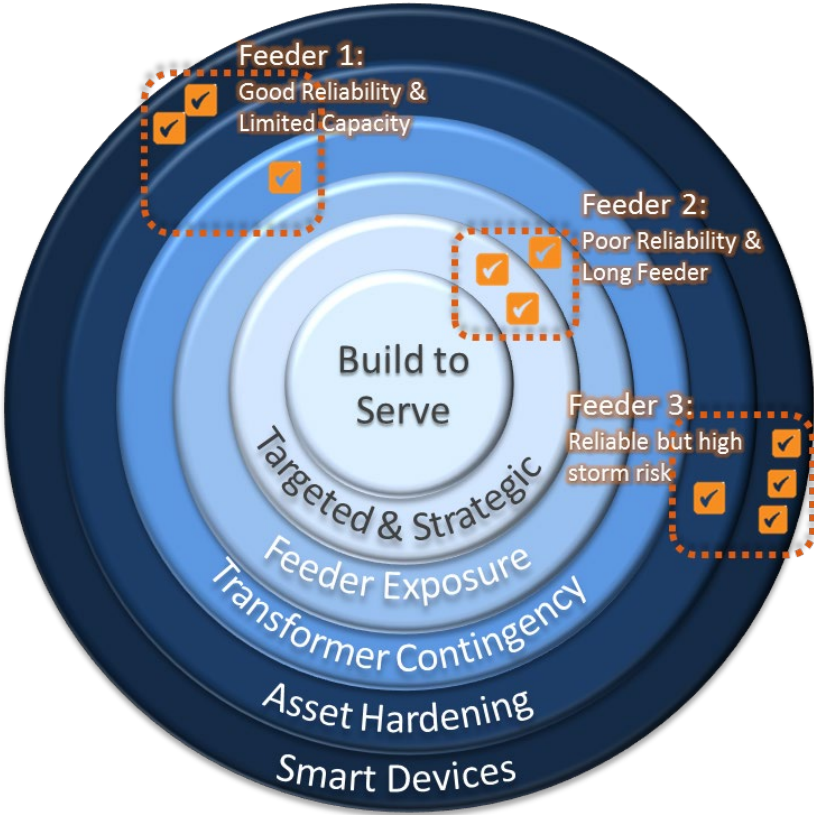


Asset Hardening



Smart Devices

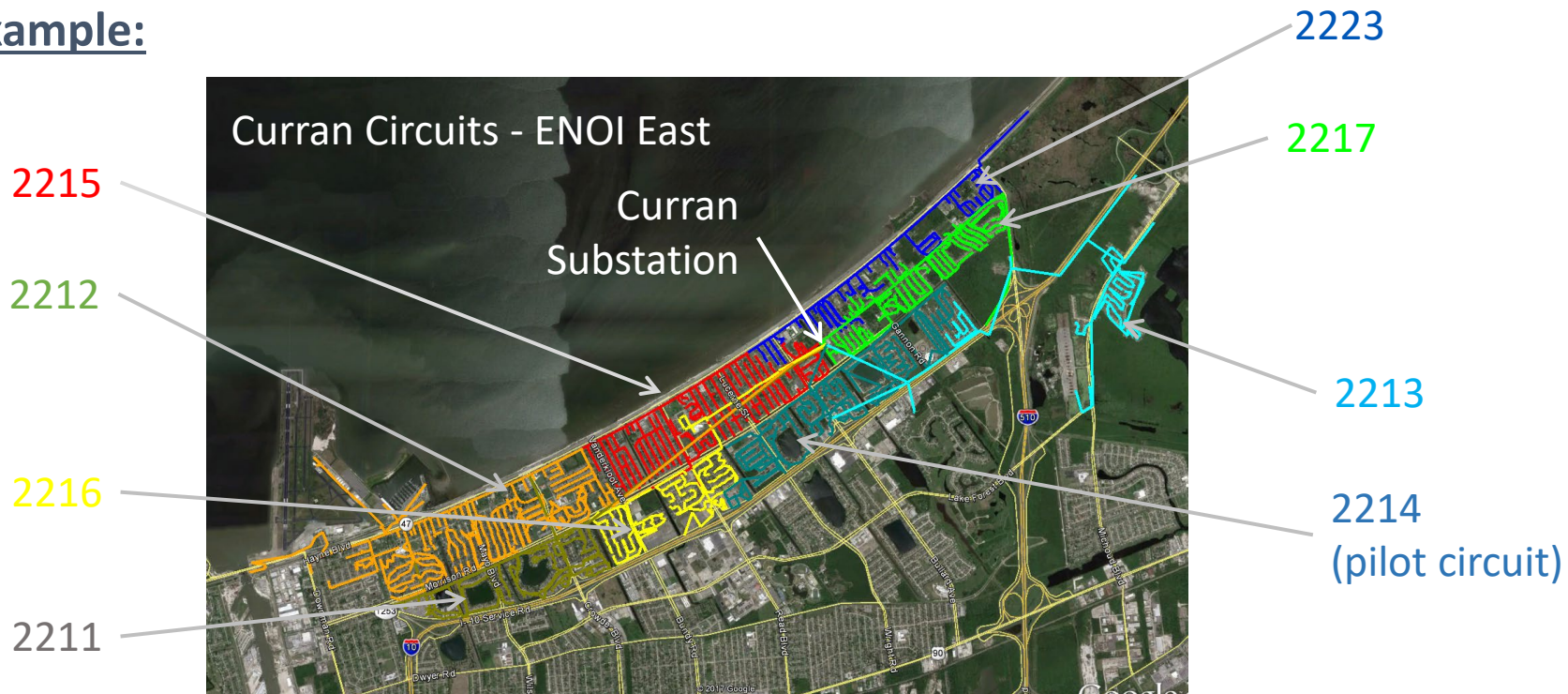
Grid Study



What is a Guild?

Guild= Group/ family of circuits that are in a close proximity geographically and/or share switchable connections with each other. They work together to serve a geographical group of customers.

Example:

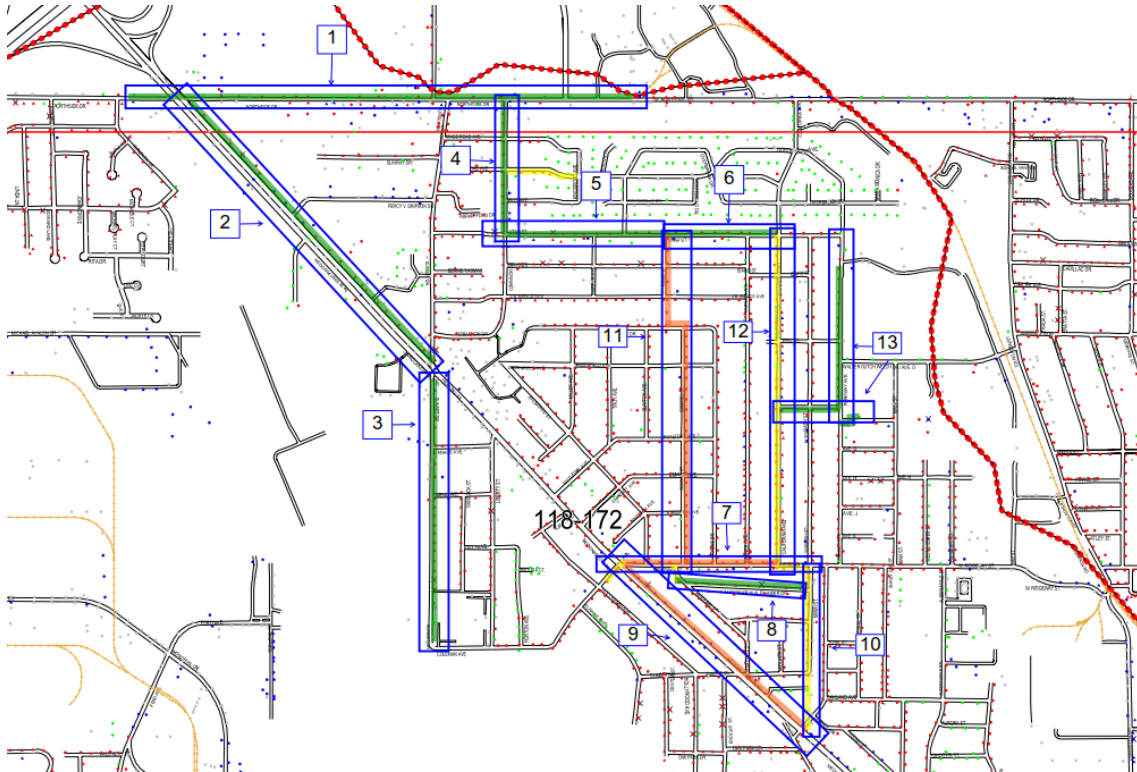


...One Holistic Project for each Circuit Family

Guild Pilot Program- Execution

Lesson's Learned- The need of a Stage Gate Process

Benefits



Miami St- First Executed Guild

Lesson's Learned

- Project refinement... the how to build those projects → **DPD**
- Large capital project organization to execute these projects → **DPME&C**
- A formalized process and governance to drive consistency and certainty throughout the life cycle of each project → **SGP**

What is the Stage Gate Process?

Overview

The Stage Gate Process (SGP) is the primary *process* used for the *execution of Distribution projects* within DPM&C.

- It is a project delivery system that drives *consistency* and *certainty* in project deliverables, activities and outcomes.

Purpose

To standardize the *planning, preparation, and execution* of Distribution projects in DPM&C and provide project teams with the necessary deliverable requirements and activities that must be performed throughout a project's lifecycle.

- In addition to providing guidance and structure, it highlights how a project transitions from one stage to the next between different project stakeholders.

What Does It Look Like?

The SGP is an eight-stage project delivery system – which goes from project initiation through closeout – listing specific deliverables and activities that should be accomplished at each stage across standard Project Management components:

- Segmentation, Project Plans, GOES, Scheduling, Estimating & Cost Control, Risk Management, WBS, Scope & Change, Reporting, Procurement & Contracting, Engineering, Construction, Start-up & Operations, ROW / Environmental



Stage 1 – Business Case Justification

Objective

- To determine the feasibility of the project options and select the option that best addresses the need.

Responsible Stakeholder Group

- Distribution Asset Planning

Deliverables/Requirement List

- Class 5 Cost Estimate*
- Scope Map*
- Business Risks*
- Target ISD Date*
- Segmentation Matrix
- Project Business Case*
- GOES Template
- Peer Review
- Portfolio Log

*Signifies deliverables or requirements that are updated or adjusted based on development of the scope and project progression.



Stage 2 – Project Scope Refinement

Objective

- To refine the scope of the option that best achieves the business need.

Responsible Stakeholder Group

- Distribution Project Development

Deliverables/Requirement List

- Class 4 Cost Estimate*
- WO Breakdown
- Scope Map*
- Project Scoping Plan
- Initial FP requests for Stage 3 funds
- Preliminary Site
- Engineering Review
- Level 1 Schedule (Target ISD Date)
- Long lead Item Risks
- ROW/Vegetation Risks
- Environmental/Permitting Risks
- Segmentation Matrix*
- Project Business Case*
- GOES Template*
- Peer Review
- Portfolio Log

*Signifies deliverables or requirements that are updated or adjusted based on development of the scope and project progression.



Entergy Estimating Software Tool

Mylan Perrin

Santosh Bhadule

Entergy Estimating Software Tool

MAJOR COMPONENTS

- Configuration and Setup
- Estimation
- Leadership view & Analysis
- Resource Allocation
- Cash flow

The screenshot displays the 'POWER COMPASS' dashboard for Entergy. The interface includes a navigation bar with 'Admin Tools' and a user profile 'mper103@entergy.com'. The main content area is titled 'Dashboard' and features a search bar for 'New Project'. Below this, there are two project cards. The first card is for 'AC21-006B Build 336AI tie down Hwy 33 to N0103 Rev. 1'. It includes a 'Copy Project' button, a 'View Project Details' button, a 'Go To Summary' button, an 'Add Jobs' button, and a 'Manage Documents' button. A progress diagram shows 'Stage 1' as the current stage, with 'Stage 2' and 'Stage 3' as subsequent stages, and 'Actuals' as a final stage. To the right of the diagram is a 'Version History' dropdown set to 'Rev. 1'. Below the diagram are two summary tables: 'Cost Summary' and 'Components Summary'. The 'Cost Summary' table lists categories like Construction, Design, Materials & Supply, Project, and Management & Oversight with their respective costs. The 'Components Summary' table lists items like Coordination Study & Device, Programming, Distribution, Automation, and Fuse Switch Install with their quantities. The second project card follows a similar layout for 'CN21-008A_ETI_Conroe_Walden_562WD, 564WD-SG2'.

Entergy Estimating Software Tool



Role Management

+ Add Role

Name

- Planning Engineer
- DPD Project Manager
- Portfolio Manager/ Leadership
- Project Sponsor
- Tool Maintenance
- Design Manager
- Actuals Manager
- Execution Representative
- DPD Lead PM
- DPD Engineer

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Name*
Portfolio Manager/ Leadership

Access

- Group: Admin**
 - Global Settings
 - Leadership View
 - User/Role Settings
- Group: Global**
 - Read-only
- Group: Stage**
 - Actual Approval
 - Actual Write
 - Always Edit Team Members
 - Project Initiator
 - Stage 0 Write
 - Stage 1 Approval
 - Stage 1 Write
 - Stage 2 Approval
 - Stage 2 Write
 - Stage 3 Approval
 - Stage 3 Write

Cancel Save



POWER COMPASS by entergy

Admin Tools mper103@entergy.com

- PROJECT DASHBOARD
- PORTFOLIO VIEW
- SCHEDULE VIEW
- REPORTS VIEW

Entergy

Entergy Estimating Software Tool



Role Management

+ Add Role

Name

- Planning Engineer
- DPD Project Manager
- Portfolio Manager/ Leadership
- Project Sponsor
- Tool Maintenance
- Design Manager
- Actuals Manager
- Execution Representative
- DPD Lead PM
- DPD Engineer

Name*
DPD Project Manager

Access

- Group: Admin**
 - Global Settings
 - Leadership View
 - User/Role Settings
- Group: Global**
 - Read-only
- Group: Stage**
 - Actual Approval
 - Actual Write
 - Always Edit Team Members
 - Project Initiator
 - Stage 0 Write
 - Stage 1 Approval
 - Stage 1 Write
 - Stage 2 Approval
 - Stage 2 Write
 - Stage 3 Approval
 - Stage 3 Write

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POWER COMPASS

Admin Tools mper103@entergy.com

Dashboard

New Project

Sort By: Name

AC21-006B Build 336Al tie down Hwy 33 to N0103 Rev. 1

Copy Project

View Project Details
Go To Summary
Add Jobs
Manage Documents

Stage 1
Stage 2
Stage 3
Actuals

Version History: Rev. 1

Cost Summary		Components Summary	
Construction	\$622,591.32	Coordination Study & Device	135
Design	\$70,155.74	Programming	3
Materials & Supply	\$230,494.98	Distribution	3
Project Management & Oversight	\$106,205.03	Automation	3
		Fuse Switch Install	3

Show Jobs

CN21-008A_ETI_Conroe_Walden_562WD_564WD-SG2

Copy Project

View Project Details
Go To Summary
Add Jobs
Manage Documents

Stage 1
Stage 2
Stage 3
Actuals

Version History: Original

Cost Summary		Components Summary	
Construction	\$468,441.43	Coordination Study & Device	82
Design	\$79,155.01	Programming	1
Materials & Supply	\$258,394.80	Disconnect Switch	1
Project Management & Oversight	\$68,869.08	Install	1
		Distribution	1

Entergy Estimating Software Tool



Role Management

+ Add Role

Name

Planning Engineer

DPD Project Manager

Portfolio Manager/ Leadership

Project Sponsor

Tool Maintenance

Design Manager

Actuals Manager

Execution Representative

DPD Lead PM

DPD Engineer

1 2

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Name*

DPD Project Manager

Access

- Group: Admin**
 - Global Settings
 - Leadership View
 - User/Role Settings
- Group: Global**
 - Read-only
- Group: Stage**
 - Actual Approval
 - Actual Write
 - Always Edit Team Members
 - Project Initiator
 - Stage 0 Write
 - Stage 1 Approval
 - Stage 1 Write
 - Stage 2 Approval
 - Stage 2 Write
 - Stage 3 Approval
 - Stage 3 Write



POWER COMPASS. energy

Admin Tools mper103@entergy.com

Role Management

+ Add Role

Name	
Planning Engineer	Edit Delete
Maximo Design Representative	Edit Delete
Portfolio Manager/ Leadership	Edit Delete
Planning Manager	Edit Delete
Actuals Manager	Edit Delete
Senior Project Manager	Edit Delete
Master	Edit Delete
DPD Manager	Edit Delete
DPD Project Manager	Edit Delete
App Admin	Edit Delete

1 2

1 - 10 of 15 items

Entergy Estimating Software Tool

CONFIGURATION, NOT CUSTOMIZATION

Global Settings - Cashflow Allocations

- Team Member Function
- Rates
- Positions
- Component Summaries
- Cost Categories
- Cost Classifications
- Parts
- Cost Class Items
- Cost Types
- Cashflow Allocations**
- Project Management & Oversight Resource Allocations
- Indirect Costs
- Part Types
- Parts Component Units
- Risk Register
- Jurisdictions
- Regions
- Networks
- Substations
- Circuits
- Stage Duration Assumptions
- Traffic Control FTEs
- Construction Cost Multipliers
- Document Folder Management

Project Types: PSK405 + Add Project Type Delete Project Type

Resource allocation for project type PSK405

Cost Class Item	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	
Construction	0%	0%	100%	0%	0%	
Design	15%	85%	0%	0%	0%	
Environmental	50%	5%	45%	0%	0%	
Materials & Supply	0%	0%	100%	0%	0%	
Other	25%	75%	0%	0%	0%	
Project Management & Oversight	20%	30%	40%	5%	5%	
ROW Inquiry & Acquisition	30%	70%	0%	0%	0%	
Scope Uncertainty	5%	20%	75%	0%	0%	
Vegetation Clearance	20%	60%	20%	0%	0%	

1 - 9 of 9 items

Global Settings - Resource Allocations

- Team Member Function
- Rates
- Positions
- Component Summaries
- Cost Categories
- Cost Classifications
- Parts
- Cost Class Items
- Cost Types
- Cashflow Allocations
- Project Management & Oversight Resource Allocations**
- Indirect Costs
- Part Types
- Parts Component Units
- Risk Register
- Jurisdictions
- Regions
- Networks
- Substations
- Circuits
- Stage Duration Assumptions
- Traffic Control FTEs
- Construction Cost Multipliers
- Document Folder Management

Project Types: PSK405 + Add Project Type Delete Project Type



Resource allocation for project type PSK405

Position	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	# FTE	
Project Mgmt - PM	10%	20%	20%	5%	5%	1	
Project Mgmt - Construction Engineer	10%	25%	50%	5%	5%	1	
Design - Engineer	10%	10%	10%	0%	0%	1	
Project Mgmt - Planner/Scheduler	10%	10%	10%	0%	0%	1	
Project Mgmt - Ops Coord	10%	25%	50%	5%	5%	1	

1 - 5 of 5 items

Entergy Estimating Software Tool

BUILD THE DATA INTELLIGENCE/MODEL

POWER COMPASS  Admin Tools  mper103@entergy.com

Global Settings - Cost Types

- Team Member Function
- Rates
- Positions
- Component Summaries
- Cost Categories
- Cost Classifications
- Parts
- Cost Class Items
- Cost Types**
- Cashflow Allocations
- Project Management & Oversight Resource Allocations
- Indirect Costs
- Part Types
- Parts Component Units
- Risk Register
- Jurisdictions
- Regions
- Networks
- Substations
- Circuits
- Stage Duration Assumptions
- Traffic Control FTEs
- Construction Cost Multipliers
- Document Folder Management

Name Component Summary Cost Category

Filter Clear

+ Add

Name	Component Summary	Cost Category	Material Cost	Labor Cost	Cost Summary	Edit	Delete
3PH Lateral Tap	Lateral Tap Transfer	Install	\$770.99	\$3,476.37	\$4,247.36	Edit	Delete
3PH New Build OH A10	New Build OH (Miles)	Install	\$27,714.37	\$41,260.77	\$68,975.14	Edit	Delete
3PH New Build OH A477	New Build OH (Miles)	Install	\$46,930.83	\$49,677.63	\$96,608.46	Edit	Delete
3PH New Build OH A795	New Build OH (Miles)	Install	\$78,965.49	\$58,715.59	\$137,681.08	Edit	Delete
3PH New Build OH A795 No Poles	New Build OH (Miles)	Install	\$46,094.27	\$38,411.88	\$84,506.15	Edit	Delete
3PH New Build OH Vertical A10	New Build OH (Miles)	Install	\$28,819.53	\$40,863.56	\$69,683.10	Edit	Delete
3PH New Build UG 336 EQ	New Build UG (Miles)	Install	\$411,022.33	\$662,460.65	\$1,073,482.97	Edit	Delete
3PH New Build UG 795 EQ	New Build UG (Miles)	Install	\$724,974.03	\$1,382,329.85	\$2,107,303.88	Edit	Delete
3PH New Build UG A10 Lateral	New Build UG (Miles)	Install	\$91,460.72	\$421,920.36	\$513,381.08	Edit	Delete
3PH New Build UG A40 Lateral	New Build UG (Miles)	Install	\$104,782.58	\$436,027.83	\$540,810.41	Edit	Delete
3PH New Build UG Parallel A750U 336 EQ	New Build UG (Miles)	Install	\$442,156.23	\$1,333,378.35	\$1,775,534.58	Edit	Delete
3PH Step Down Transformer Install	Step Down Transformer	Install	\$19,129.93	\$7,746.75	\$26,876.68	Edit	Delete
3PH Trip Saver	Trip Saver	Install	\$18,544.74	\$2,559.35	\$21,104.09	Edit	Delete
Convert 3PH Shielded to 35kV Per Pole	Conversion	Install	\$216.36	\$727.03	\$943.39	Edit	Delete
Convert 3PH UnShielded to 35kV Per Pole	Conversion	Install	\$216.36	\$792.03	\$1,008.39	Edit	Delete

Entergy Estimating Software Tool



11- Overhead wire extension - Project Details

Scoping

Class Stage: Scoping

Project Type: Guild

Company: Entergy Arkansas

Region: Northeast (AR)

Network: Blytheville

Substation: ARMOREL

Circuit: 1001B

Project Segment: 1

Estimated Revision Date: 5/1/2021

Requested InService Date: 5/6/2022

Estimated InService Date: 2/5/2022

Estimated Start Date: 5/5/2021

Project Description

Format: [Rich Text Editor]

New additions to subdivision, Commercial plaza

Key Project Assumptions/Risks

low risk

Add Team Member

sabhadule@burnsmcd.com - Project Manager

bsuntosh@hotmail.com - Site Coordinator

CANCEL SAVE & QUIT NEXT

Stage 1

AC21-006B Build 336AI tie down Hwy 33 to N0103 - Jobs

Rev. 1

N0107_COORD1

N0107_Env1

N0107_N1

Map Callout: N0107_N 1 Substation: VIENNA Circuit: N0107

Details

N1: New build 2 mile of A336 3PH OH horizontal construction.
N2: New build 160 feet of A336 3PH OH horizontal construction.

Notes

Fuse switch called for 3 in excel tool. Should have been 1. Putting 3 here for consistency. See red "I" button above the cost type for more information.

Cost Type	Quantity	Make primary Cost Type
3PH New Build OH A477	0.030	<input type="radio"/>
Line Demolition OH 3PH	0.070	<input type="radio"/>
Fuse Switch Install	3.000	<input type="radio"/>
3PH New Build OH A477	0.200	<input checked="" type="radio"/>

Add Cost Type

ROW Voucher	Vegetation Voucher	Environmental Voucher	Miscellaneous Voucher
\$48,920.00	\$24,678.00		

Transmission Cost: [] Construction Cost Multiplier: 1 Traffic Control Multiplier: High

Entergy Estimating Software Tool

ESTIMATION

USER PORTAL

WIZARD DRIVEN ESTIMATION

VISIBILITY AND INSIGHTS
AT EACH STAGE AND STATUS

Stage 2

Cost Summary

Cost Category	2022 Total	2023 Total	2024 Total	Grand Total
Total Direct Estimate	\$62,868.70	\$1,735,603.76	\$1,368,917.37	\$3,167,389.83
Scope Uncertainty	\$0.00	\$624,088.86	\$326,128.10	\$950,216.96
Indirect Cost	\$25,876.00	\$859,751.00	\$256,434.00	\$1,142,061.00
Fully Loaded Cost	\$88,744.70	\$3,219,443.62	\$1,951,479.47	\$5,259,667.79


Construction MHRs: 12315.28

Cost Summary

Cost Summary	Distribution Direct Costs	Class 4 Estimates
Construction		\$1,738,032.25
Design		\$323,964.18
Materials & Supply		\$584,556.77
Project Management & Oversight		\$184,444.65
Vegetation Clearance		\$59,000.00
Environmental		\$81,000.00
ROW Inquiry/Acquisition		\$196,392.00
Other		\$0.00
Scope Uncertainty		\$950,216.96
Total Distribution Direct Costs		\$4,117,606.81
	Distribution Indirect Costs	
AFUDC		\$196,326.00
Allocation		\$0.00
Cap Suspende		\$766,038.00
Employee Benefits		(\$300.00)
M&S		\$62,219.00
Stock Options Loader		\$117,778.00
Total Distribution Indirect Costs		\$1,142,061.00
	Total Project Costs	
Fully Loaded Distribution Cost		\$5,259,667.81
Fully Loaded Distribution Related Transmission Costs		\$0.00
Fully Loaded Transmission Upgrade Costs		
Total Project Costs		\$5,259,667.81

Cashflows

Cost Type	Cashflow Allocation					
	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Grand Total
Construction	\$0.00	\$0.00	\$1,738,032.21	\$0.00	\$0.00	\$1,738,032.21
Design	\$32,396.40	\$291,567.76	\$0.00	\$0.00	\$0.00	\$323,964.16
Materials & Supply	\$0.00	\$0.00	\$584,556.81	\$0.00	\$0.00	\$584,556.81
Project Management & Oversight	\$18,444.45	\$55,333.37	\$92,222.31	\$9,222.23	\$9,222.23	\$184,444.59
Vegetation Clearance	\$0.00	\$35,399.98	\$23,600.01	\$0.00	\$0.00	\$58,999.99
Environmental	\$8,100.00	\$32,400.01	\$40,500.03	\$0.00	\$0.00	\$81,000.04

POWER COMPASS  entergy

Admin Tools | sbhadul@entergy.com

Reports

Project Name: Project Type: Jurisdiction: Region: Cost Class Item (s):

Year (s): Single year Range
 From: To:

Aggregate Cost
 Show go forward project only

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Project Type	Jurisdiction	Region	Project	Stage	Status	2023				2024			
						Construction	Design	Total Direct Cost	Total Overall Cost	Construction	Design	Total Direct Cost	Total Overall Cost
PSK405	Arkansas	Northeast (AR)	BV22-006V EAL Batesville Network Moorefield P485	Stage 1	Approved	\$518,900.82	\$146,916.60	\$1,597,961.34	\$2,077,349.76	\$691,867.76	\$0.00	\$1,430,028.18	\$1,859,036.62
PSK405	Arkansas	Northwest (AR)	RS22-002A	Stage 1	Approved	\$801,518.39	\$37,726.29	\$1,219,574.27	\$1,219,574.27	\$0.00	\$0.00	\$0.00	\$0.00
PSK405	Arkansas	Northeast (AR)	SR22-005A	Stage 1	Approved	\$454,389.35	\$39,464.39	\$972,585.91	\$1,264,361.68	\$0.00	\$0.00	\$0.00	\$0.00
PSK405	Arkansas	Southwest (AR)	MA22-001V	Stage 1	Approved	\$473,630.11	\$73,756.63	\$1,509,186.10	\$1,961,941.93	\$0.00	\$0.00	\$0.00	\$0.00
PSK405	Arkansas	Southwest (AR)	MA22-002V	Stage 1	Approved	\$646,291.90	\$48,108.30	\$1,706,117.56	\$2,217,952.82	\$0.00	\$0.00	\$0.00	\$0.00
PSK405	Arkansas	Northwest (AR)	HN22-004V_EAL_Harrison_Harrison West_S218	Stage 1	Approved	\$0.00	\$0.00	\$2,366.78	\$2,366.78	\$0.00	\$0.00	\$0.00	\$0.00

Total (Construction, Design) Estimate Spending: \$8,285,915.33

Entergy Estimating Software Tool

RESOURCE ALLOCATION

% OF RESOURCES
IN STAGES

CREWS/ FTES

EXTERNAL VS INTERNAL
RESOURCES

SCHEDULING

Stage Duration Details

Design

Construction

Construction - Stage 5 Start (custom)
2/5/2022

Estimated # of Construction Crews
1

Schedule Buffer
2

Distribution Feeder Work Start
5/5/2021

Distribution Feeder Work End
5/13/2021

Distribution Tie In Start
5/20/2021

Distribution Tie In End
5/18/2021

Substation In Service
6/5/2021

Notes

Schedule

Activity/Milestone	Start Date	Finish Date	Duration (months)
Stage 2 - Project Scope Refinement		5/2021	
Trans - Stage 3 - Project Planning		4/2022	
Dist - Stage 3 - Project Planning	5/2021	12/2021	7
Kickoff Meeting			
PEP Input/Schedule			
Full Funding Approval			
Acquired			
Stage 4 - Detailed Engineering & Design	12/2021	2/2022	2
Stage 5 - Construction	2/2022	4/2022	2
Distribution Feeder Work	5/2021	5/2021	
Substation In Service Date	5/2021	6/2021	
Distribution Tie In Complete	5/2021	5/2021	0
Construction In Service Date	4/2022	4/2022	1
Stage 6 - Operate/Produce	4/2022	5/2022	1
Stage 7 - Benefits	5/2022	6/2022	1
Realization/Closeout			
Project Total			13
Distribution Cashflow Total			13

CANCEL SAVE & QUIT BACK NEXT

11- Overhead wire extention - Resource Allocation

Scoping

Work Breakdown

Stage Duration Details

Design

Detailed Engineering & Design - Stage 4 Start (custom)
12/5/2021

Estimated # of Design FTES
2

ROW Schedule Buffer
2

Schedule Buffer
2

Notes

Construction

Schedule

Activity/Milestone	Start Date	Finish Date	Duration (months)
Stage 2 - Project Scope Refinement		5/2021	
Trans - Stage 3 - Project Planning		4/2022	
Dist - Stage 3 - Project Planning	5/2021	4/2022	7
Kickoff Meeting			
PEP Input/Schedule			
Full Funding Approval			
Acquired			
Stage 4 - Detailed Engineering & Design	12/2021	2/2022	2
Stage 5 - Construction	2/2022	4/2022	2
Distribution Feeder Work			
Substation In Service Date			
Distribution Tie In Complete			
Construction In Service Date	4/2022	4/2022	0
Stage 6 - Operate/Produce	4/2022	5/2022	1
Stage 7 - Benefits	5/2022	6/2022	1
Realization/Closeout			
Project Total			13
Distribution Cashflow Total			13

CANCEL SAVE & QUIT BACK NEXT

Entergy Estimating Software Tool

CASH FLOW

SPEND PER MONTH AND YEAR

SPEND PER PHASE/STAGE

PORTFOLIO SPEND FOR SPECIFIC TIME RANGE

Scoping

Planning

Cost Summary

Cashflows

Cost Type	Cashflow Allocation					Grand Total
	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	
Construction	\$75,866.63	\$379,333.28	\$6,827,998.86	\$75,866.65	\$227,599.96	\$7,586,665.38
Design	\$826,366.59	\$826,366.56	\$330,546.60	\$991,639.90	\$330,546.63	\$3,305,466.28
Materials & Supply	\$615,225.87	\$615,225.92	\$1,230,451.74	\$430,658.09	\$184,567.75	\$3,076,129.37
Project Management & Oversight	\$952.63	\$952.64	\$952.56	\$952.62	\$952.62	\$4,763.07
Scope Uncertainty	\$30,368.24	\$36,437.60	\$167,799.06	\$29,982.35	\$14,873.34	\$279,460.59
Indirect Cost	\$760.69	\$912.64	\$4,203.00	\$751.01	\$372.55	\$6,999.89
Fully Loaded Cost	\$1,549,540.65	\$1,859,228.64	\$8,561,951.82	\$1,529,850.62	\$758,912.85	\$14,259,484.58

Cost Category	2021 Total	2022 Total	2023 Total	2024 Total	Grand Total
Construction	\$99,574.96	\$587,966.57	\$3,485,124.42	\$3,413,999.43	\$7,586,665.38
Design	\$878,014.50	\$1,941,961.45	\$320,217.03	\$165,273.30	\$3,305,466.28
Materials & Supply	\$653,677.49	\$1,076,645.28	\$730,580.73	\$615,225.87	\$3,076,129.37
Project Management & Oversight	\$1,012.17	\$2,619.72	\$654.90	\$476.28	\$4,763.07
Scope Uncertainty	\$32,645.59	\$72,183.89	\$90,731.58	\$83,899.53	\$279,460.59
Indirect Cost	\$817.73	\$1,808.04	\$2,272.62	\$2,101.50	\$6,999.89
Fully Loaded Cost	\$1,665,742.44	\$3,683,184.95	\$4,629,581.28	\$4,280,975.91	\$14,259,484.58

Project Component Summary

- EXPORT TO EXCEL
- EXPORT PORTFOLIO VIEW
- VIEW PSP
- CANCEL
- SAVE & QUIT
- BACK
- SUBMIT

Next Steps...Roadmap

PowerCompass

- Streamline Stage 5 – Planning support
- Enhance PowerCompass to enable Stage 3 estimates – One Application
- Automate “Actuals” integration for full financial insights and analytics – lessons learned
- Drive estimates based on historical project data – AI

Stage gate journey

- T&D Partnership

Questions?