

Chapter Appendix: Documentation of Participation

Pemiscot-Dunklin Electric Cooperative

Hazard Mitigation Meeting #1

January 19, 2011

Printed Name

Signature

Michael W Dumez	Michael W Dumez
Tim Davis	Tim Davis
Coy DeFew	Coy DeFew
Scott Perry	Scott Perry
Steve Duke	Steve Duke

Pemiscot-Dunklin Electric Cooperative
Hazard Mitigation Meeting 1 Summary
1/19/2011

- I. Introductions: Tim Davis, CEO, Coy DePew, Supervisor
- II. PDEC business structure
 - a. Stakeholders – 8535 members in co-operative which is owned by the membership. Board of Directors comprised on 9 persons is the governing body. Policy is board approved and internally developed. Procedures are not board ratified. Company profile is available at www.pemdunk.com.
 - b. General customer information
 - i. Number of customers served – 8535
 - ii. Residential vs. Nonresidential customers 6998 and 1537
 - iii. Critical Facilities located within the service area: Critical facilities include public government facilities, schools, hospitals and other medical facilities, day care, major fuel pumping facilities, and electrical power facilities.
 - c. Average daily and annual usage/output: Average daily per customer: 59 kWh; Total Annual usage: 182,269,451 kWh
- III. Asset inventory [See worksheet](#)
 - a. General Information on:
 - i. Distribution facility
 - ii. Generation facility
 - iii. Substations
 - iv. Transmission Lines (miles)
 - v. Distribution Lines (miles)
 - vi. Office buildings
 - vii. Warehouses
 - viii. Vehicles
 - b. Information by county
 - i. Meters
 - ii. Poles
 - iii. Lines (Overhead and Underground in miles)
 - iv. Guys/Anchors
 - v. Cross-arms
 - vi. Replacement cost
- IV. Natural Hazards which can potentially impact PDEC – worksheet [See worksheet compilation](#)
- V. Previous damage estimates based on natural hazards
 - a.

Pemiscot-Dunklin Electric Cooperative

Hazard Mitigation Meeting #2

February 15, 2011

Printed Name

Signature

Michael W. Dumey	Michael W. Dumey
Tim Davis	Tim Davis
Coy DePew	Coy DePew
Scott Perry	Scott Perry
Steve Duke	Steve Duke

Pemiscot- Dunklin- Electric Cooperative Mitigation meeting summary
February 15, 2011

Current list of mitigation actions:

- Add lightning arresters
- Implement new electronic reclosures
- Add poles and line; Change poles as needed; Tighten hardware; Routine maintenance
- Annual inspections of lines and poles
- Vegetation management
- Add new and larger conductors
- Add guidewires (guys and anchors) to places where ground is soft or area is subject to high winds
- Convert overhead lines to underground lines or vice versa in troubled areas based on vulnerability
- Raise transformers to prevent flooding
- Replace cross-arms and shorten spans

Potential list of mitigation actions:

- All actions listed above
- Add alternate source wiring to reduce outage time
- Install new conductors and poles
- Upgrade to concrete or steel poles in some areas
- Waterproof meters @ Big Lake
- Raise transformers with pad mounts
- Install new electric reclosures and expand use of lightning arresters
- Implement IVR (integrated voice response?) system to improve outage reporting
- Increase holding of generators for use in critical assets.
- Improve outage management using GIS system
- GPS all infrastructure
- Cooperate with local law enforcement and government officials
- Partner with county emergency management to ensure power for local shelters, fuel stations, and public safety.
- Maintain mutual agreement with other state cooperatives.

Goals/Objectives/Actions:

Goal 1: Protect the health and safety of community

Objective 1: Prevent injury, loss of life, and damage to property.

Objective 2: Reduce outage time to critical facilities.

Goal 2: Reduce future losses due to Natural Hazard events.

Objective 1: Protect and maintain existing infrastructure.

Objective 2: Research and develop plans for future infrastructure improvements, seeking implementation where feasible.

Objective 3: Research and develop plans for future communication and data collection improvements, seeking implementation where feasible.

Goal 3: Improve emergency management capabilities and enhance local partnerships.

Objective 1: Improve assessment of outages and reduce response time.

Objective 2: Create or maintain partnerships with outside agencies.

Goal 4: Continue to promote public awareness and education.

Objective 1: Utilize media resources to promote public education.

Objective 2: Continue interaction with local schools and civic groups.

Actions:

- Provide safety and reporting information to the general public through the company's website or social media sites. (G1/O1; G4/O1)
- Provide safety and reporting information to the general public using local newspapers. (G1/O1; G4/O1)
- Provide safety information to local residents through presentations and publications. (G1/O1; G4/O2)
- Maintain mutual aid agreements with other rural electric cooperatives. (G3/O2)
- Partner with county emergency management to ensure power for local shelters, fuel stations, and public safety. (G1/O1; G3/O2)
- Cooperate with local law enforcement and government officials to reduce the impact of power outages. (G1/O1; G3/O2)
- Utilize GIS technology to reduce site identification and response time. (G2/O2; G2/O3; G3/O1)
- Consider implementation of automated voice response systems to improve outage reporting. (G1/O2; G3/O1)
- Collect GPS data for all existing infrastructure. (G2/O1; G2/O3; G3/O1)
- Convert overhead lines to underground lines or vice versa in troubled areas based on vulnerability. (G1/O1; G1/O2; G2/O1; G2/O2)
- Upgrade to concrete or steel poles where possible. (G1/O1; G1/O2; G2/O1; G2/O2)
- Research methods for waterproofing meters in flood-prone areas. G2/O2)
- Perform routine maintenance and utilize upgraded equipment where possible to ensure quality of system. Tasks may include part replacement and/or upgrades. Identified work includes:
 - Addition of lightning arresters, electronic reclosures, conductors, guidewires.
 - Replacement or repair on poles, cross-arms, lines.
 - Raising transformers with pad mounts in flood prone areas. (G1/O1; G2/O1)
- Use vegetation management to prevent interference with delivery of power. (G1/O1; G2/O1)
- Complete annual inspections of lines and poles. G1/O1; G2/O1)
- Increase number of generators owned for use in critical asset outages. (G1/O1; G1/O2; G2/O2)
- Add alternate source wiring to eliminate or reduce time of outages. (G1/O1; G1/O2; G2/O2)

Pemiscot-Dunklin Electric Cooperative

Hazard Mitigation Meeting #3

August 10, 2011

Printed Name

Signature

Tim Davis	Tim Davis
Coy DePew	Coy DePew
Scott Perry	Scott Perry
Michael Doney	Michael Doney

Pemiscot-Dunklin Meeting 3 Summary
August 10, 2011

Goals and Objectives:

Goal 1: Protect the health and safety of community

Objective 1: Prevent injury, loss of life, and damage to property.

Objective 2: Reduce outage time to critical facilities.

Goal 2: Reduce future losses due to Natural Hazard events.

Objective 1: Protect and maintain existing infrastructure.

Objective 2: Research and develop plans for future infrastructure improvements, seeking implementation where feasible.

Objective 3: Research and develop plans for future communication and data collection improvements, seeking implementation where feasible.

Goal 3: Improve emergency management capabilities and enhance local partnerships.

Objective 1: Improve assessment of outages and reduce response time.

Objective 2: Create or maintain partnerships with outside agencies.

Goal 4: Continue to promote public awareness and education.

Objective 1: Utilize media resources to promote public education.

Objective 2: Continue interaction with local schools and civic groups.

Method of prioritization:

Unlike a political or governmental entity, the prioritization process for an electric cooperative requires different considerations when assigning values to specific mitigation actions. Mitigation goals and objectives were identified by representatives of the electric cooperative using a simple criterion as the baseline: reducing the impact of power outages due to natural hazards. Each established goal and objective adheres to this criterion by addressing the most important aspects of impact reduction: protection of the local community and infrastructure.

Building from the goals and objectives, three mitigation action groups were identified:

- **Group A** - Ongoing mitigation actions,
- **Group B** - Pre-disaster planning and/or immediate response to natural hazard events, and
- **Group C** - Potential actions given additional funding.

Prudent business operations require a certain intrinsic amount of mitigation which occurs with regular frequency on a daily, weekly, monthly, and annual bases to reduce service interruptions. Group A includes actions which continue regardless of outside funding sources. Pre-disaster planning and/or immediate response to natural hazard events includes preventative actions as well as the establishment of working relationships with outside agencies to reduce the impact of natural hazard events. Group B includes public education campaigns and mutual aid agreements with outside agencies. Potential actions given additional funding help to identify areas of growth for the cooperative. Group C includes infrastructure and other system improvements as well as research into new technology. The chart below provides the actions selected for each mitigation group.

Pemiscot-Dunklin Electric Cooperative Mitigation Action Groups		
Group A Ongoing Mitigation Actions	Group B Pre-disaster planning and immediate response	Group C Potential Actions
Provide safety and reporting information to the general public through the company’s website or social media sites.	Maintain mutual aid agreements with other rural electric cooperatives.	Utilize GIS technology to reduce site identification and response time.
Provide safety and reporting information to the general public using local newspapers.	Partner with county emergency management to ensure power for local shelters, fuel stations, and public safety.	Consider implementation of automated voice response systems to improve outage reporting.
Provide safety information to local residents through presentations and publications.	Cooperate with local law enforcement and government officials to reduce the impact of power outages.	Collect GPS data for all existing infrastructure.
Perform routine maintenance and utilize upgraded equipment where possible to ensure quality of system. Tasks may include part replacement and/or upgrades. Identified work includes: <ul style="list-style-type: none"> • Addition of lightning arresters, electronic reclosures, conductors, guidewires. • Replacement or repair on poles, cross-arms, lines. • Raising padmount transformers in flood prone areas. 	Convert overhead lines to underground lines or vice versa in troubled areas based on vulnerability.	
Use vegetation management to prevent interference with delivery of power.		Upgrade to concrete or steel poles where possible.
Complete annual inspections of lines and poles.		Research methods for waterproofing meters in flood-prone areas.
		Increase number of generators owned for use in critical asset outages.
		Add alternate source wiring to eliminate or reduce time of outages.

In keeping with the original criterion of reducing the impact of power outages during natural hazard events, representatives from the cooperative discussed a number of methods that could be used to prioritize the identified actions. The traditional STAPLEE (Social, Technological, Administrative, Political, Legal, Economic, and Environmental) method does not support best practices or area-specific concerns which a cooperative must take into consideration. A funding-contingent method appeared too restrictive in developing potential future actions and was thus eliminated as well. As a group, the

committee decided to create a unique prioritization process which divided potential actions in all groups into three additional tiers:

- **Tier 1** – Physical infrastructure protection and/or improvement to reduce power outages.
- **Tier 2** – Creating and maintaining working relationships to reduce and prevent the impacts associated with power outages during a natural hazard event.
- **Tier 3** – Potential projects for other system improvements to reduce response time and prevent impacts associated with power outages.

Tier 1 projects are considered to be the most basic mitigation actions, and therefore the highest priority, which directly impact the potential threat of power outages. Without basic electric service, the second and third tier actions cannot be completed. Tier 2 projects focus on disaster planning, both internally and with outside agencies, to reduce the impact of natural hazard events. Tier 3 projects seek to identify and implement new technology and other types of system improvements. The chart below demonstrates the actions associated with each tier.

Pemiscot-Dunklin Electric Cooperative Mitigation Priority Tiers		
Tier 1 Physical infrastructure	Tier 2 Agency relationships and Pre-planning	Tier 3 Other system improvements
<p>Perform routine maintenance and utilize upgraded equipment where possible to ensure quality of system. Tasks may include part replacement and/or upgrades. Identified work includes:</p> <ul style="list-style-type: none"> • Addition of lightning arresters, electronic reclosures, conductors, guidewires. • Replacement or repair on poles, cross-arms, lines. • Raising padmount transformers in flood prone areas. 	<p>Provide safety and reporting information to the general public through the company’s website or social media sites.</p>	<p>Utilize GIS technology to reduce site identification and response time.</p>
<p>Use vegetation management to prevent interference with delivery of power.</p>	<p>Provide safety and reporting information to the general public using local newspapers.</p>	<p>Consider implementation of automated voice response systems to improve outage reporting.</p>
<p>Add alternate source wiring to eliminate or reduce time of outages.</p>	<p>Provide safety information to local residents through presentations and publications.</p>	<p>Collect GPS data for all existing infrastructure.</p>
<p>Complete annual inspections of lines and poles.</p>	<p>Maintain mutual aid agreements with other rural electric cooperatives.</p>	<p>Research methods for waterproofing meters in flood-prone areas.</p>
<p>Upgrade to concrete or steel poles where possible.</p>	<p>Partner with county emergency management to ensure power for local shelters, fuel stations, and public safety.</p>	
<p>Convert overhead lines to underground lines or vice versa in troubled areas based on vulnerability.</p>	<p>Cooperate with local law enforcement and government officials to reduce the impact of power outages.</p>	
	<p>Increase number of generators owned for use in critical asset outages.</p>	

Pemiscot-Dunklin Electric Cooperative Mitigation Actions Summary			
Action	Goal/Objective	Group	Tier
Perform routine maintenance and utilize upgraded equipment where possible to ensure quality of system. Tasks may include part replacement and/or upgrades. Identified work includes, but is not limited to: <ul style="list-style-type: none"> Addition of lightning arresters, electronic reclosures, conductors, guidewires. Replacement or repair on poles, cross-arms, lines. Raising padmount transformers in flood prone areas. 	G1/O1 G2/O2	A	1
Use vegetation management to prevent interference with delivery of power.	G1/O1 G2/O2	A	1
Add alternate source wiring to eliminate or reduce time of outages.	G1/O1; G1/O2; G2/O2	C	1
Complete annual inspections of lines and poles.	G1/O1; G1/O2	A	1
Upgrade to concrete or steel poles where possible.	G1/O1; G1/O2; G2/O1; G2/O2	C	1
Convert overhead lines to underground lines or vice versa in troubled areas based on vulnerability.	G1/O1; G1/O2; G2/O1; G2/O2	C	1
Provide safety and reporting information to the general public through the company's website or social media sites.	G1/O1; G4/O1	A	2
Provide safety and reporting information to the general public using local newspapers.	G1/O1; G4/O1	A	2
Provide safety information to local residents through presentations and publications.	G1/O1; G4/O2	A	2
Maintain mutual aid agreements with other rural electric cooperatives.	G3/O2	A	2
Partner with county emergency management to ensure power for local shelters, fuel stations, and public safety.	G1/O1; G1/O2; G3/O2	B	2
Cooperate with local law enforcement and government officials to reduce the impact of power outages.	G1/O1; G3/O2	B	2
Increase number of generators owned for use in critical asset outages.	G1/O1; G1/O2; G2/O2	C	2
Utilize GIS technology to reduce site identification and response time.	G1/O1; G2/O3; G3/O1	C	3
Consider implementation of automated voice response systems to improve outage reporting.	G1/O2; G3/O1	C	3
Collect GPS data for all existing infrastructure.	G2/O1; G2/O3; G3/O1	C	3
Research methods for waterproofing meters in flood-prone areas.	G2/O2	C	3

RE: Pemiscot-Dunklin Electric Cooperative Natural Hazard Mitigation Plan

Dear _____,

Since 1993, the State of Missouri has received thirty-two Presidential Declarations for disaster related assistance. This assistance, as set forth in the Stafford Act, is comprised of three basic programs: 1) individual assistance; 2) public assistance; and 3) Hazard Mitigation Grant Program (HGMP). This letter pertains to HGMP funding. Effective November 1, 2003, any county in Missouri that is declared a federal disaster area must have an approved Hazard Mitigation Plan in place to be eligible for HGMP funding. Hazard mitigation, as defined by the Federal Emergency Management Agency (FEMA), is *any action taken to eliminate or reduce the loss of life or property as the result of a disaster event*. HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters as well as provide a long term solution to a problem. Many types of projects can be funded through the Hazard Mitigation Grant Program including retrofitting structures and facilities to minimize damage from natural hazards (i.e. utility pole upgrades, burying electrical lines, etc.).

County governments have participated in this process since its inception. School districts were included as separate entities beginning in 2008. In 2010, the Association of Missouri Electric Cooperatives elected to create a statewide plan for all rural electric cooperatives (RECs). As a statewide plan, certain elements have been standardized, but each individual REC worked with the local regional planning commission to create their own mitigation strategies. With their participation, each REC is eligible to apply for HMGP funding towards potential mitigation projects. The Pemiscot-Dunklin Electric Cooperative has been actively working towards this goal with the Bootheel Regional Planning Commission since January 2011.

County-level plans require public involvement in this process. The REC plans require public involvement as well. As a local jurisdiction, critical facility, or business entity, Pemiscot-Dunklin Electric Cooperative invites you to provide comments and input on their portion of the statewide plan. Copies of their local chapter may be accessed through their website (www.pemdunk.com) or at their Hayti office. Additionally, a copy may be secured by email request to Michael Dumey at the Bootheel Regional Planning Commission (mdumey@newwavecomm.net). If you have comments or concerns related to the plan, you may return the attached comments sheet or email Mr. Dumey at the address above. The deadline for comment is January 31, 2011.

Thank you for your consideration in this matter. If you have any further questions, please do not hesitate to contact us directly using the information below.

Sincerely,

Michael W. Dumey
Regional Planner
Bootheel Regional Planning Commission
Email: mdumey@newwavecomm.net

****News Release******Pemiscot-Dunklin Electric Cooperative Develops Local
Mitigation Plan**

Since 1993, the State of Missouri has received 32 Presidential Declarations for disaster related assistance. This assistance, as set forth in the Stafford Act, is comprised of three basic programs: 1) individual assistance; 2) public assistance; 3) Hazard Mitigation Grant Program (HMGP). Effective November 1, 2003, any county in Missouri that is declared a federal disaster area must have an approved Hazard Mitigation Plan in place to be eligible for HMGP funding. Hazard mitigation, as defined by the Federal Emergency Management Agency (FEMA), is any action taken to eliminate or reduce the loss of life or property as the result of a disaster event. HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters as well as provide long term solution to a problem. Many types of projects can be funded through the Hazard Mitigation Grant Program including retrofitting structures and facilities to minimize damage from natural hazards (i.e. utility pole upgrades, burying electrical lines etc.)

County governments have participated in this process since its inception. School districts were included as separated entities beginning in 2008. In 2010, the Association of Missouri Electric Cooperatives elected to create a statewide plan for all rural electric cooperatives (RECs). As a statewide plan, certain elements have been standardized, but each individual REC worked with the local regional planning commissions to create their own mitigation strategies. With their participation, each REC is eligible to apply for HMGP funding toward potential mitigation projects. Pemiscot-Dunklin Electric Cooperative has been actively working towards this goal with the Bootheel Regional Planning Commission since January, 2011.

Like county-level plans, the REC plans require the opportunity for public involvement in the development and review of their plan. Pemiscot-Dunklin Electric Cooperative invites you to provide comments and input on their portion of the statewide plan. Copies of their local chapter may be accessed through their website at www.pemdunk.com. The deadline for receipt of public comments is January 31, 2012. All comments may be returned by mail to BRPC, 105 E. North Main, Dexter, Mo. 63841 or by e-mail to mdumey@newwavecomm.net.