



FECA

Florida Electric Cooperatives Association, Inc.

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-VIA ELECTRONIC FILING-

January 17, 2018

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

RE: Docket No.: 20170215-EU In re: Review of electric utility hurricane preparedness and restoration actions.

Dear Ms. Stauffer:

Enclosed please find Florida Electric Cooperatives Association's (FECA) responses to Staff's Second Data Request in the above referenced docket. Please note that pursuant to discussions and agreements with PSC staff, FECA is filing these responses on behalf of the following FECA members: Central Florida Electric Cooperative, CHELCO, Clay Electric Cooperative, Escambia River Electric Cooperative, Florida Keys Electric Cooperative Association, Glades Electric Cooperative, Peace River Electric Cooperative, Sumter Electric Cooperative, Suwannee Valley Electric Cooperative, Talquin Electric Cooperative, Tri-County Electric Cooperative, West Florida Electric Cooperative, and Withlacoochee River Electric Cooperative.

FECA's filing includes general answers to the first four questions on the data request as well as a general answer to Questions 5 -11. PSC staff has agreed to accept these general answers as compliance with the data request. In addition, FECA has attached a spreadsheet with additional information requested by PSC staff for the above FECA member-cooperatives. Further, FECA has attached a sheet providing more detailed information from Clay Electric Cooperative, Sumter

Electric Cooperative and Suwannee Valley Electric Cooperative that was too large to include on the spreadsheet.

If you should have any questions regarding this transmittal, please contact me at (850) 877-6166, ext. 3.

Sincerely,

/s/ Michelle Hershel

Michelle Hershel

Director of Regulatory Affairs

Florida Electric Cooperatives Association

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Enclosures

Coop	Please provide your OH/UGD ratio of your whole system _____	Do you perform a forensic review after a hurricane? ___yes, ___no	Please provide any specifics on tree trimming (with local govts):	Please provide details on any problems related to customer-owned generation during the hurricanes:
	2017 - 7.1% UGD 2016 - 7.0% UGD 2015 - 6.2% UGD 2014 - 6.4% UGD 2013 - 6.3% UGD 2012 - 6.0% UGD 2011 - 5.9% UGD 2010 - 5.7% UGD 2009 - 5.6% UGD 2008 - 5.5% UGD 2007 - 5.2% UGD 2006 - 4.8% UGD 2005 - 4.4% UGD 2004 - 4.0% UGD 2003 - 3.6% UGD 2002 - 3.3% UGD 2001 - 3.0% UGD 2000 - 2.8% UGD	No	Central Florida Electric Cooperative, Inc. (CFEC) is currently on a 5-year right-of-way vegetation cycle plan and starting in 2018 will move towards a 4-year cycle. Trees are trimmed or removed within 15 feet of all OH primary pole lines and guys. Dead trees, which could fall on the line from outside of our easements, are downed. Vines are removed from poles, guys and lines.	There were no known problems.
CHELCO	3 to 1	Yes	Over the past 6 years CHELCO has aggressively worked to remove problem trees within the easements and any off right of way dead	No Issues.
Clay EC	10,195.8 Miles/2,835 .2 Miles = 3.60 (Does not include 216.6 miles of OH transmission line.)	No	See Attached sheet	No Known Problems
EREC	21.09	No	EREC maintains all of our own right-of-ways without the help of local governing bodies.	EREC did not have any problems with its customer-owned generation for the hurricanes due to the hurricanes having minimal impact.

FKEC	70% OH/30% UG	No	FKEC inspects and trims, where necessary, the entire transmission system on an annual basis. Substations are inspected annually and trimmed when vegetation FKEC is not aware of encroaches. The remainder any specific problems of FKEC's distribution system related to customer is trimmed on a three-year owned generation. cycle. A formal trade-a-tree program was implemented in 2007 to help with the removal of problem trees located within the right of way.	
Glades EC		20:01 No	GEC is on a 4 year trim cycle. Notifies public through social media	None to our knowledge
GCEC	already filed their response			
Okefenoke	already filed their response			
PRECO	76% OH/24% UGD	No	Peace River Electric has an effective tree trimming program. As a company, we coordinate with our state/local governments when using their Right-of-ways. In addition, we will coordinate any tree removal that is done.	None to our knowledge

SECO	SECO Energy's OH/UG ratio of our whole system is 56/44 *more details available if needed	Yes, SECO Energy performs a forensic review after a hurricane if it is warranted. Of the 137,328 distribution poles on our system, SECO Energy experienced 10 poles down during Hurricane Hermine, 18 poles down during Hurricane Matthew, and 352 poles down during Hurricane Irma. These poles represent less than one (1) percent of SECO	*See Attached Sheet	During Hurricane Irma, the 2.0 MW solar farm at the Coleman Federal Correctional Institution failed due to structural damage and has remained offline ever since. Currently, there is no estimated time frame for when the system will be brought back online.
SVEC	2016 - 8.08% *see more details on attached sheet	No	SVEC doesn't interact with local governments regarding tree trimming. SVEC has a ROW plan, works the plan and reviews the plan on a quarterly basis.	None to our knowledge
Talquin EC	86% OH/UGD	No	Talquin Electric Cooperative has two right of way contractors on our system responsible for all regularly scheduled maintenance and member requested maintenance on our system. We have line construction personnel assigned to work directly with the county right of way crews to expedite road clearing following a significant storm event. We assign two employees to the county EOC's in our service area upon activation of each EOC	Talquin Electric Cooperative did not encounter any problems with customer – owned generation during Hurricane Hermine or Hurricane Irma.

TCEC	92% OH and 8% UG		<p>Yes, The broken poles replaced during the recent hurricanes failed due to trees on the line. Broken pole locations are evaluated to confirm the infrastructure is designed and installed to meet service requirements and in accordance with RUS guidelines.</p> <p>The Cooperative maintain a five-year side trimming cycle throughout the service territory. We also retain in-house right of way personnel to remove danger/dead trees. We maintain a good relationship with the local road departments to remove dead/danger trees that will eventually damage power lines and/or fall across roads.</p>	No problems with customer-owned generation
WFEC	5.2% (250 miles) of West Florida's 4816 miles of distribution lines are underground	Yes	<p>West Florida Electric is on a four to five year rotation cycle on its tree trimming program. West Florida Electric also has hot spotting crew contracted year round for danger trees.</p> <p>A professional Arbor Company has been hired to evaluate the Cooperatives Rights of Way, and to supervise the reclaiming of Rights of Way. Additional tree trimming companies has been hired to cut trees in in the right away. The Cooperative expects to spend 18 million dollars in this effort in 2018.</p>	None.
WREC	65.1 Over Head 34.9 L	Yes		There were no problems



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Additional Information for Clay Electric Cooperative, Sumter Electric Cooperative and Suwannee Valley Electric Cooperative:

Clay Electric Cooperatives' Response to Question 3 – Vegetation Management/Tree Trimming:

Vegetation Management Transmission:

- a.) Clay's vegetation management program for the transmission rights-of-way consists of mowing, herbicide spraying, and systematic recutting. Clay performs all three methods on its entire transmission system. While Clay is doing systematic recutting on our transmission corridor, they attempt to remove any danger trees off right-of-way.

Clay's systematic program for mowing and spraying is on a 3-year cycle while Clay's systematic recutting program is on a 3, 4, or 5-year cycle as needed.

Distribution:

- a.) Clay owns and operates over 7,800 miles of overhead primary distribution lines. All of our primary lines are under our Vegetation Management Program. Clay's Vegetation Management Program has been developed taking into account the widely different service areas Clay serves. Presently, Clay's Vegetation Management Program consists of a 3-year cycle (city), a 4-year cycle (urban), and a 5-year cycle (rural) for all its distribution primary circuits. The average time for the three cycles is 4.6 years. The reason for the difference in cycle times is simply the difference between regrowth speed and trimming clearance. In the city areas, Clay often cannot get the full 10'-12' clearance Clay desires, plus these areas often have more water and fertilizers due to residential sprinkling and fertilizing. At the other

extreme in rural areas, Clay can often get the full 10'-12' clearance plus much of the trees in these areas get only rain and not fertilizer. Every distribution primary feeder Clay has is assigned to one of these cycles and a schedule is developed to ensure completion of the cycle. Annually after a feeder is recut, Clay's arborist evaluates the clearance obtained and the expected re-growth speed to establish the cycle for the next recut. The next recut could be 3, 4, or 5 years. Therefore, each year Clay's arborist evaluates a feeder's cycle and adjusts the cycle as needed to ensure safe and reliable operations of Clay's feeders.

Clay's Vegetation Management Program is a clear cut right-of-way maintenance program combined with mowing and spraying to provide a safe and reliable distribution system. Clay has approximately 1% of its feeder miles under a 3-year cycle, 33% under a 4-year cycle, and the remaining 66% is under a 5-year cycle. Clay has a Pre-Cycle Vegetation Maintenance Program consisting of annual inspections of all the distribution feeders for areas that may have the potential to cause an outage before the next cycle year. If Clay finds areas that need to be trimmed to carry the feeder to the next year, these areas will be trimmed on the Pre-Cycle Maintenance Program. Clay's Dead/Danger Tree Removal Program is with annual inspections of the Pre-Cycle Maintenance Program. Clay also received requests from members throughout the year for removal of dangerous trees. All of these are field inspected by Clay and action taken as required. Clay also has a Systematic Vegetation Management Mowing and Herbicide Spraying Program of 3-year cycles each. Clay's Vegetation Management Program addresses all areas of vegetation from landscape planting to danger tree removal. Clay has been following this program diligently for many years now. While tree limbs are still one of Clay's largest outage causes, Clay is confident its Vegetation Management Program is an effective way to provide for a safe and reliable distribution system. Clay strongly feels the 3, 4, or 5 year cycle they have developed and follow is a realistic program to implement. Reducing the cycle times in Clay's opinion without regard to clearance and re-growth would not result in a significantly safer or reliable distribution system.

Sumter Electric Cooperative's Response to Question 3 - Vegetation Management/Tree Trimming:

As referenced in our 2016 annual report submitted to the FPSC, SECO Energy has practiced the following Vegetation Management program guidelines since 2006:

Trimming Clearances: SECO Energy utilizes a 15-foot minimum clearance trimming standard in order to maintain a three-year trim cycle. Slow-growth species and ornamentals encountered in residential landscaped areas are trimmed to no less than 10 feet.

Pruning Practices: SECO Energy requires all Vegetation Management contractors to follow the ANSI-A 300 industry standards, utilizing directional pruning methods as often as practical. Adherence to these standards allows trees to remain healthy after pruning, while reducing regrowth and crown failures that can cause storm-related reliability issues.

New Construction / System Upgrade Trimming: SECO Energy maintains a "Ground-to-Sky" trimming policy for all circuits that are newly constructed or significantly upgraded. These circuits are trimmed to a 15-foot clearance with all underbrush being removed.

Work Planning: SECO Energy uses Utility Arborist Resource Group, Inc. (ACRT) to perform all work planning and customer notification. Once ACRT provides the completed work plans, SECO Energy then issues them to a single-source contractor, Nelson Tree Service (NTS), to complete the trimming.

Unit Price Contracting: NTS is compensated on a per-unit basis to perform all overhead line clearance work on the SECO Energy's system. This allows SECO Energy to accurately track the type of work being performed.

Vegetation Removal: Since implementing the FPSC-recommended trimming cycle in 2006, SECO Energy has removed 257,097 trees from distribution circuit easements and road right-of-ways. In 2016, NTS addressed line-clearance issues on 91,161 trees. SECO Energy removes all tall-growing brush underneath its conductors, preventing future tree growth and providing better access for restoration crews during major storm events.

Circuit Prioritization: SECO Energy's Vegetation Management staff determined the order of cut for 2016 by utilizing four weighted factors: • Pole Inspection Cycle • Last date trimmed • Number of members served by each circuit • Total tree-related outages on each circuit

SECO Energy coordinates its vegetation management program with the pole inspection program. Using this methodology, the overall reliability of the circuits are improved and the impact to the customer is minimized since both the pole inspections and replacements are performed within the same 12-month period as the tree trimming.

Herbicide Program: SECO Energy utilizes EDKO, LLC as its herbicide applicator for all substations and NaturChem, Inc. to treat brush units in areas trimmed by NTS in 2015 and part of 2016 (in accordance with all local, state, and federal regulations).

Tree Replacement Program: SECO Energy's tree replacement program provides "utility friendly" trees to customers who allow for the removal of vegetation growing in close proximity to its conductors. During 2016, SECO Energy purchased 195 trees for members in exchange for these strategic removals.

Tree Planting Guidelines: Proper tree selection and planting guidelines are provided to members of the public through SECO Energy's website, newsletters, and public events. In 2016, SECO Energy was awarded the National Arbor Day Foundation's prestigious "Tree Line USA" designation for the tenth consecutive year.

Danger Tree Removal / Hazard Mitigation: In 2016, SECO Energy trimmed or removed 2,721 trees located adjacent to road right-of-ways and easements that posed an imminent threat to system reliability. ACRT arborists and SECO Energy line inspection personnel identified dead, leaning, or diseased trees with the potential to fall on distribution facilities throughout SECO Energy's service territories. Once located, these defective trees were removed by NTS trimming crews within 30 days.

Suwannee Valley Electric Cooperative Response to Question 1 – Ratio OH/UGD:

	OH	URD	Total	% of Total	OH Growth	URD Growth
2006	3794.4	229.08	4023.48	5.69%		
2007	3825.87	246.62	4072.49	6.06%	0.83%	7.66%
2008	3838.49	260.1	4098.59	6.35%	0.33%	5.47%
2009	3856.67	265.46	4122.13	6.44%	0.47%	2.06%
2010	3877.15	274.87	4152.02	6.62%	0.53%	3.54%
2011	3892.03	282.5	4174.53	6.77%	0.38%	2.78%
2012	3922.65	292.5	4215.15	6.94%	0.79%	3.54%
2013	3958.46	307.01	4265.47	7.20%	0.91%	4.96%
2014	4011.91	321.74	4333.65	7.42%	1.35%	4.80%
2015	4040.66	343.9	4384.56	7.84%	0.72%	6.89%
2016	4059.48	357.04	4416.52	8.08%	0.47%	3.82%