



March 1, 2024

E-PORTAL FILING

Mr. Adam Teitzman, Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: 20240000-OT – Undocketed Filings for 2024.

Dear Mr. Teitzman:

Attached for filing on behalf of Florida Public Utilities Company, please find the Company's 2024 Distribution Reliability Report for the prior period 2023.

As always, please don't hesitate to let me know if you have any questions. Thank you for your assistance with this filing.

Kind regards,

Gunster, Yoakley & Stewart, P.A.
215 South Monroe St., Suite 601
Tallahassee, FL 32301
(850) 521-1706

cc:/ Tom Ballinger
Penelope Buys



**P.O. Box 418
Fernandina Beach
FL 32035-0418
Phone: 904/261-3663
Fax: 904/261-3666
www.fpuc.com**

March 1, 2024

Mr. Thomas Ballinger, Director
Division of Engineering
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0868

Dear Mr. Ballinger:

Attached is Florida Public Utilities Company's required 2023 Annual Update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455. This report only includes section 1.

The Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Protection Plan (SPP) and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781 will be submitted on June 1, 2024.

If you have any questions, please call (904) 530-7052 or e-mail mcassel@chpk.com.

Sincerely,

A handwritten signature in blue ink that reads "Michael Cassel".

Michael Cassel
Vice President, Governmental and Regulatory Affairs
Florida Public Utilities Company

Attachments

Cc: Commission Clerk
Jeff Sylvester
Martin Cheryl
William Haffecke
Kevin Walz
Mark Cutshaw
Jorge Puentes

Florida Public Utilities Company

Reliability Indices Report (Section I)

2023 Annual Update

March 1, 2024



Florida Public Utilities Company

Reliability Indices

Annual Update

Table of Contents

Introduction

I. Reliability Indices

Introduction

This is the FPUC's annual update. The update includes the Annual Distribution Service Reliability Report required by Rule 25-6.0455. However, this year, the report will initially only include section I. The Annual Wood Pole Inspection Report required by Order No. PSC-06-0144, and updates of our Storm Protection Plan (SPP) and Ten Storm Preparedness Initiatives, as required by Order No. PSC-06-0781 will be submitted in June 1, 2024. The update has been traditionally divided into four primary sections: I. Reliability Indices; II. Wood Pole Inspections; III. Storm Hardening; and, IV. Storm Preparedness Initiatives. FPUC report forms, research reports, contractor reports, and other available supplemental supporting documentation are incorporated into the appropriate sections of the update. FPSC reliability index report forms have been updated and are also included.

FPUC has two electric divisions, Northwest (NW) Division, also referred to as Marianna, and Northeast (NE) Division, and also referred to as Fernandina Beach. In some cases, each division's results are reported separately. For example, NW has no transmission facilities. Therefore, only NE will be reporting on Storm Preparedness Initiatives #3 (Six Year Transmission Structure Inspections) and #4 (Storm Hardening of Existing Transmission Structures). Also, the two divisions are approximately 250 miles apart and, although they may supply resources to support one another during emergency situations, each division will prepare separate emergency response plans to address Initiative #10 (Natural Disaster Preparedness and Recovery Program). In other cases, consolidated reports or a combination of individual and consolidated reports provide a more complete overview and reports are prepared accordingly.

I. Reliability Indices

This section contains the FPUC Annual Distribution Service Reliability Report required by Florida Public Service Commission (FPSC) Rule 25-6.0455.

In addition to the supporting data provided by FPUC for clarification, the report was prepared using the forms developed by FPSC. Indices are reported on an *actual* and *adjusted* basis, as follows:

- a. Total number of Outage Events (N), categorized by cause for the highest ten causes.
- b. Identification of three percent (3%) of Primary Circuits (feeders) with the highest number of feeder breaker interruptions.
- c. SAIDI, CAIDI, SAIFI, and L-Bar reliability indices for each division and by company total*.

Indices are calculated as follows:

$$\text{SAIDI} = \text{System Average Interruption Duration Index} = \frac{\text{Total Customer Minutes of Interruption (CMI)}}{\text{Total Number of Customers Served (C)}}$$

$$\text{CAIDI} = \text{Customer Average Interruption Duration Index} = \frac{\text{Total Customer Minutes of Interruption (CMI)}}{\text{Total Number of Customer Interruptions (CI)}}$$

$$\text{SAIFI} = \text{System Average Interruption Frequency Index} = \frac{\text{Total Number of Customer Interruptions (CI)}}{\text{Total Number of Customers Served (C)}}$$

$$\text{L-Bar} = \text{Average Duration of Outage Events} = \frac{\text{Sum of All Outage Event Durations (L)}}{\text{Total Number of Outage Events (N)}}$$

* The FPUC total electric retail customer count is well below 50,000. Per Rule 25-6.0455, (3) (c), MAIFIe and CEMI5 indices are not applicable (N/A) and not reported at this time.

Forms reporting *actual* data include all outage events. Forms reporting *adjusted* data exclude outage events directly caused by one or more of the following, if applicable:

- a. Planned Service Interruptions;
- b. A storm named by the National Hurricane Center;
- c. A tornado recorded by the National Weather Service;
- d. Ice on lines;
- e. A planned load management event;
- f. Electric generation or transmission events not governed by subsections 25-6.018 (2) and (3);
- g. Extreme weather or fire events causing activation of the county emergency operation center.

Definitions from Rule 25-6.044 'Continuity of Service' are provided below for clarification:

- a. **“Area of Service.”** A geographic area where a utility provides retail electric service. An Area of Service can be the entire system, a district, or a sub-region of the utility’s system in which centralized distribution service functions are carried out.
- b. **“Average Duration of Outage Events (L-Bar).”** The sum of each Outage Event Duration (L) for all Outage Events occurring during a given time period, divided by the Number of Outage Events (N) over the same time period within a specific Area of Service.
- c. **“Customer Average Interruption Duration Index (CAIDI).”** The average time to restore service to interrupted retail customers within a specified Area of Service over a given period of time. It is determined by dividing the sum of Customer Minutes of Interruption (CMI) by the total number of Service (aka Customer) Interruptions (CI) for the respective Area of Service.
- d. N/A (CEMI5).
- e. **“Customer Minutes of Interruption (CMI)”**. For a given Outage Event, CMI is the sum of each affected retail customer’s Service Interruption Duration.
- f. thru h. N/A (MAIFIE)
- i. **“Number of Customers Served (C).”** The sum of all retail customers on the last day of a given time period within a specific Area of Service.
- j. **“Number of Outage Events (N).”** The sum of Outage Events for an Area of Service over a specified period of time.
- k. **“Outage Event.”** An occurrence that results in one or more individual retail customer Service Interruptions.
- l. **“Outage Event Duration (L).”** The time interval, in minutes, between the time a utility first becomes aware of an Outage Event and the time of restoration of service to the last retail customer affected by that Outage Event.
- m. **“Service Interruption.”** The complete loss of voltage of at least one minute to a retail customer. (CI for one customer).
- n. **“Service Interruption Duration.”** The time interval, in minutes, between the time a utility first becomes aware of a Service Interruption and the time of restoration of service to that retail customer. (CMI for one customer).
- o. **“System Average Interruption Duration Index (SAIDI).”** The average minutes of Service Interruption Duration per retail customer served within a specified Area of Service over a given period of time. It is determined by dividing the total Customer Minutes of Interruption (CMI) by the total Number of Customers Served (C) for the respective Area of Service.
- p. **“System Average Interruption Frequency Index (SAIFI).”** The average number of Service Interruptions per retail customer within a specified Area of Service over a given period of time. It is determined by dividing the sum of Service (aka Customer) Interruptions (CI) by the total Number of Customers Served (C) for the respective Area of Service.
- q. **“Planned Service Interruption.”** A Service Interruption initiated by the utility to perform necessary scheduled activities, such as maintenance, infrastructure improvements, and new construction due to customer growth.

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

PART I

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: Florida Public Utilities Company- NE Division			Year: 2023
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Unknown	112	108.03	160.87
Vegetation	67	103.92	109.88
Animal	60	72.53	96.07
Defective Equipment	57	116.09	139.10
Lightning	22	117.82	193.47
Named Storm	20	53.01	78.49
Other Weather	18	122.04	111.83
Other	17	107.81	88.69
Planned Outage	8	96.45	100.72
Transmission	7	1,195.76	144.38
Vehicle	6	133.61	135.57
System Totals NE	394	120.96	123.73

PSC/ECR 102-1(a) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED**

PART I

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: Florida Public Utilities Company- NE Division			Year: 2023
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Unknown	112	108.03	160.87
Vegetation	67	103.92	109.88
Animal	60	72.53	96.07
Defective Equipment	57	116.09	139.10
Lightning	22	117.82	193.47
Other Weather	18	122.04	111.83
Other	17	107.81	88.69
Vehicle	6	133.61	135.57
System Totals NE	359	104.33	134.38

PSC/ECR 102-1(b) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

PART I

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: Florida Public Utilities Company- NW Division			Year: 2023
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	357	123.50	124.67
Animal	232	52.15	63.09
Unknown	174	69.73	64.12
Lightning	166	104.99	111.39
Other Weather	46	149.66	136.23
Other	41	126.47	118.93
Defective Equipment	35	94.76	63.30
Planned Outage	30	99.18	61.01
Vehicle	29	115.06	101.08
Named Storm	2	43.02	43.93
Transmission	1	164.92	164.92
Substation	1	70.07	70.07
System Totals: NW	1,114	96.74	104.98

PSC/ECR 102-1(a) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED**

PART I

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: Florida Public Utilities Company – NW Division			Year: 2023
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	357	123.50	124.67
Animal	232	52.15	63.09
Unknown	174	69.73	64.12
Lightning	166	104.99	111.39
Other Weather	46	149.66	136.23
Other	41	126.47	118.93
Defective Equipment	35	94.76	63.30
Vehicle	29	115.06	101.08
System Totals: NW	1,080	96.73	106.92

PSC/ECR 102-1(b) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ACTUAL**

PART I

<u>CAUSES OF OUTAGE EVENTS – ACTUAL</u>			
Utility Name: Florida Public Utilities Company- FPUC Total			Year: 2023
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	424	120.41	121.46
Animal	292	56.34	70.02
Unknown	286	84.73	104.26
Lightning	188	106.49	140.08
Defective Equipment	92	107.97	103.32
Other Weather	64	141.89	118.85
Other	58	121.00	110.91
Planned Outage	38	98.60	95.75
Vehicle	35	118.24	121.25
Named Storm	22	52.10	78.44
Transmission	8	1,066.90	146.15
Substation	1	70.07	70.07
System Totals FPUC	1,508	103.07	116.54

PSC/ECR 102-1(a) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

**FLORIDA PUBLIC SERVICE COMMISSION
ANNUAL DISTRIBUTION SERVICE RELIABILITY REPORT – ADJUSTED**

PART I

<u>CAUSES OF OUTAGE EVENTS – ADJUSTED</u>			
Utility Name: <u>Florida Public Utilities Company- FPUC Total</u>			Year: <u>2023</u>
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
Vegetation	424	120.41	121.46
Animal	292	56.34	70.02
Unknown	286	84.73	104.26
Lightning	188	106.49	140.08
Defective Equipment	92	107.97	103.32
Other Weather	64	141.89	118.85
Other	58	121.00	110.91
Vehicle	35	118.24	121.25
System Totals FPUC	1,439	98.63	116.92

PSC/ECR 102-1(b) (8/06)
Incorporated by reference in Rule 25-6.0455,
Florida Administrative Code

PART II

<u>THREE PERCENT FEEDER LIST – ACTUAL</u>													
Utility Name: <u>Florida Public Utilities Company</u>											Year: <u>2023</u>		
Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events “N” (i)	Average Duration “L-Bar” (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
215	JLT	Northeast	1229	102	0	0	1331	4	110.14	110.14	NO	0	N/A
9512	Marianna	Northwest	422	174	0	0	596	4	74.09	73.96	NO	0	N/A

PSC/ECR 102-2(a) (8/06)
 Incorporated by reference in Rule 25-6.0455,
 Florida Administrative Code

PART II

<u>THREE PERCENT FEEDER LIST – ADJUSTED</u>													
Utility Name: <u>Florida Public Utilities Company</u>											Year: <u>2023</u>		
Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events “N” (i)	Average Duration “L-Bar” (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
215	JLT	Northeast	1229	102	0	0	1331	4	110.14	110.14	NO	1	N/A
9512	Marianna	Northwest	422	174	0	0	596	4	74.09	73.96	NO	1	N/A

PSC/ECR 102-2(b) (8/06)
 Incorporated by reference in Rule 25-6.0455,
 Florida Administrative Code

PART III

<u>SYSTEM RELIABILITY INDICES – ACTUAL</u>					
Utility Name: <u>Florida Public Utilities Company</u>			Year: <u>2023</u>		
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFle (e)	CEMI5 (f)
NE Division	352.73	123.73	2.85	N/A*	N/A*
NW Division	260.16	104.98	2.48	N/A*	N/A*
System Averages	314.09	116.54	2.70	N/A*	N/A*

* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3) (c)

PSC/ECR 102-3(a) (8/06)
 Incorporated by reference in Rule 25-6.0455,
 Florida Administrative Code

PART III

<u>SYSTEM RELIABILITY INDICES – ADJUSTED</u>					
Utility Name: <u>Florida Public Utilities Company</u>			Year: <u>2023</u>		
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFle (e)	CEMI5 (f)
NE Division	115.43	134.38	0.86	N/A*	N/A*
NW Division	223.73	106.92	2.09	N/A*	N/A*
System Averages	160.63	116.92	1.37	N/A*	N/A*

* Total # of Electric Retail Customers is well below 50,000. N/A by Rule 25-6.0455 (3) (c)

PSC/ECR 102-3(b) (8/06)
 Incorporated by reference in Rule 25-6.0455,
 Florida Administrative Code

2023 - Reliability Indicators By Feeder FPUC – NE (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
AIP (315)	3	161.95	161.96	2,657,600	16,409	486		
AMELIA ISLAND PARKWAY (312)	15	113.09	64.17	13,412	209	1,696		
BAILEY (311)	43	94.86	68.89	45,952	667	4,079		
BONNIEVIEW (310)	47	88.75	141.54	233,820	1,652	4,171		
CLINCH DRIVE (214)	32	110.37	149.26	146,271	980	3,532		
COAST CHIPS	4	1,987.25	1,987.25	7,949	4	7,949		
ELEVEN STREET (212)	46	113.22	155.01	46,812	302	5,208		
FIFTEENTH STREET (209)	20	111.20	120.99	19,116	158	2,224		
JASMINE STREET (211)	57	93.37	90.03	63,924	710	5,322		
JLT (313)	1	28.10	28.10	193,356	6,881	28		
NECTARINE (210)	14	107.15	106.26	32,729	308	1,500		
PARKWAY SOUTH (104)	6	150.32	197.66	214,658	1,086	902		
PLANTATION FIELDSIDE (111)	22	91.19	81.56	140,930	1,728	2,006		
PLANTATION ROADSIDE (110)	9	192.73	150.41	5,264	35	1,735		
SADLER NECTARINE SO.14TH (215)	16	83.72	110.06	604,237	5,490	1,340		
SOUTH FLETCHER (102)	57	91.97	164.07	619,022	3,773	5,242		
Totals	394	120.96	123.73	6,203,169	50,134	47,657	352.73	2.85

Total No. of Customers at end of 2023==>

17,586

2023 - Reliability Indicators By Feeder FPUC - NE (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
AMELIA ISLAND PARKWAY (312)	14	120.50	66.64	13,328	200	1,687		
BAILEY (311)	39	95.91	54.28	20,842	384	3,741		
BONNIEVIEW (310)	42	93.22	146.46	228,915	1,563	3,915		
CLINCH DRIVE (214)	31	112.07	151.07	145,179	961	3,474		
ELEVEN STREET (212)	42	114.90	165.57	44,705	270	4,826		
FIFTEENTH STREET (209)	18	117.78	126.57	18,353	145	2,120		
JASMINE STREET (211)	56	94.14	91.72	62,460	681	5,272		
NECTARINE (210)	14	107.15	106.26	32,729	308	1,500		
PARKWAY SOUTH (104)	5	173.99	197.81	214,626	1,085	870		
PLANTATION FIELDSIDE (111)	19	95.96	81.55	22,589	277	1,823		
PLANTATION ROADSIDE (110)	9	192.73	150.41	5,264	35	1,735		
SADLER NECTARINE SO.14TH (215)	16	83.72	110.06	604,237	5,490	1,340		
SOUTH FLETCHER (102)	54	95.42	166.35	616,655	3,707	5,153		
Totals	359	104.33	134.38	2,029,882	15,106	37,455	115.43	0.86

Total No. of Customers at end of 2023 ==>

17,586

2023 - Reliability Indicators By Feeder FPUC - NW (Actual)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
ALTHA (9952)	74	92.10	95.90	136,077	1,419	6,815		
BLOUNTSTOWN (9972)	12	74.48	69.03	10,217	148	894		
BRISTOL (9882)	115	82.03	104.33	373,607	3,581	9,433		
COLLEGE (9982)	127	101.41	138.01	758,223	5,494	12,879		
COTTONDALE (9866)	122	94.43	82.74	177,891	2,150	11,521		
DOGWOOD HEIGHTS (9722)	30	108.01	106.07	29,913	282	3,240		
GREENWOOD (9742)	153	90.13	83.70	476,749	5,696	13,789		
HOSPITAL (9872)	68	111.23	115.84	252,413	2,179	7,564		
HWY 90E (9942)	61	89.69	140.75	129,629	921	5,471		
HWY 90W (9992)	62	107.54	92.07	153,297	1,665	6,667		
INDIAN SPRINGS (9932)	71	126.80	113.93	111,194	976	9,003		
INDUSTRIAL PARK (9752)	7	87.87	36.39	2,074	57	615		
PRISON (9732)	5	46.18	44.15	265	6	231		
RAILROAD (9512)	54	110.69	77.69	218,234	2,809	5,977		
SOUTH STREET (9854)	152	88.84	86.25	203,123	2,355	13,504		
CAVERNS (4CBS)	1	164.92	164.92	245,066	1,486	165		
Grand Total	1,114	96.74	104.98	3,277,973	31,224	107,768	260.16	2.48

Total No. of Customers at end of 2023==>

12,600

2023 - Reliability Indicators By Feeder FPUC - NW (Adjusted)

Cause	Number of Outage Events (N)	Average Duration (L-Bar)	CAIDI	Sum of all Customer Min. Interrupted (CMI)	Total Customer Interruptions (CI)	Total Outage Duration (L)	SAIDI	SAIFI
ALTHA (9952)	71	94.21	140.71	73,170	520	6,689		
BLOUNTSTOWN (9972)	12	74.48	69.03	10,217	148	894		
BRISTOL (9882)	111	77.77	104.15	372,140	3,573	8,632		
COLLEGE (9982)	119	103.62	160.83	682,397	4,243	12,331		
COTTONDALE (9866)	118	90.25	82.05	175,916	2,144	10,649		
DOGWOOD HEIGHTS (9722)	30	108.01	106.07	29,913	282	3,240		
GREENWOOD (9742)	146	91.05	88.62	406,670	4,589	13,293		
HOSPITAL (9872)	67	112.60	115.93	252,374	2,177	7,544		
HWY 90E (9942)	59	91.93	152.33	128,721	845	5,424		
HWY 90W (9992)	61	108.94	92.93	152,864	1,645	6,646		
INDIAN SPRINGS (9932)	71	126.80	113.93	111,194	976	9,003		
INDUSTRIAL PARK (9752)	7	87.87	36.39	2,074	57	615		
PRISON (9732)	4	49.22	49.22	197	4	197		
RAILROAD (9512)	54	110.69	77.69	218,234	2,809	5,977		
SOUTH STREET (9854)	150	88.92	86.25	202,957	2,353	13,338		
Grand Total	1,080	96.73	106.92	2,819,037	26,365	104,472	223.73	2.09

Total No. of Customers at end of 2023==>

12,600

FPUC 2023 – Reliability Indicators and Analysis

FPUC managed to improve the majority of the reliability indicators in 2023. Both NE and NW Divisions continue to invest in its SPP, infrastructure improvements and system upgrades which will continue to generate reliability improvements in the future. Substantial improvements were achieved in SAIDI as it decreased 20.75% from 202.70 in 2022 to 160.63 in 2023. In addition, SAFI decreased 19.41% from 1.70 in 2022 to 1.37 in 2023. CAIDI decreased 2.16% from 119.50 in 2022 to 116.92 in 2023. The only minor increase of 0.69% was for L-BAR which went from 97.95 in 2022 to 98.63 in 2023. However, it was still lower than the 5 year peak of 102.68 in 2021.

As FPU reviews its five year reliability indicator trends, averages and outage causes, it notes that indicators continue to be significantly influenced by the weather. This is due to FPU's relatively small territory size when compared to other large investor owned utilities within the state. A good example of this was in October of 2018 when the NW Division had the eye of Hurricane Michael demolish nearly all of its distribution system. Another good example was on September of 2017 when the NE Division had to evacuate its entire territory due to hurricane Irma.

Some of the factors contributing to this year's improvements in the reliability indicators were our focus on our vegetation management efforts, continued implementation of our SPP plan and investments in other system infrastructure. Both divisions fully transitioned from its previous 3 year feeder and 6 year lateral vegetation management program to a 4 year feeder and lateral schedule. FPU believes this approach will continue to yield more reliability to customers in the future. In addition to our investments in the SPP program, in 2023, we have continued to upgrade our substation assets by replacing an older 138kV 50MVA autotransformer with a new 75MVA unit as well as replacing several 7.62kV regulators in the substations and distribution system. In 2023 we also completed a transmission protection coordination study in the NE Division and plan to conduct a distribution coordination plan in 2024 at both divisions.

FPUC will continue to monitor all reliability indices and outage causes to adjust and improve current reliability programs as needed.

FPUC 2023 – Description of Excluded Events for Named Storms, Transmission, Distribution, and Substations

Named Storms and Tornadoes

The NW Division was slightly affected by hurricane Idalia while the NE Division was moderately affected by the same hurricane. None of the divisions were impacted by tornadoes.

Transmission and Substation

In 2023 the NE Division experienced several transmission outages which were related to 69kV insulator, arrestor or other substation equipment failures. In the NW Division there was one transmission outage due to a Gulf Power/FPL equipment failure and one substation outage which was related to a 15kV substation breaker. However, in all cases equipment was repaired and customers' power was restored as quickly as possible. These events are noted in the Excluded Events Tables below.

The NE and NW Divisions also had other planned outages to perform maintenance to different sections of the distribution system. These outages are noted below in the Excluded Event Tables below. In all cases, FPUC promptly dispatched crews to restore power to customers.

2023 NW Division Excluded Events					
Date	Feeder	Exclusion	Aff Cust	L	CMI
1/18/2023	ALTHA (9952)	Planned Outage	1	16	16
2/7/2023	COLLEGE (9982)	Planned Outage	23	43	987
2/7/2023	COLLEGE (9982)	Planned Outage	10	43	431
2/7/2023	COLLEGE (9982)	Planned Outage	23	43	984
2/7/2023	COTTONDALE (9866)	Planned Outage	1	153	153
2/8/2023	COTTONDALE (9866)	Planned Outage	1	94	94
3/14/2023	COTTONDALE (9866)	Planned Outage	3	552	1,656
3/15/2023	GREENWOOD (9742)	Planned Outage	3	14	43
3/25/2023	HWY 90E (9942)	Planned Outage	1	36	36
3/27/2023	CAVERNS (4CBS)	Transmission	1,486	165	245,066
4/11/2023	COTTONDALE (9866)	Planned Outage	1	73	73
4/26/2023	HOSPITAL (9872)	Planned Outage	2	20	39
4/27/2023	HWY 90W (9992)	Planned Outage	20	22	433
5/1/2023	PRISON (9732)	Planned Outage	2	34	68
6/13/2023	GREENWOOD (9742)	Planned Outage	2	117	233
6/13/2023	GREENWOOD (9742)	Planned Outage	2	106	212
6/13/2023	GREENWOOD (9742)	Planned Outage	1	89	89
6/26/2023	GREENWOOD (9742)	Planned Outage	1	98	98
6/28/2023	SOUTH STREET (9854)	Planned Outage	1	19	19
7/10/2023	GREENWOOD (9742)	Planned Outage	13	8	109
7/12/2023	SOUTH STREET (9854)	Planned Outage	1	147	147
7/13/2023	COLLEGE (9982)	Planned Outage	1,177	61	71,797
8/10/2023	COLLEGE (9982)	Planned Outage	14	94	1,317
8/14/2023	BRISTOL (9882)	Planned Outage	1	246	246
8/16/2023	COLLEGE (9982)	Planned Outage	1	181	181
8/16/2023	COLLEGE (9982)	Planned Outage	1	37	37
8/22/2023	BRISTOL (9882)	Planned Outage	2	66	132
8/28/2023	BRISTOL (9882)	Planned Outage	1	289	289
8/29/2023	ALTHA (9952)	Named Storm	1	40	40
8/29/2023	COLLEGE (9982)	Named Storm	2	46	91
9/11/2023	BRISTOL (9882)	Planned Outage	4	200	800
10/5/2023	GREENWOOD (9742)	Planned Outage	1,085	64	69,295
10/26/2023	HWY 90E (9942)	Planned Outage	75	12	873
11/7/2023	ALTHA (9952)	Substation	897	70	62,850

2023 NE Division Excluded Events					
Date	Feeder	Exclusion	Aff Cust	L	CMI
2/2/2023	STEPDOWN (306309)	Transmission	4844	53	257,701
2/2/2023	AIP (315)	Transmission	5463	146	795,868
3/14/2023	COAST CHIPS	Transmission	1	23	23
3/30/2023	PARKWAY SOUTH (104)	Planned Outage	1	32	32
7/13/2023	COAST CHIPS	Transmission	1	165	165
8/30/2023	SOUTH FLETCHER (102)	Named Storm	58	37	2,135
8/30/2023	CLINCH DRIVE (214)	Named Storm	19	57	1,092
8/30/2023	SOUTH FLETCHER (102)	Named Storm	5	37	184
8/30/2023	FIFTEENTH STREET (209)	Named Storm	1	44	44
8/30/2023	BAILEY (311)	Named Storm	113	41	4,641
8/30/2023	BONNIEVIEW (310)	Named Storm	1	21	21
8/30/2023	SOUTH FLETCHER (102)	Named Storm	3	16	48
8/30/2023	FIFTEENTH STREET (209)	Named Storm	12	60	719
8/30/2023	BONNIEVIEW (310)	Named Storm	44	32	1,418
8/30/2023	PLANTATION FIELDSIDE (111)	Named Storm	1	85	85
8/30/2023	BONNIEVIEW (310)	Named Storm	1	60	60
8/30/2023	PLANTATION FIELDSIDE (111)	Named Storm	13	16	206
8/30/2023	PLANTATION FIELDSIDE (111)	Named Storm	1437	82	118,050
8/30/2023	BONNIEVIEW (310)	Named Storm	36	83	2,992
8/30/2023	BAILEY (311)	Named Storm	145	130	18,857
8/30/2023	JASMINE STREET (211)	Named Storm	29	50	1,464
8/30/2023	BONNIEVIEW (310)	Named Storm	7	59	415
8/30/2023	ELEVEN STREET (212)	Named Storm	1	57	57
8/30/2023	ELEVEN STREET (212)	Named Storm	29	62	1,786
8/30/2023	BAILEY (311)	Named Storm	17	30	516
9/15/2023	COAST CHIPS	Transmission	1	206	206
9/20/2023	COAST CHIPS	Transmission	1	7,555	7,555
9/27/2023	ELEVEN STREET (212)	Planned Outage	1	11	11
9/27/2023	ELEVEN STREET (212)	Planned Outage	1	252	252
10/20/2023	BAILEY (311)	Planned Outage	8	137	1,097
11/12/2023	STEPDOWN (306309)	Planned Outage	4,898	184	900,416
11/12/2023	AIP (315)	Transmission	5,473	222	1,217,378
11/12/2023	AIP (315)	Planned Outage	5,473	118	644,355
11/15/2023	AMELIA ISLAND PARKWAY (312)	Planned Outage	9	9	84
12/22/2023	JLT (313)	Planned Outage	6,881	28	193,356