



LAKE WORTH BEACH

Electric
UtilitiesSM

CITIZEN OWNED ENERGY

Electric Reliability Presentation

1.28.2025

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CAIDI - Customer Average Interruption Duration Index

The average time to restore service to interrupted customers within a specified area of service over a given period of time.

SAIDI – System Average Interruption Duration Index

The average minutes of service interruption duration per customer served within a specified area of service over a given period of time.

SAIFI – System Average Interruption Frequency Index

The average number of Service Interruptions per customer within a specified area of service over a given period of time.

MAIFI – Momentary Average Interruption Event Frequency Index

The average number of Momentary Interruption Events recorded on primary circuits for a specified area of service over a given period of time.

L-Bar – Average Duration of Outage Events

The sum of each outage event duration for all outage events occurring during a given time period, divided by number of outage events over the same time period within a specific area of service.

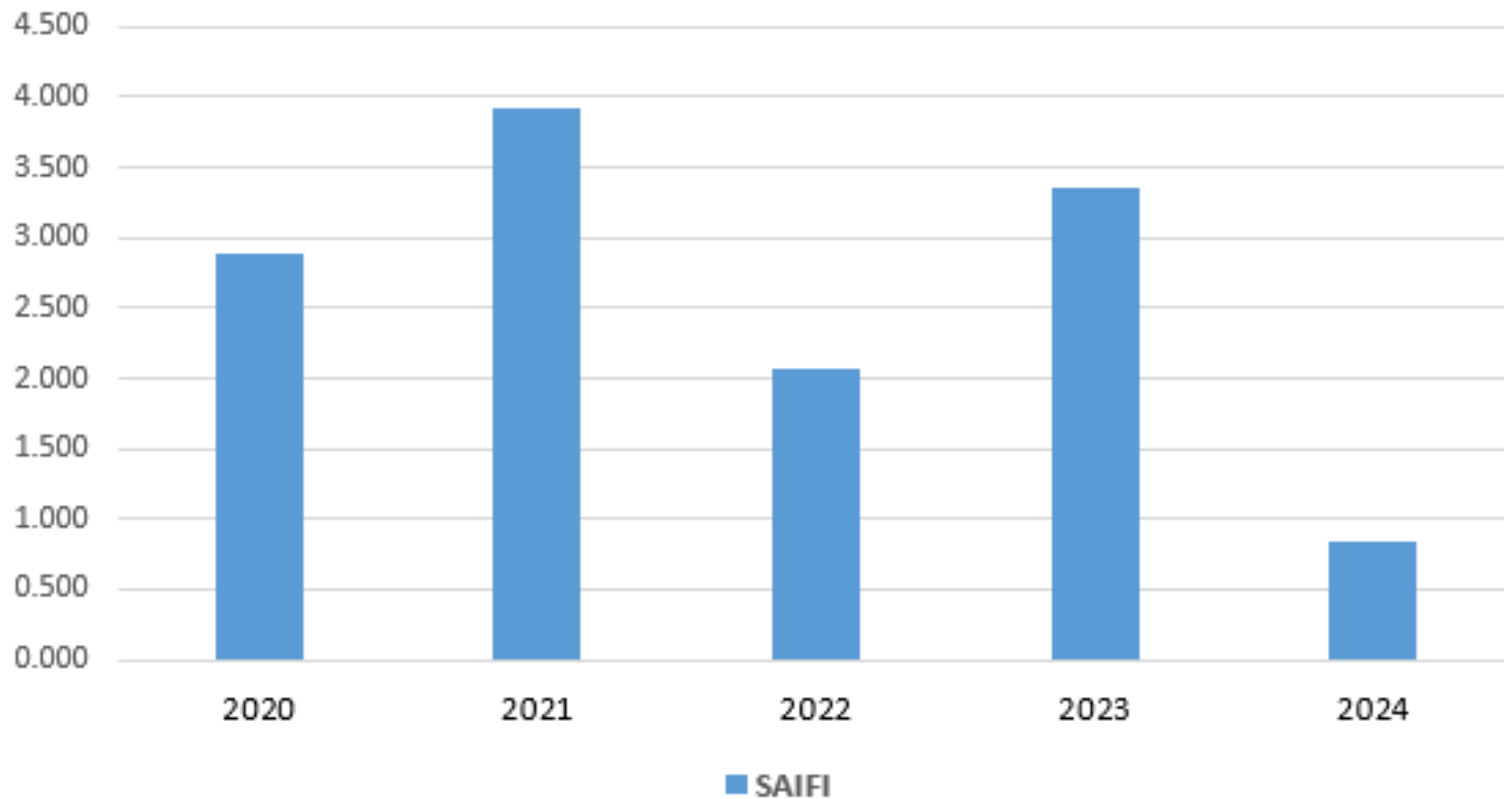


SAIFI – Measures the average frequency of interruptions for the average customer.

END OF THE YEAR RELIABILITY NUMBERS - SAIFI (FREQUENCY)

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
<u>SAIFI</u>	2.889	3.917	2.070	3.355	0.845
<u>% Change</u>		35.6%	-47.2%	62.1%	-74.8%

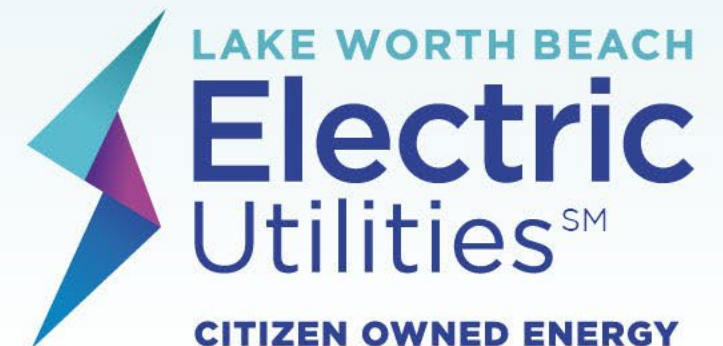
**END OF THE YEAR RELIABILITY NUMBERS - SAIFI
(FREQUENCY)**



$$\frac{\text{Customers that experienced an outage}}{\text{Number of customers served}}$$

$$\frac{23,524}{27,842} = 0.845$$

Last year was 93,064 impacted.
2024 was a reduction of -74.8%

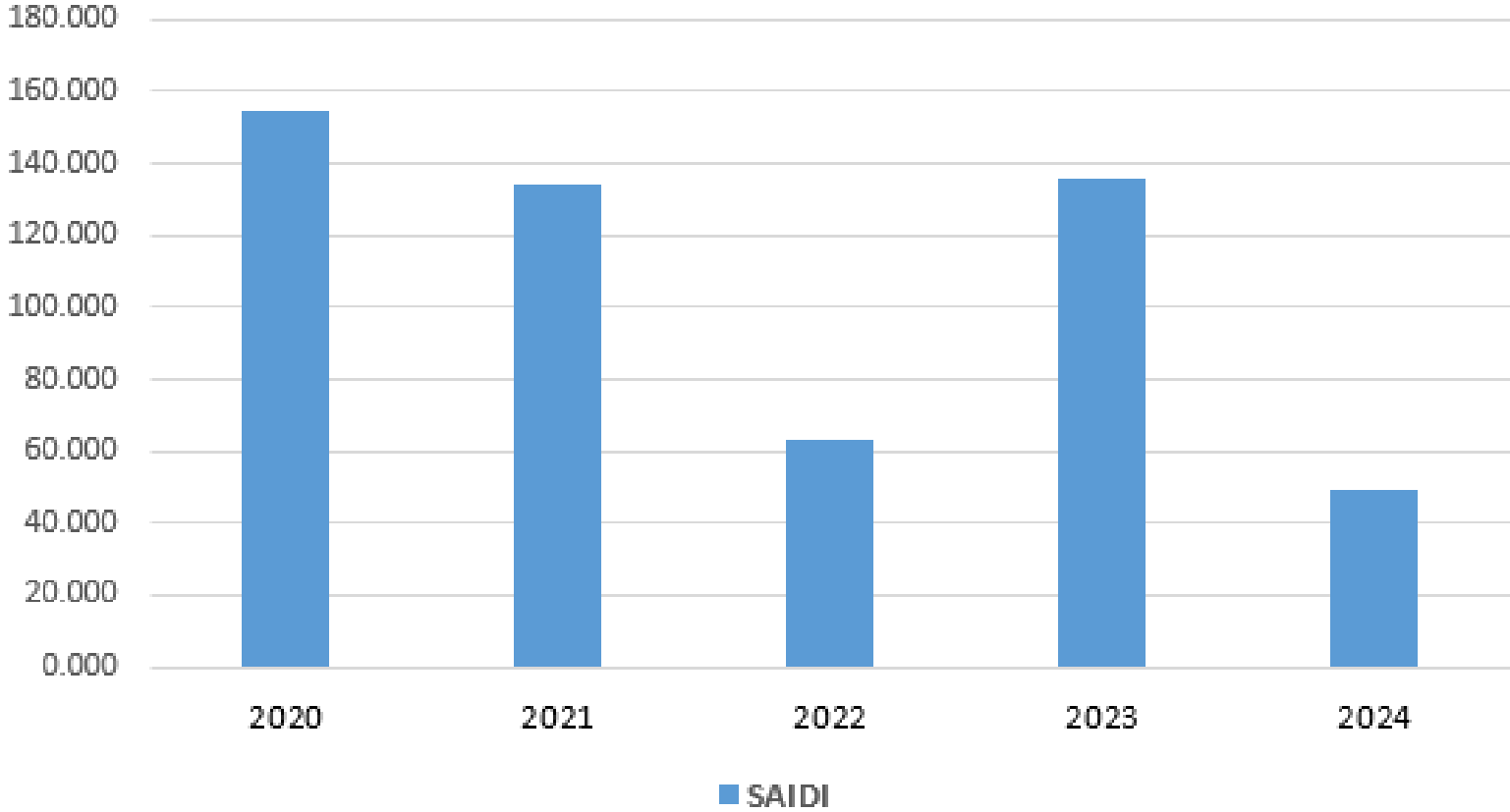


SAIDI – Measures the average duration of interruptions for the average customer.

END OF THE YEAR RELIABILITY NUMBERS - SAIDI (DURATION)

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
<u>SAIDI</u>	154.835	134.068	63.384	135.684	48.913
<u>% Change</u>		-13.4%	-52.7%	114.1%	-64.0%

END OF THE YEAR RELIABILITY NUMBERS - SAIDI (DURATION)



Customer minutes of interruption (CMI) equals the number of customers out times the duration of the outage in minutes.
 1 customer out of 100 minutes = 100 CMI
 10 customers out for 10 minutes = 100 CMI

$$\frac{\text{Customer minutes of interruption}}{\text{Number of customers served}}$$

$$\frac{1,361,842}{27,842} = 48.913$$

Last year our CMI was 3,763,592
 2024 resulted in reduction of -64.0% or
 2,401,750 less minutes of interruption



CAIDI – Measures the average repair time experienced by the average interrupted customer.

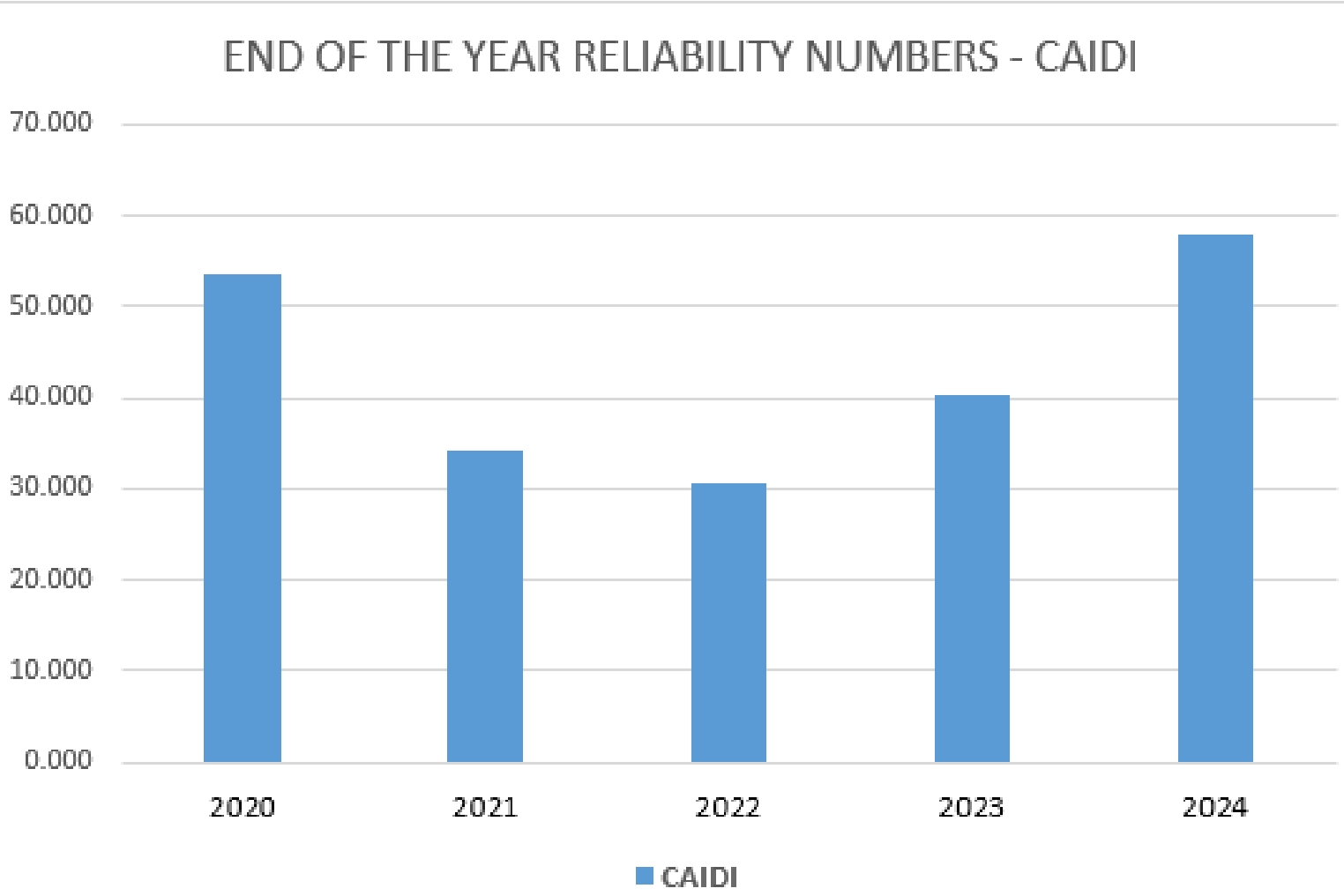
END OF THE YEAR RELIABILITY NUMBERS - CAIDI

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
<u>CAIDI</u>	53.590	34.224	30.623	40.441	57.892
% Change		-36.1%	-10.5%	32.1%	43.2%

$$\frac{\text{SAIDI}}{\text{SAIFI}} = \text{CAIDI}$$

$$\frac{48.913}{0.845} = 57.892$$

END OF THE YEAR RELIABILITY NUMBERS - CAIDI

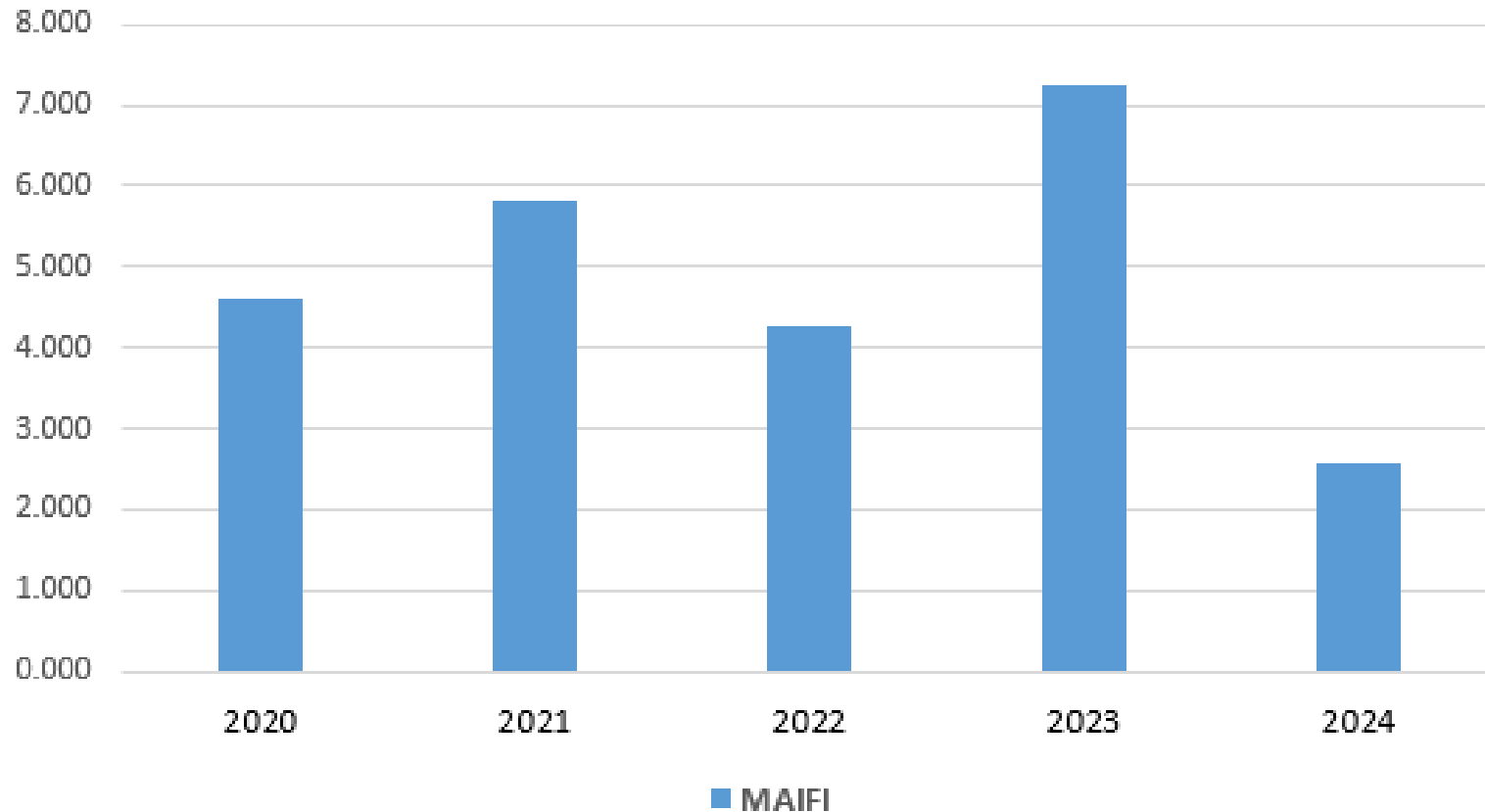


MAIFI – measures the average frequency of momentary interruption events for the average customer.

END OF YEAR RELIABILITY NUMBERS - MAIFI (MOMENTARY)

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
<u>MAIFI</u>	4.616	5.820	4.280	7.235	2.572
% Change		26.1%	-26.5%	69.0%	-64.5%

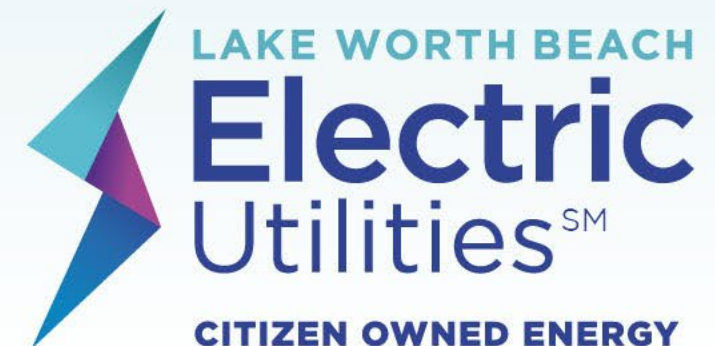
END OF YEAR RELIABILITY NUMBERS - MAIFI
(MOMENTARY)



Customers that experienced a momentary
Number of customers served

$$\frac{71,598}{27,842} = 2.572$$

Last year was 200,677 customer momentary.
2024 saw a reduction of -64.5% or 129,079
less momentary interruptions.

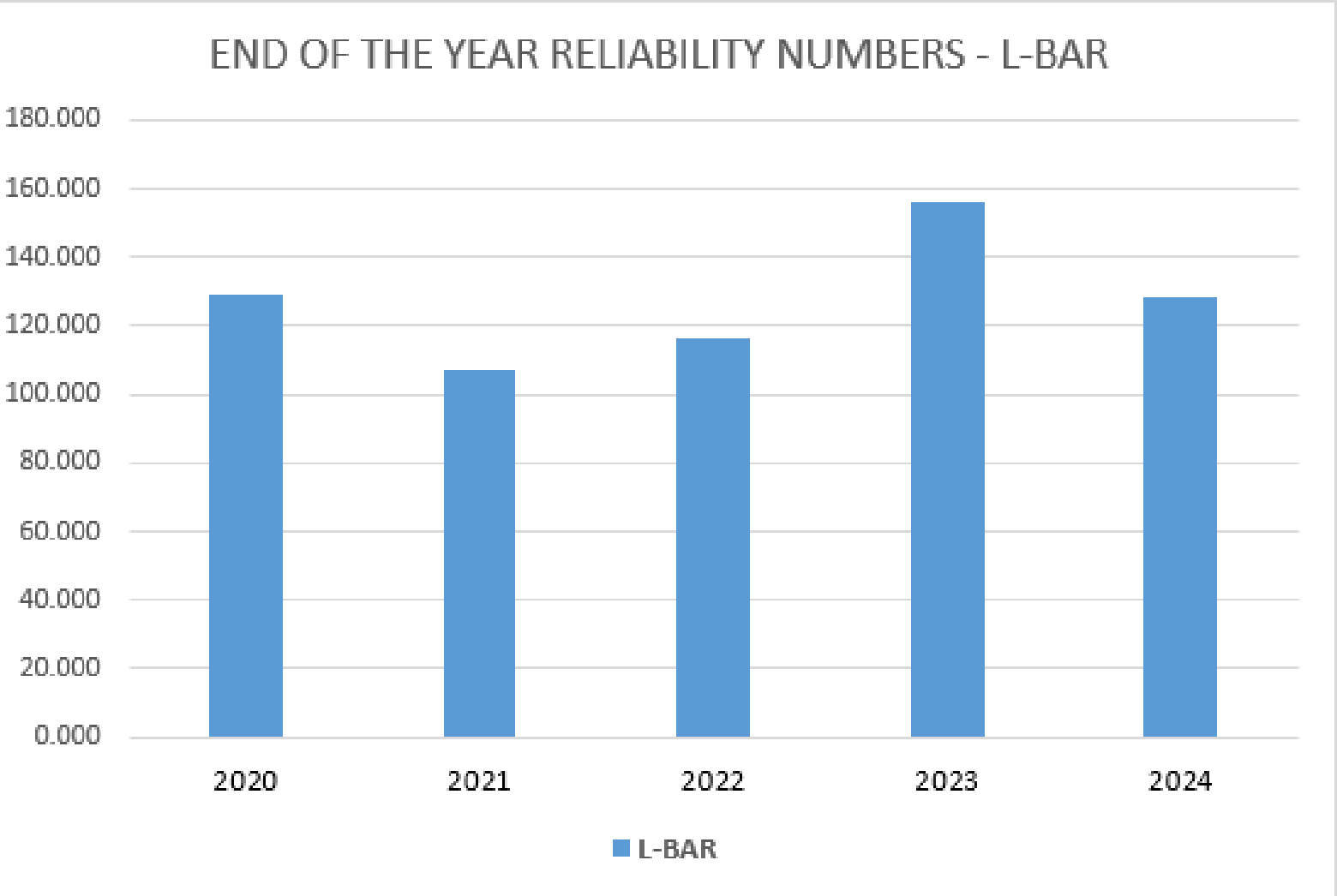


L-BAR – Measures the average length of a single outage.

END OF THE YEAR RELIABILITY NUMBERS - L-BAR

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
<u>L-BAR</u>	129.319	107.202	116.680	156.189	128.633
% Change		-17.1%	8.8%	33.9%	-17.6%

END OF THE YEAR RELIABILITY NUMBERS - L-BAR

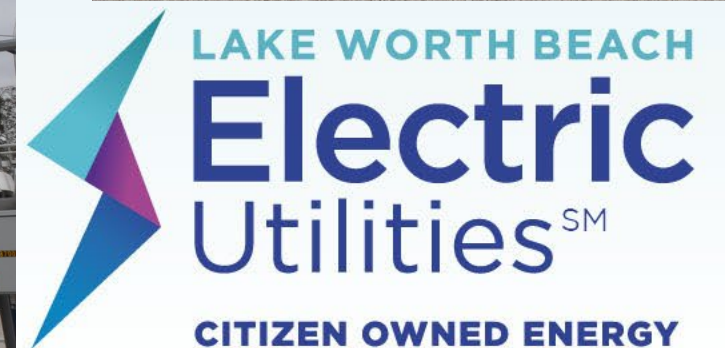
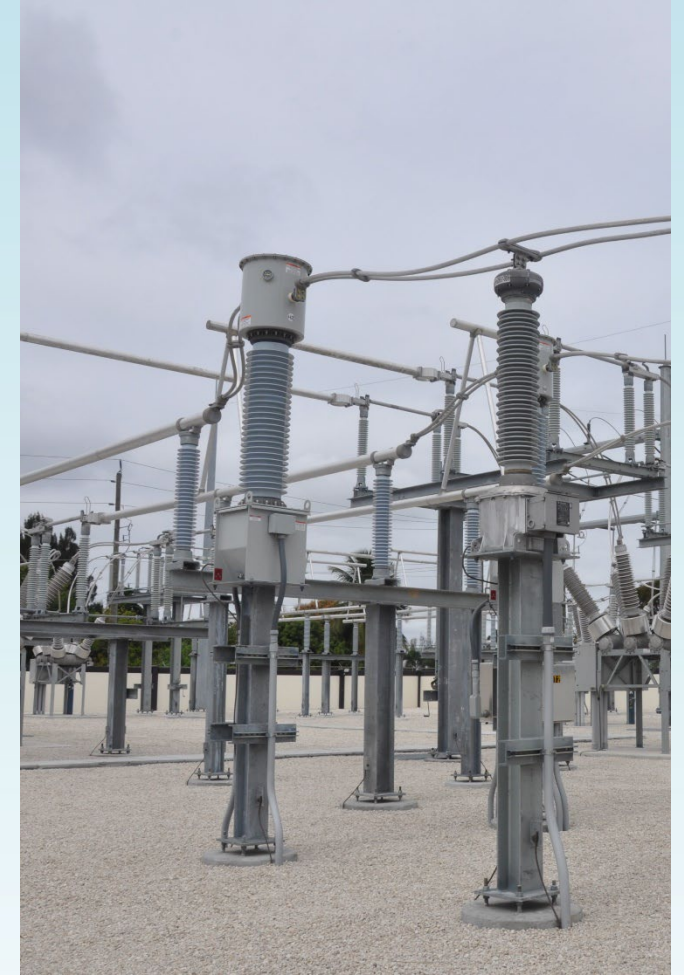


$$\frac{\text{Sum of each outage in minutes}}{\text{Number of outages}}$$

$$\frac{37,818}{294} = 128.633$$



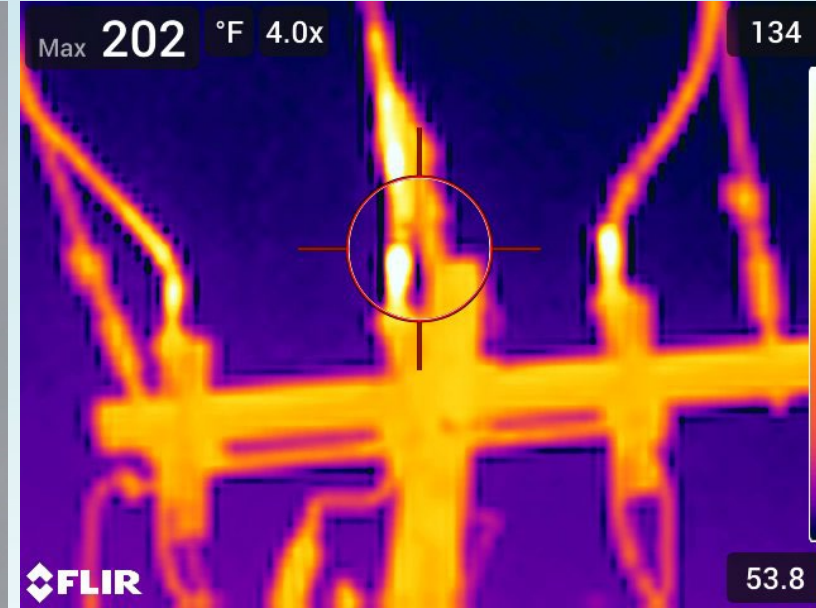
Projects underway that will continue to improve reliability.



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Projects underway that will continue to improve reliability





Thank you... Questions?



<https://www.psc.state.fl.us/distribution-reliability-reports> Website for 2023 FPL Distribution Reliability Report