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**Courtney R. Nicholson** Vice-President – Regulatory and Public Affairs

December 15, 2021

<u>Via Electronic Delivery</u> Ms. Lora W. Johnson, CMC, LMMC Clerk of Council City Hall - Room 1E09 1300 Perdido Street New Orleans, LA 70112

### **RE:** Council Docket UD-17-04; Quarterly Filing Requirement per Ordering Paragraph #6 of Council Resolution R-17-427

Dear Ms. Johnson:

Please find enclosed for your further handling Entergy New Orleans, LLC's ("ENO") report on Customer Interruptions for the period of January 1, 2021 through September 30, 2021, which Report is being filed in the above-referenced docket pursuant to Ordering Paragraph 6 of Council Resolution Nos. R-I7-427, dated August 10, 2017 and R-18-98 dated April 5, 2018. This Report is being converted from a bi-monthly filing to quarterly filing pursuant to Council Resolution No. R-21-153, dated May 6, 2021. As a result of the remote operations of the Council's office related to COVID-19, ENO submits this filing electronically and will submit the requisite original and number of hard copies once the Council resumes normal operations, or as you direct. ENO requests that you file this submission in accordance with Council regulations as modified for the present circumstances.

Thank you for your assistance with this matter.

Sincerely,

Courtney R. Michalson

Courtney R. Nicholson

CRN/bkd

Enclosures

cc: Official Service List (UD-17-04 via electronic mail)

### ENTERGY NEW ORLEANS, LLC'S BI-MONTHLY CUSTOMER INTERRUPTION REPORT FOR THE PERIOD OF JANUARY 1, 2021 THROUGH SEPTEMBER 30, 2021

### 1. Background

Entergy New Orleans, LLC's ("ENO" or the "Company") electric distribution system operates between 13,200 volts (13.2 kV) and 34,500 volts (34.5 kV). ENO's distribution system serves over 200,000 customers. There are 20 ENO substations that supply power to over 200 distribution circuits, consisting of approximately 1,800 distribution circuit miles, of which approximately 1,200 are overhead circuit miles, and approximately 600 are underground circuit miles.

ENO is geographically divided into four networks, New Orleans East, Algiers, the Central Business District, and Orleans. The four networks comprise the New Orleans Metro Region. ENO's distribution system begins at the substations, where power is transformed from transmission-level voltage into distribution-level voltage, suitable for delivering power directly to residential, and most commercial, governmental, and industrial customers. However, some of ENO's largest commercial, governmental, and industrial customers are connected directly to the Company's transmission system.

This report is filed pursuant to Council Resolution Nos. R-17-427 and R-18-98, which require ENO to file bi-monthly reports with the Council of the City of New Orleans ("Council") detailing various aspects of the Company's reliability performance and to help demonstrate that ENO's efforts to operate and maintain its distribution system that serves customers in New Orleans have been reasonable and effective. The reporting frequency was subsequently modified from bi-monthly to quarterly, per Resolution R-21-153 in the ENO Reporting Requirements Streamlining docket, UD-20-01. The report contains the reliability performance of ENO's distribution system and transmission system for the year-to-date ("YTD") period ending September 30, 2021. <sup>1</sup> Specifically, ENO provides customer interruptions<sup>2</sup> experienced during the YTD period, except interruptions attributed to Major Events, those that are Mandated by Public Authority or interruptions that are Momentary in duration. The results are summarized below.

### 2. YTD Distribution Reliability Performance:

As of September 2021, YTD distribution-related customer interruptions increased by approximately 10.24% as compared to January – September 2020 and increased by 9.41% as compared to ENO's average reliability performance over the past 3 years.<sup>3</sup> The highest contributing outage categories to the frequency of customer interruptions reflected herein were

<sup>&</sup>lt;sup>1</sup> Due to a change in the outage tracking system, specific weather-related information is not available on outages as of November 9, 2020. ENO is currently looking into whether this data can be made available in the future. <sup>2</sup> "**Customer Interruptions**" refers to the number of customers who were interrupted during an outage.

<sup>&</sup>lt;sup>3</sup> For the purposes of these metrics, interruptions caused by momentary outages and major events are excluded. Such exclusions are consistent with standard industry reliability indices used by most electric utilities to assess the reliability of their electrical system, which exclude major outage events that cause interruptions to a significant portion of the utility's customer base, momentary outages lasting no longer than five (5) minutes, and which typically occur as a result of temporary faults in the distribution of electricity, and outages that are mandated by a public authority.

lightning, primary conductor failure, emergency switching, scheduled interruptions, and foreign objects.<sup>4</sup> These outage causes affected approximately 113,399 customer interruptions during the reportable period and are higher than historical interruption patterns over the same months in previous years. ENO believes this increase is due to adverse weather conditions experienced in 2021 with much higher-than-normal rainfall totals. According to the National Weather Service, New Orleans received 80.05 inches of precipitation from January through September 2021, which is approximately 49.26% more rain than averaged over the same six-month timespan in the previous 10 years, of 53.63 inches.<sup>5</sup> As described in ENO's Annual Reliability Plan, ENO has installed, and continues to install, devices on targeted circuits that automatically isolate and potentially re-energize undamaged sections of a feeder after a disturbance. Those devices minimize the impact of an outage by decreasing the number of affected customers. The additional precipitation was caused by an increased number of storms in the metropolitan area, which also caused an increase in lightning strike customer interruptions of approximately 2.6 times the 3-year average.

ENO's Bi-Monthly Customer Interruption Report for the YTD period ending February 29, 2020<sup>6</sup> described ENO's enhanced safety practices contributable to outages coded as either "scheduled interruption" when the work is preplanned or "emergency switching" when additional customers need to be taken out to support repairs for an emergency outage. Approximately 38,997 customer interruptions during the reportable period were attributable to emergency switching and scheduled interruptions. These accounted for roughly 19.66% of the total customer interruptions year to date.

### 3. YTD Transmission Reliability Performance:

Transmission-related customer interruptions in the reportable period decreased by approximately 81.21% as compared to the corresponding July – September period in 2020 and decreased by 87.71% as compared to ENO's average reliability performance for the same period over the past 3 years.<sup>7</sup> During the July – September 2021 timeframe, there were 3,376 transmission-related customer interruptions. These transmission-related customer interruptions were related to lightning, and an animal getting into electrical equipment. The highest contributing outage category to the duration of these customer interruptions was animal related.

Transmission-related customer interruptions on a year-to-date basis have increased as compared to the corresponding January – September period in 2020, by 21.47%, and have decreased compared to ENO's average transmission-related customer interruptions for January – September over the past 3 years, by 8.19%.

<sup>&</sup>lt;sup>4</sup> The Customer Interruption data being provided does not include the April 24, 2021 vault fire that occurred at the corner of Natchez St. and Magazine St. because the nature of the mesh network that serves the Central Business District does not currently allow outages on the network to be captured in the automated reporting.

<sup>&</sup>lt;sup>5</sup> Precipitation totals calculated from daily weather data for the New Orleans Area compiled and provided through the National Weather Service's NOWData – NOAA Online Weather Data feature.

<sup>&</sup>lt;sup>6</sup> See Bi-Monthly Customer Outage Report for the Period of January 31, 2020 through February 29, 2020 filed by ENO on July 30, 2020.

<sup>&</sup>lt;sup>7</sup> See FN 2.

### CERTIFICATE OF SERVICE Docket No. UD-17-04

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

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Arthur J. Johnson Lower 9th Ward Center for Sustainable **Engagement and Development** 5227 Chartres Street New Orleans, LA 70117

Dawn Hebert 6846 Lake Willow Dr. New Orleans, LA. 70126

David Dalia 609 Dumaine Street New Orleans, LA 70115-3210

Denise T. Turbinton 931 Mazant St. New Orleans, LA 70117

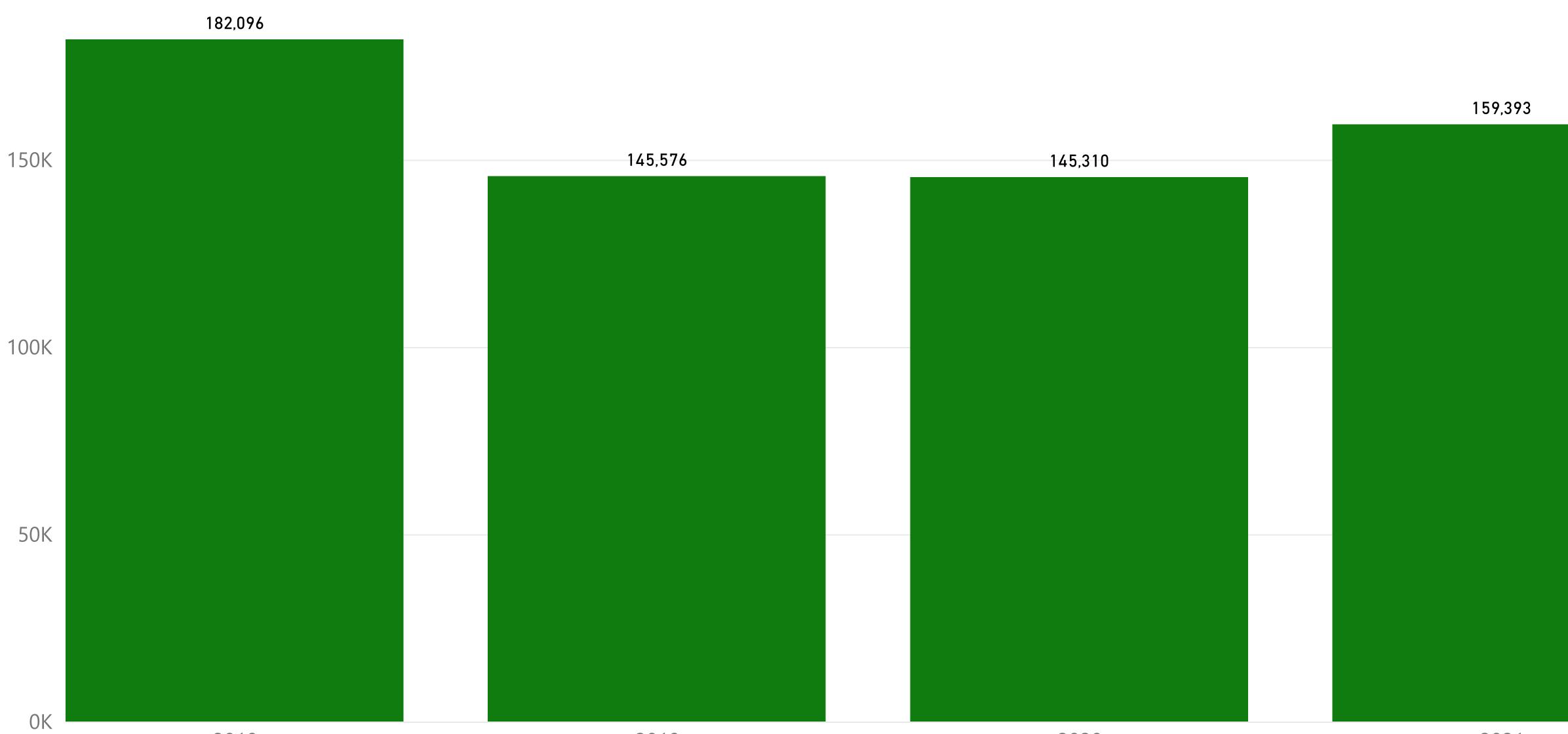
New Orleans, Louisiana, this 15<sup>th</sup> day of December 2021.

Courtney R. Nicholson





200K



## ENTERGY NEW ORLEANS

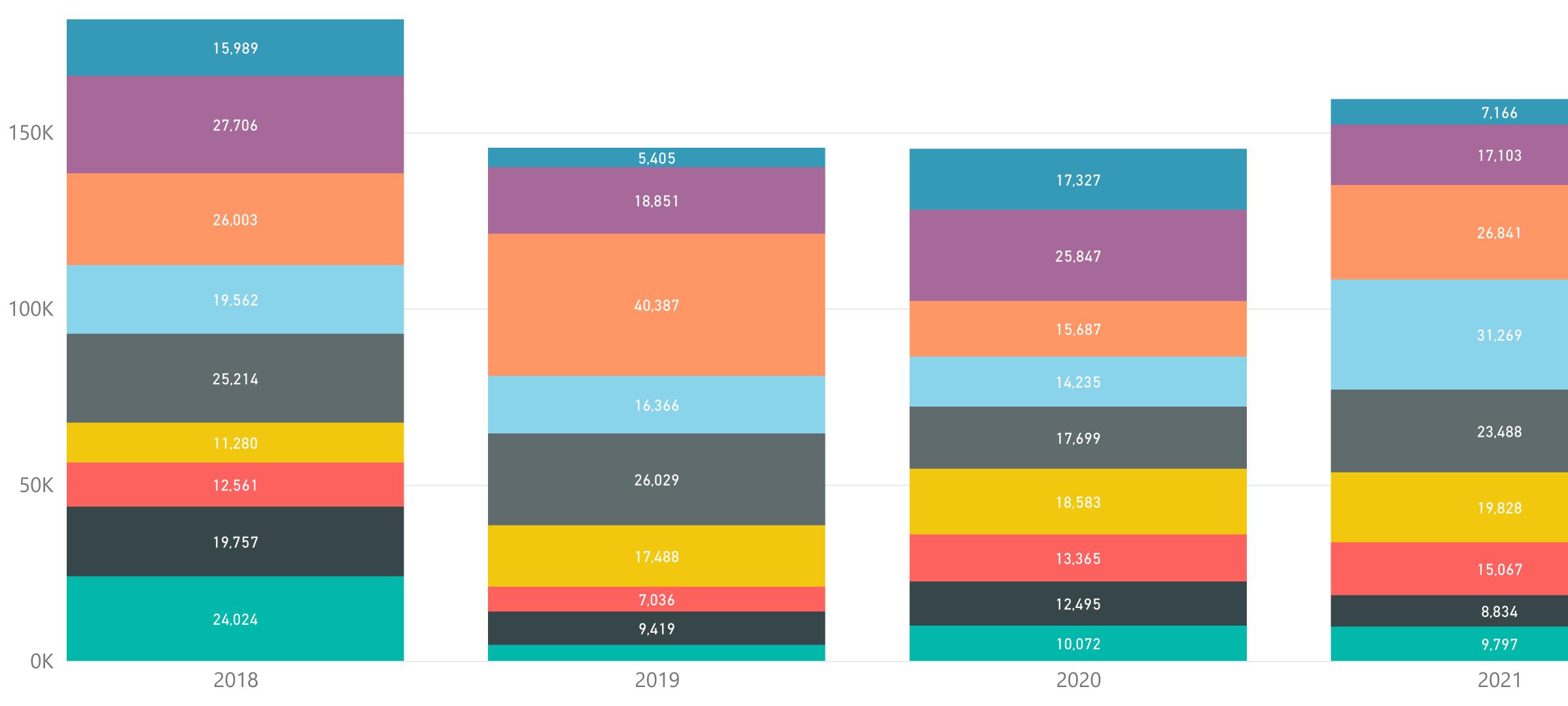
### Distribution Customer Interruptions (excluding Scheduled and Emergency Switching) by Year (Jan 1 - Current Date All Years)



Distribution Customer Interruptions (excluding Scheduled and Emergency Switching) by Month by Year

**Month** January February March April May June July August September

200K



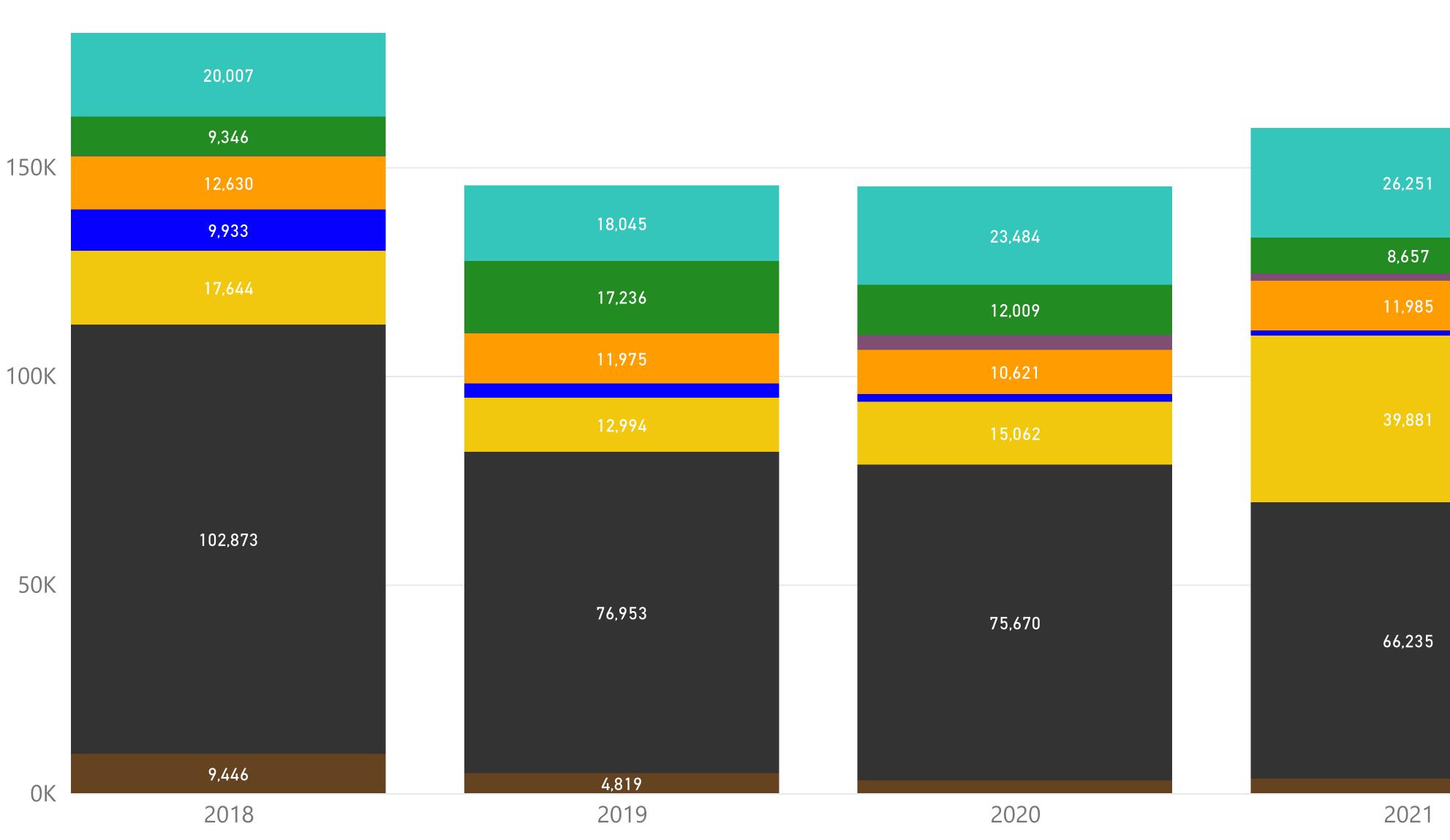
### ENTERGY NEW ORLEANS

(Jan 1 - Current Date All Years)





- Summary Cause Updated 200K
- (Blank)
- Animal
- Equipment Failure
- Lightning
- Human Error
- Public Damage
- Foreign Trouble
- Vegetation
- Other



### Distribution Customer Interruptions by Outage Cause (excluding Scheduled and Emergency Switching) by Year (Jan 1 - Current Date All Years)





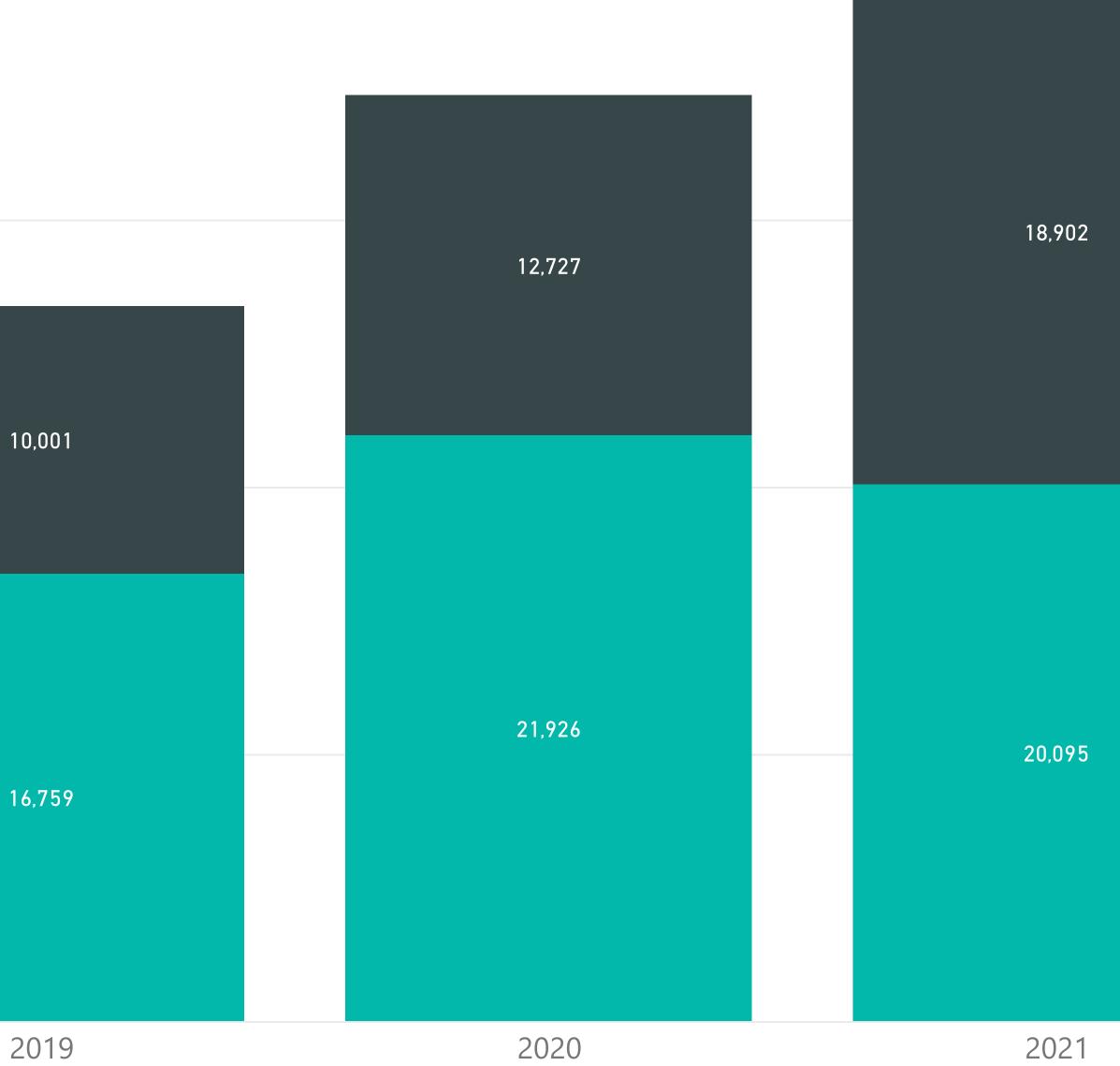
Distribution Scheduled Interruptions and Emergency Switching Customer Interruptions by Year (Jan 1 - Current Date All Years)

Summary Cause Updated 40K

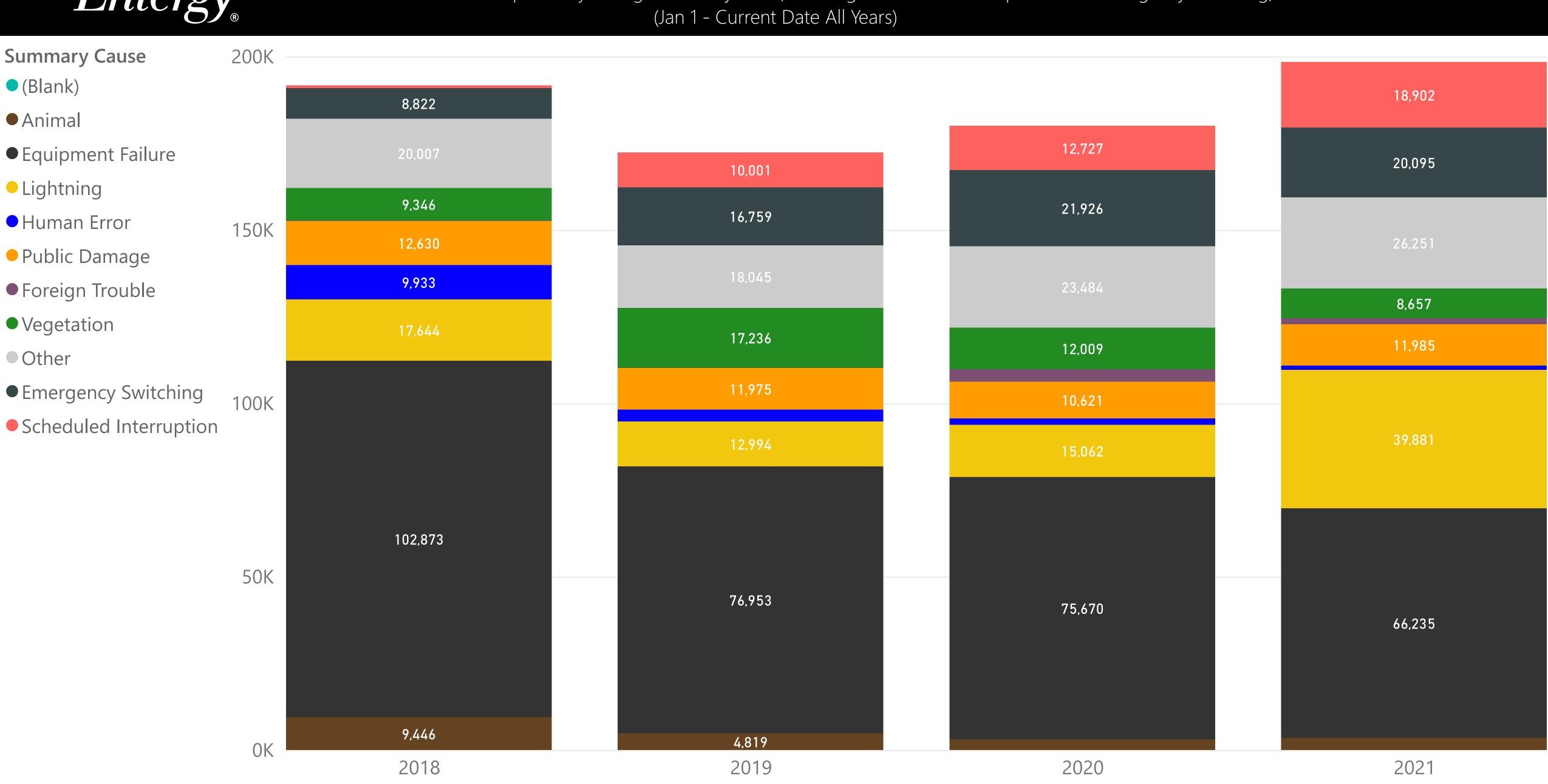
- Emergency Switching
- Scheduled Interruption

30K 20K 10K 8,822 0K 2018

# ENTERGY NEW ORLEANS







Distribution Customer Interruptions by Outage Cause by Year (including Scheduled Interruptions and Emergency Switching)

9/30/2021

Current Data Date



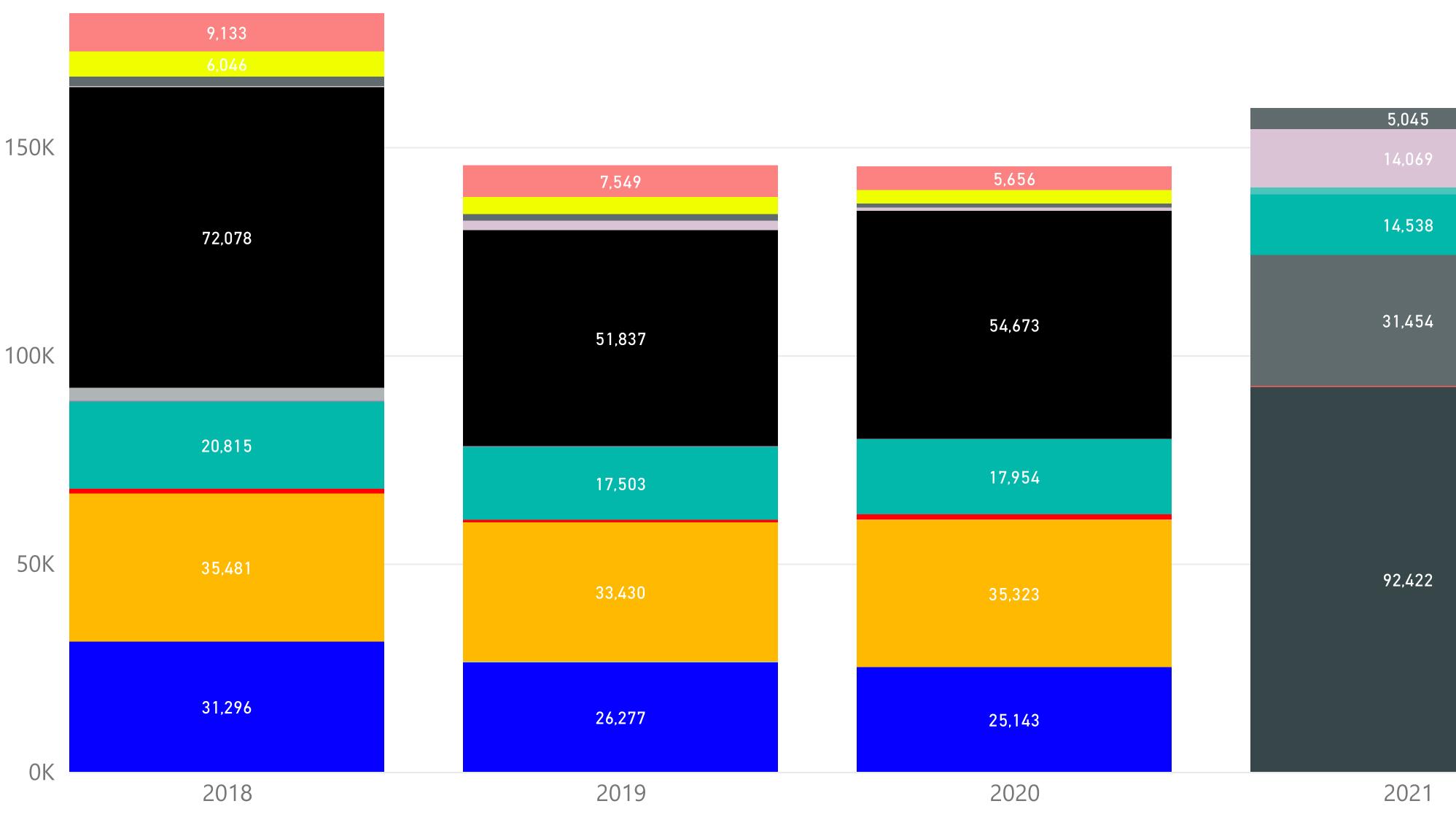
### Outage Device Type

200K

- Auto Transfer Switch
- Breaker
- Cut
- Disconnect Switch
- Elbow 150K
- Fuse
- Gang Operated Switch
- Line Fuse
- Network
- Open
- Pole
- Primary Conductor
- Primary Meter
- Recloser
- Secondary Conductor
- Service Conductor
- Service Point
- Substation
- Substation Breaker

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Switch

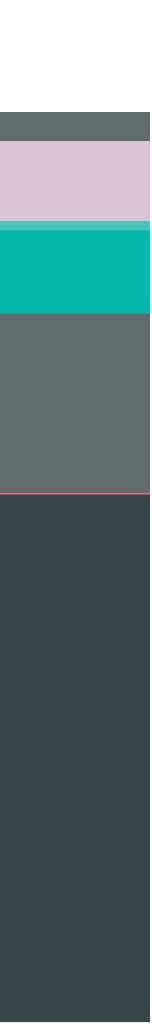


# ENTERGY NEW ORLEANS

Distribution Customer Interruptions (excluding Scheduled Interruptions and Emergency Switching) by Device Type by Year (Jan 1 - Current Date All Years)

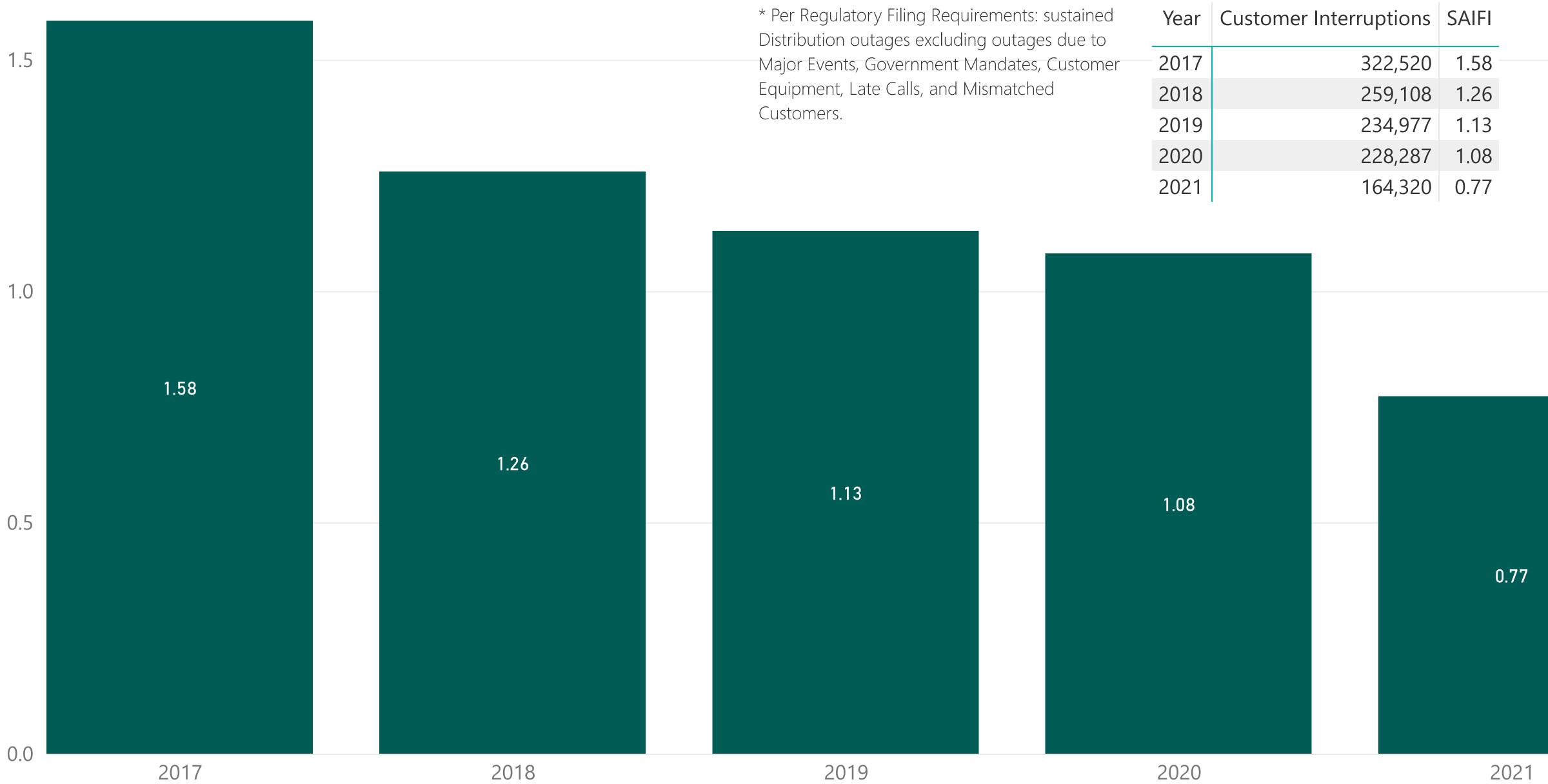
9/30/2021

Current Data Date







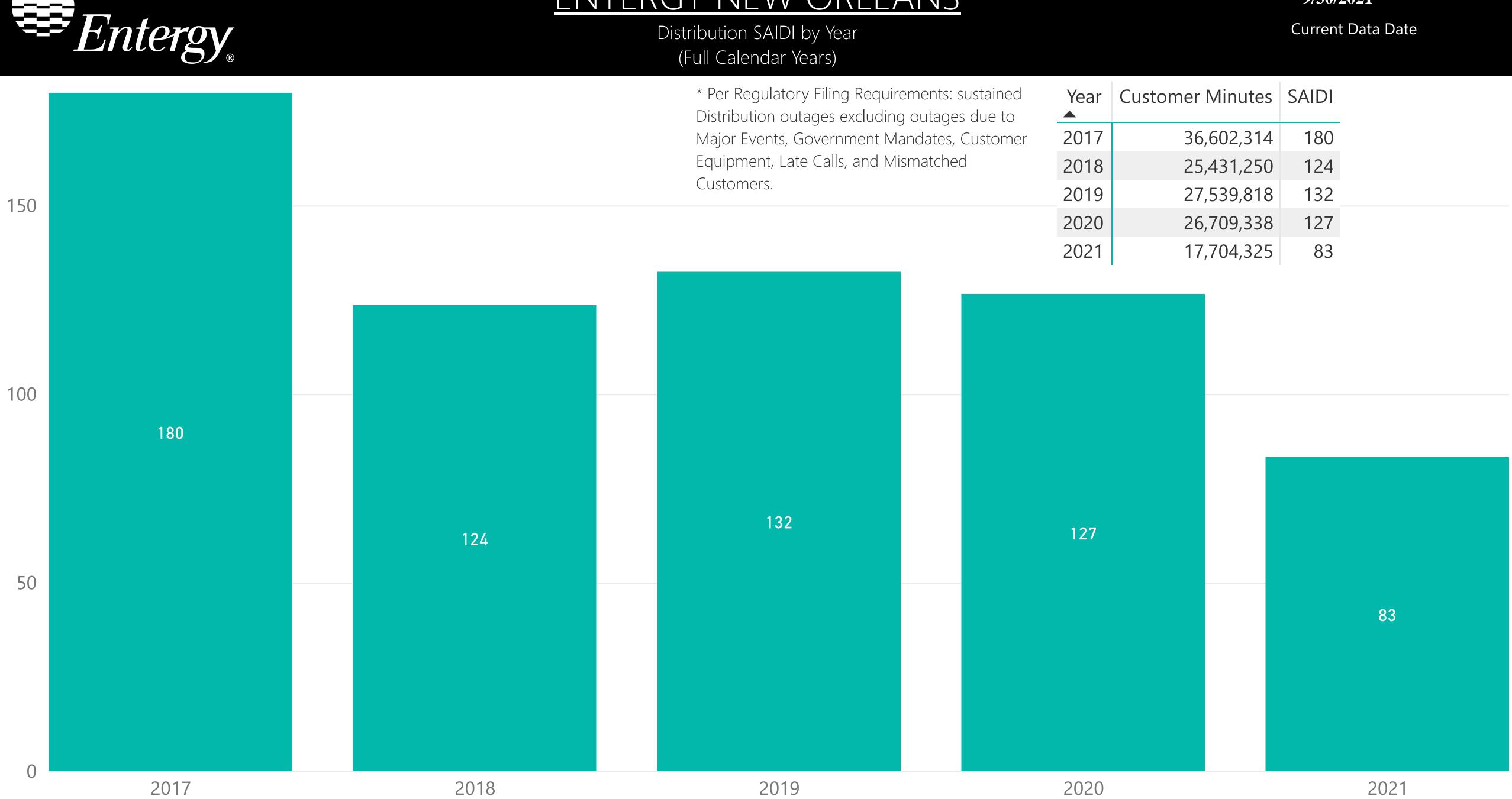


Distribution SAIFI by Year (Full Calendar Years)

Year	Customer Interruptions	SAIFI
2017	322,520	1.58
2018	259,108	1.26
2019	234,977	1.13
2020	228,287	1.08
2021	164,320	0.77







9/30/2021

Year	Customer Minutes	SAIDI
2017	36,602,314	180
2018	25,431,250	124
2019	27,539,818	132
2020	26,709,338	127
2021	17,704,325	83





Transmission Customer Interruptions (excluding Scheduled and Mandated) by Year

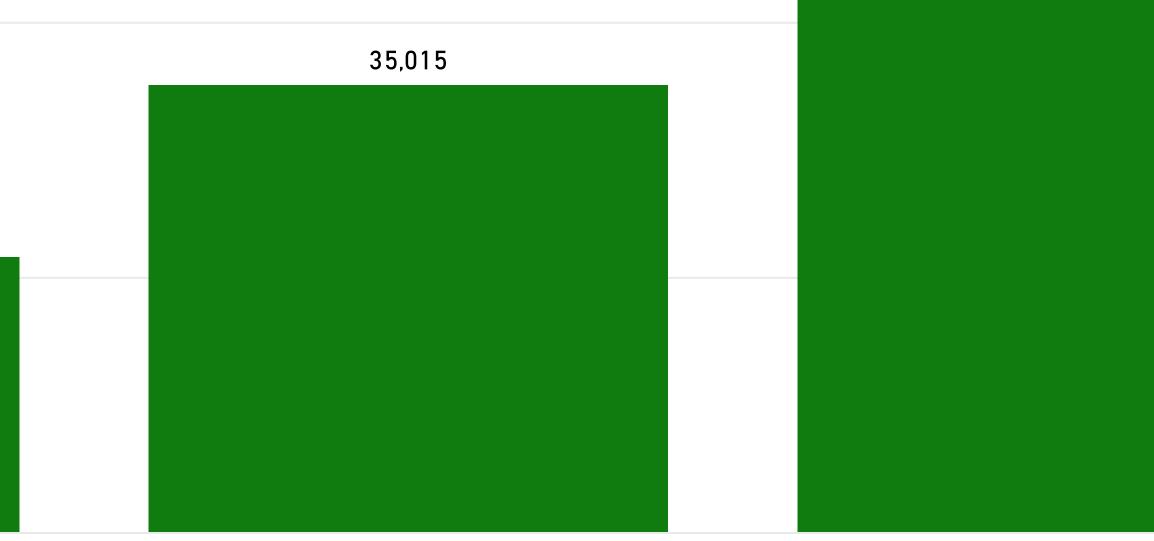
(Jan 1 - Current Date All Years)

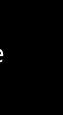
82,435

	82,435	
80K		
COK		
60K		
40K		
		21,540
20K		
ОK		
	2018	2019

### <u>ENTERGY NEW ORLEANS</u>

42,534



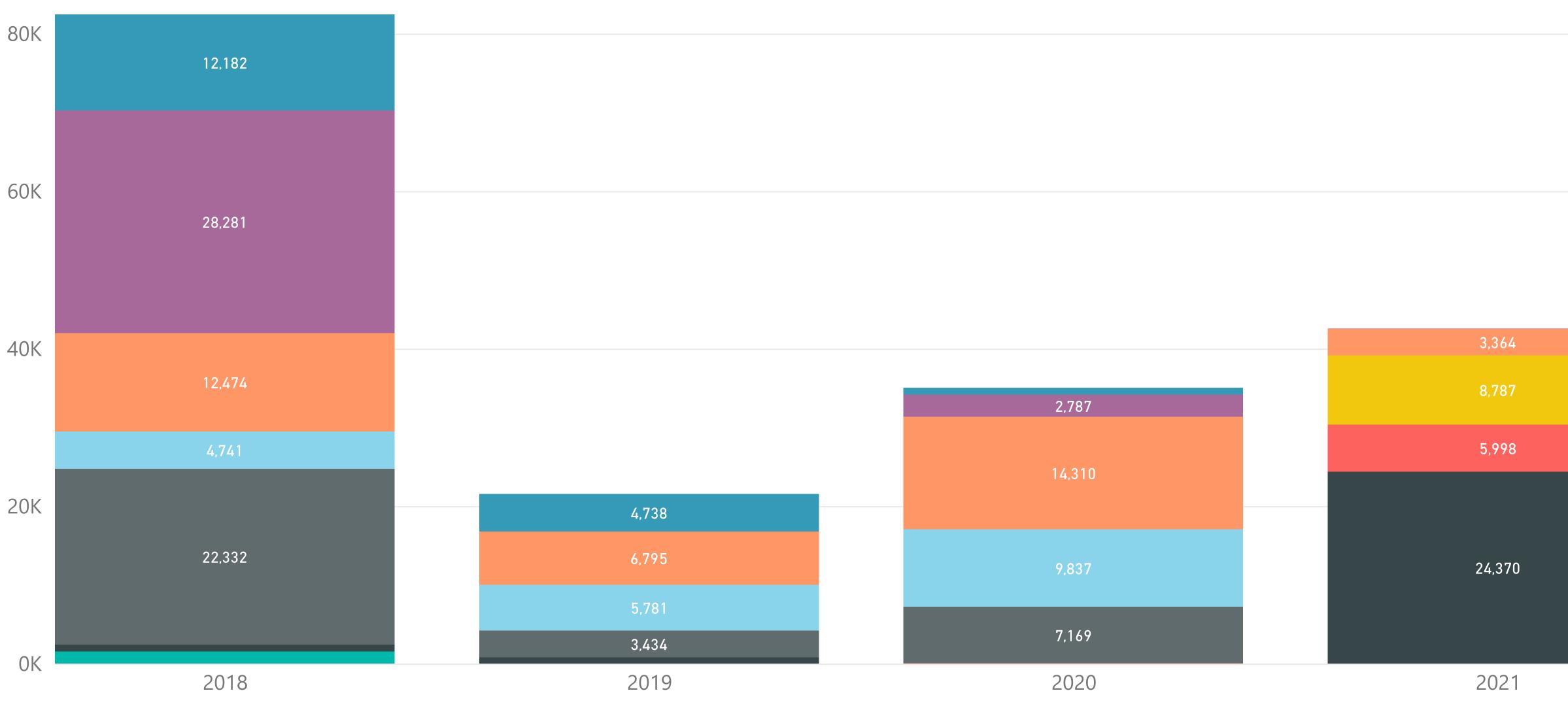




Transmission Customer Interruptions (excluding Scheduled and Emergency Switching) by Month by Year

(Jan 1 - Current Date All Years)

**Month** January February March April May June July August September

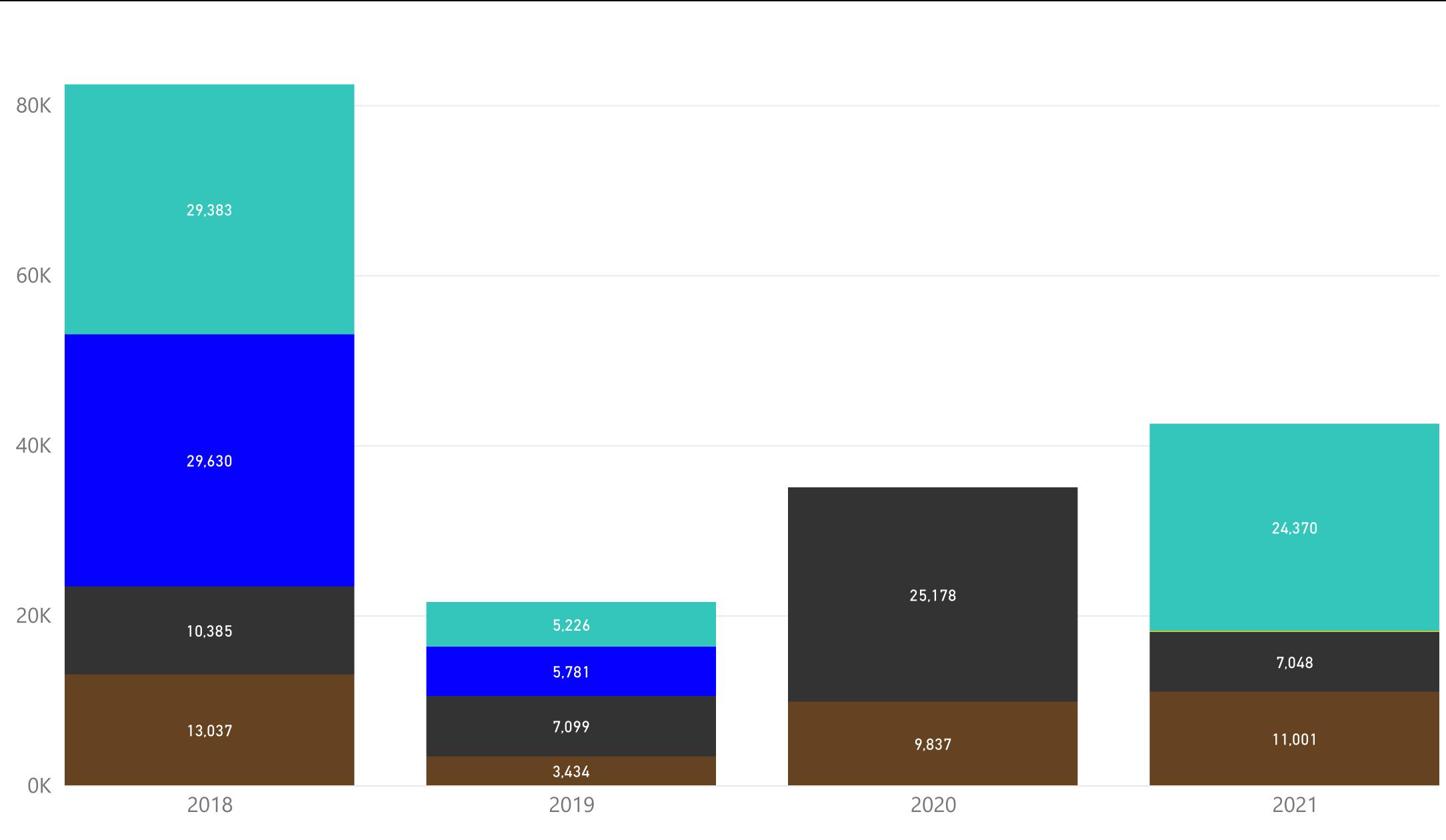


## ENTERGY NEW ORLEANS





- Summary Cause Updated
- Animal
- Equipment Failure
- Lightning
- Human Error
- Other



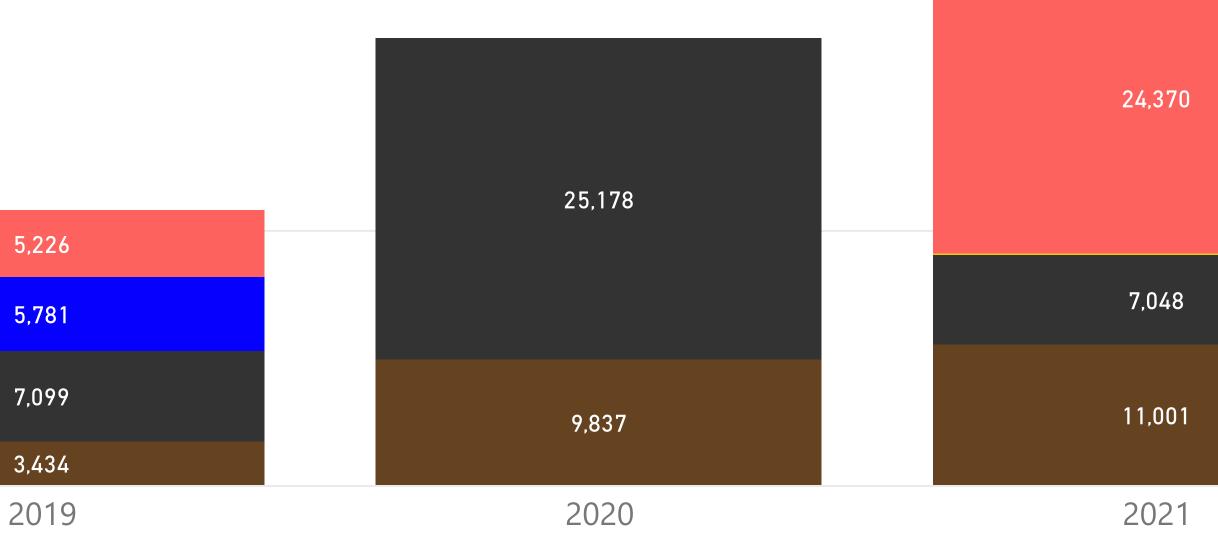
Transmission Customer Interruptions by Outage Cause (excluding Scheduled and Emergency Switching) by Year (Jan 1 - Current Date All Years)



Summary Cause Animal • Equipment Failure 80K Lightning • Human Error Other 29,383 Emergency Switching 60K 40K 29,630 20K 10,385 13,037 0K 2018

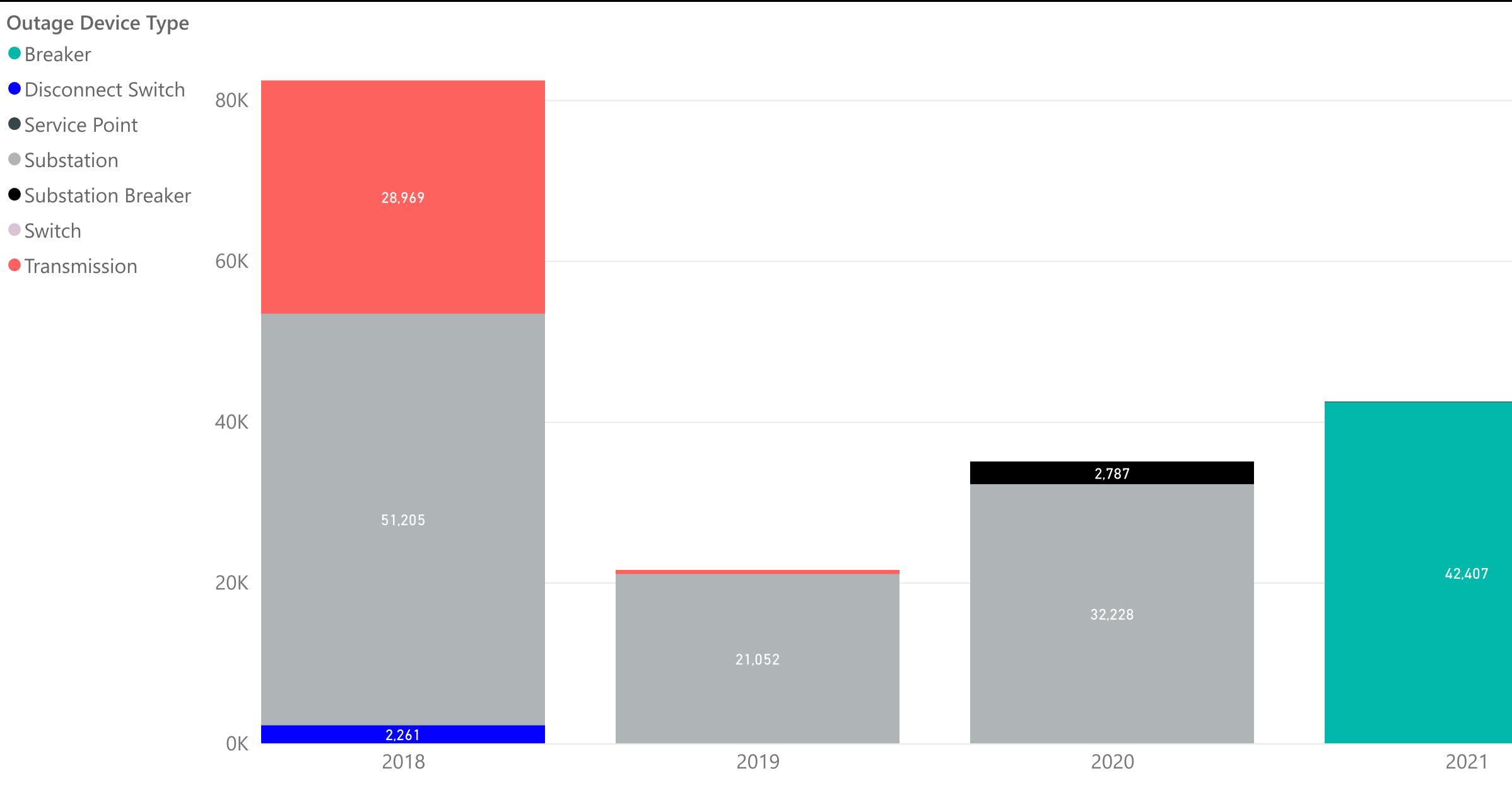
## ENTERGY NEW ORLEANS

Transmission Customer Interruptions by Outage Cause by Year (including Scheduled and Emergency Switching) (Jan 1 - Current Date All Years)







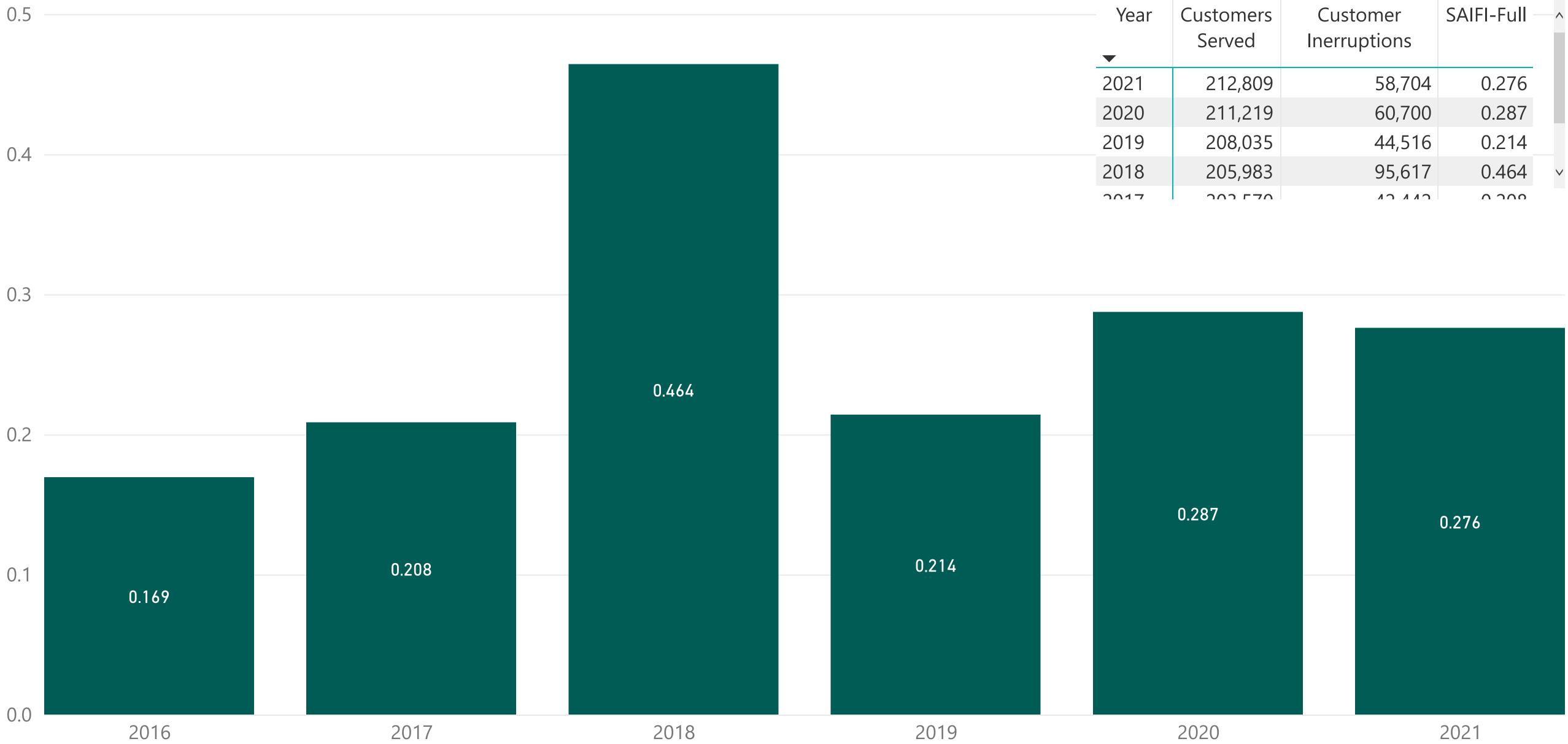


Transmission Customer Interruptions (excluding Scheduled and Emergency Switching) by Device Type by Year (Jan 1 - Current Date All Years)









### 9/30/2021

### Current Data Date

# <u>ENTERGY NEW ORLEANS</u>

### Transmission SAIFI by Year

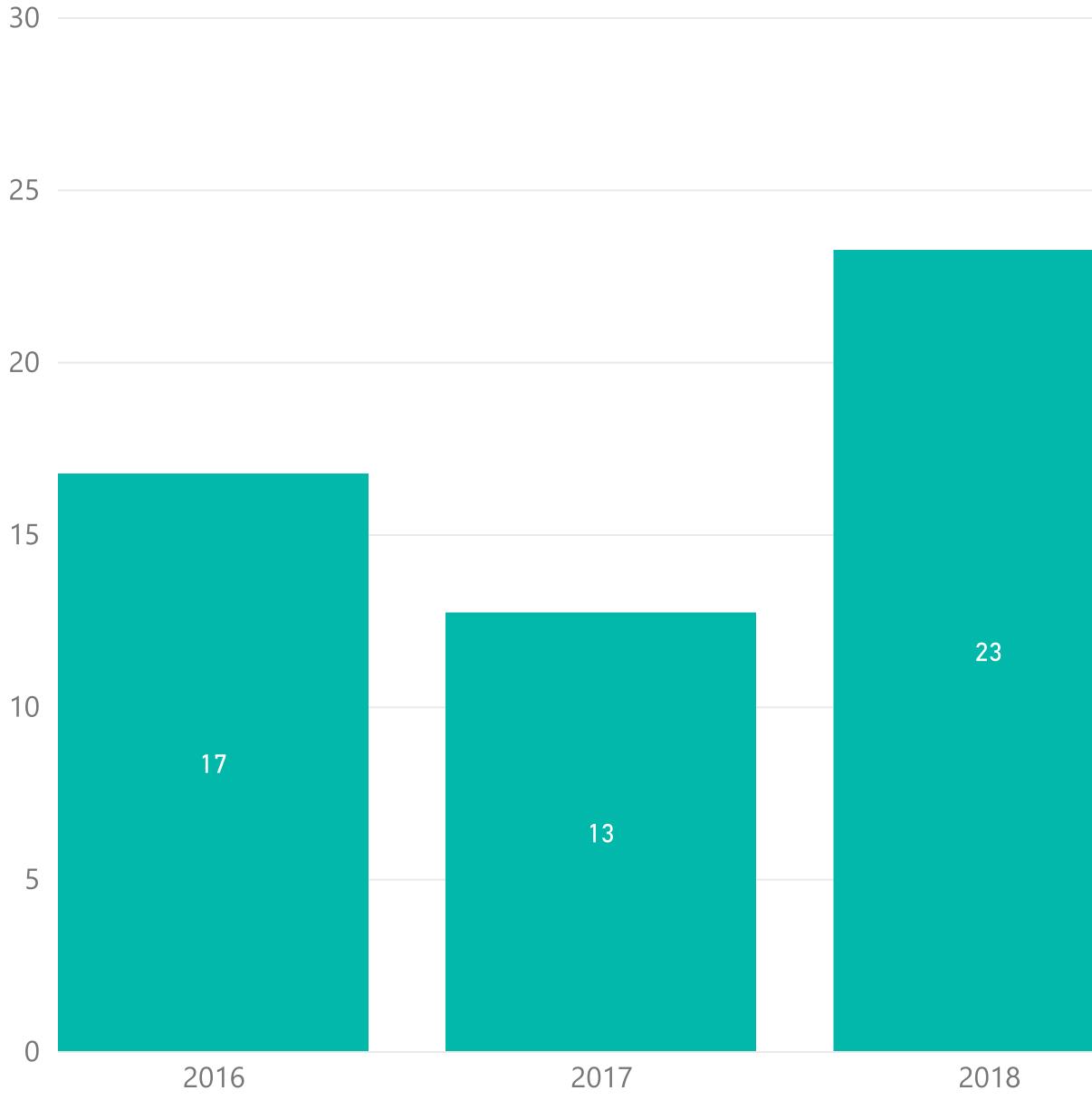
(Full Calendar Years)

Year	Customers Served	Customer Inerruptions	SAI
2021	212,809	58,704	
2020	211,219	60,700	
2019	208,035	44,516	
2018	205,983	95,617	
2017	202 570		





Transmission SAIDI by Year (Full Calendar Years)



# ENTERGY NEW ORLEANS

			Year	Customers Served	Custor Minut		SAI
			2021	212,809	4,52	29,820	
			2020	211,219	4,7	14,500	
			2019	208,035	5,38	80,052	
			2018	205,983	4,78	88,062	
			2017		ר ה	00 701	
	26		22		2	21	
	2019	•	202	20		20	)21

