## RELIABILITY DATA TEMPLATE

Month:

Year:

CUSTOMER CREDITS PROVIDED DURING THE MONTH

Item	Sector	Number of Customers Eligible for Credits	<b>Total Customer Credits (\$)</b>
Customer Credits Provided for Failure to Restore Service	Residential		
within 96 Hours of the Start of Sustained Interruption	Commercial		
during Catastrophic Conditions	Industrial		
Customer Credits Provided for Failure to Restore Service	Residential		
within 48 Hours of the Start of Sustained Interruption	Commercial		
during Gray Sky Conditions	Industrial		
Customer Credits Provided for Failure to Restore Service	Residential		
within 16 Hours of the Start of Sustained Interruption	Commercial		
during Normal Conditions	Industrial		
	Residential		
Customer Credits Provided to Individual Customers Who	Commercial		
Experienced 6 or more Sustained Interruptions.	Industrial		

### WORST PERFORMING CIRCUITS DURING THE MONTH AND YEAR

- (1) For each electric utility with 1,000,000 or more customers, a list of its 10 worst performing circuits for the prior month in terms of SAIDI and SAIFI. For each listed circuit, provide the following information below.
- (2) For each electric utility or cooperative with less than 1,000,000 customers, a list of the worst performing 1% of circuits for the prior month in terms of SAIDI and SAIFI. For each listed circuit, provide the following information below.

Item/Area		Circuit 1	Circuit 2	Circuit 3	Circuit 4	Circuit 5	Circuit 6	Circuit 7	Circuit 8	Circuit 9	Circuit 10
Circuit Nam	ie										
Circuit Numb	er										
SAIDI all weather (monthly)	Residential										
	Commercial										
	Industrial										
	Overall										
SAIDI excluding MEDs (annual											
only)	Residential										
	Commercial										
	Industrial										
	Overall										
Circuit Length (											
1	Residential										
Number of Customers Served	Commercial										
	Industrial										
Substation Name											
<b>Location of Circuit Span - Zip Code</b>											
<b>Location of Circuit Span - Census T</b>	racts										
Last Circuit Trim											
List of Outages and	Causes										

Circuit Name	Item/Area		Circuit 1	Circuit 2	Circuit 3	Circuit 4	Circuit 5	Circuit 6	Circuit 7	Circuit 8	Circuit 9	Circuit 1
Create Commercial			Circuit 1	on cuit 2		Circuit 1	en cuit e	Circuit	Circuit /	Circuit	on cure y	Circuit I
SAFI all weather (monthly)   Recidential												
Connected												
Industrial	(4.00.000)											
ASFF excluding MED (annual oaly)   Residential												
AFF   Eveldential												
only) Residential	SAIFI excluding MEDs (annual				1							
Commercial Industrial		Residential										
Industrial	• •				1							
Circuit length (miles)					1							
Circuit Length (miles)												
Registerial	Circuit Length (											
Number of Cestioners Servee   Cemilo												
Industrial	Number of Customers Served											
ocation of Circuit Span - Zep Zeps Zeps Zeps Zeps Zeps Zeps Zeps												
ocation of Circuit Span - Census Tracts  ast Circuit Trim  List of Outages and Causes  CEMIO CEMII CEMI2 CEMI3 CEMI4 CEMI5 CEMI6 CEMI7 CEMI8 CEMI0+ (number of customers, war-to-date)  Number of CEMI Reporting for Indices CEMI0 through CEMII0+ (number of customers, year-to-date)  CELID8Bours  CELID8Bours  CELID8Bours  CELID8Bours  CELID8Bours  CELID8Bours  CELID8Bours  CELID8Bours	ubstation Name											
Deation of Circuit Span - Census Tracts as Circuit Trim  List of Outages and Causes  CEMIO CEMII CEMI2 CEMI3 CEMI4 CEMI5 CEMI6 CEMI6 CEMI7 CEMI8 CEMI0+ (number of customers, war-to-date)  Number of CELID Reporting for Indices CEMI0 through CEMI10+ (number of customers, year-to-date)  CELIDShours  CELIDS		es										
List of Outages and Causes  CEMIO CEMII CEMI2 CEMI3 CEMI4 CEMI5 CEMI6 CEMI7 CEMI8 CEMI8 CEMI10+ (number of customers, monthly)  Number of CEMI Reporting for Indices CEMI0 through CEMII0+ (number of customers, year-to-date)  Number of CEMI Reporting for Indices CEMI0 through CEMII0+ (number of customers, year-to-date)  Number of CEMI Reporting for Indices CEMI0 through CEMII0+ (number of customers, year-to-date)												
CEMIO	ast Circuit Trim											
Number of CEMI Reporting for Indices CEMI0 through CEMI10+ (number of customers, monthly)  Number of CEMI Reporting for Indices CEMI0 through CEMI10+ (number of customers, year-to-date)  Sumber of CELID Reporting for CELID Rep	List of Outages and	l Causes										
CEMI10+ (number of customers, monthly)  Number of CEMI Reporting for Indices CEMI0 through CEMI10+ (number of customers, year-to-date)  Tumber of CELID Reporting for CELID8hours			CEMI0	CEMI1	CEMI2	CEMI3	CEMI4	CEMI5	CEMI6	CEMI7	CEMI8	CEMI9
CEMI10+ (number of customers, year-to-date)  Tumber of CELID Reporting for CELID Repor												
umber of CELID Reporting for												
umber of CELID Reporting for CELID Reporting f												
	umber of CELID Reporting for	CELID8hours										
Indices: VELID24110UIS	Indices:	CELID24hours										

Storm Outage	Storm #1	Storm #2	Storm #3	Storm #4	Storm #5
Storm Name					
Date(s) of Storm					
Storm Type					
# of Customers Interrupted					
Storm Duration					
Duration of restoration efforts					
\$ spent per event					

CELID48hours

Number of Non-Residential Customers Experiencing

\$ paid in outage credits			
Non-baseload resources requested			
(Y/N)			
# of Company linemen used			
# of contractor workers used			
# of non-baseload workers used			
# of Company crews used			
# of contractor crews used			
Non-baseload crews used			
# wire down personnel used			
Downed wires			
Non-baseload resources cost			

# RELIABILITY DATA REPORTED BY CIRCUIT Month:

Year:																															
		New Service				Outage Restor	ration		CEMI4												Outag	e Causes						Į.	Reliability Metrics (all weat	her)	
	Meter Reading Factor R460.732 (a)	Installation Factor R460.732(b)	Wire Down Relief Factor	R460.732	All Conditions R460.732 (d)	Normal Conditions R460.732 (e)	Gray-Sky Conditions R460.732 (f)	Catastrophic Conditions R460.732 (g)	Sustained Interruption R460.732 (h(i))	as	Line	Clearing/ Tr	ree Trimming			Total Customer outages	Equipment	Lightning	Planned	Power Supply	Public	Vegetation	Weather (other than lightning)	Wildlife	Unknown	Other	SAIDI	SAIFI	CAIDI	ASAI	MAIFI
Circuit Name or Geographical Area	Meter Reading Factor (Percentage)	Business Days or	Number of Minutes until Police/Fire Guarded Downed Wires Reached in Metropolitan Statistical Areas	Number of Minutes until Police/Fire Guarded Downed Wires Reached in Non-Metropolitan Statistical Areas	Percentage of Customers Restored in 36 Hours or Less	Percentage of Customers Restored in 8 Hours or Less	Customers Restored in 24	Percentage of Customers Restored in 48 Hours or Less	Number of Customers Experiencing 4 or More Sustained Interruptions	Cleared (miles)	Capital Spend (S000)	O&M Spend (S000)	Quarterly Line Clearing Target (miles)	Clearing Target	Cumulative Line Clearing Target (%)	Total Customer outages	Total number of outages causes by equipment failure	Total number oj outages caused b lightning	f Total number of y planned and forced outages	outages caused by	outages caused by an act of the public	outager caused by	Total number of outage caused by weather	Total number of outages caued by animal interference	Total number of outages caused by unknonwn causes	Total number of outages caused by other causes	System Average Interruption Duration Index	System Average Interruption Frequency Index	Customer Average Interruption Duration Index (contribution to total CAIDI)	Average Service Availability Index	Momentary Averag Interruption Duration Index
Circuit or Area 1																															
Circuit or Area 2 Circuit or Area 3																															1
Circuit or Area 4																															1
Circuit or Area 5																															
Circuit or Area 6																															
Circuit or Area 7																															
Circuit or Area 8 Circuit or Area 9																															
Circuit or Area 9  Circuit or Area 10																															
All circuits or areas (month)																	1														<del></del>
All circuits or areas (year to date)																	1														
MPSC Annual Performance	95% or more	90% or more	90% or more within 120	90% or more within 180	90% or more customers	90% or more customers	90% or more customers	90% or more customers	6% or less before 2030;	;							•	•			•	•	•	•		•	•	•			

### RELIABILITY DATA REPORTED BY ZIP CODE

Month: Year:																														
		N Si				Outage Restor	ation		CEMI4											Outag	e Causes						Relia	bility Metrics (all wea	ther)	
	Meter Reading Factor R460.732 (a)	New Service Installation Factor R460.732(b)	Wire Down Relief Factor (c)	R460.732	All Conditions R460.732	Normal Conditions R460.732 (e)	Gray-Sky Conditions R460.732 (f)	Catastrophic Conditions R460.732 (g)	Sustained Interruptions R460.732 (h(i))		Line Cle	earing/ Tree Trimm	ing		Total Custome outages	Equipment	Lightning	Planned	Power Supply	Public	Vegetation	Weather (other than lightning)	Wildlife	Unknown	Other	SAIDI	SAIFI	CAIDI	ASAI	MAIFI
Zip Code	Meter Reading Factor (Percentage)	New Services Installed in 15 Business Days or Less (Percentage)	Number of Minutes until Police/Fire Guarded Downed Wires Reached in Metropolitan Statistical Areas	Number of Minutes until Police/Fire Guarded Downed Wires Reached in Non-Metropolitan Statistical Areas	Percentage of Customers Restored in 36 Hours or Les	Percentage of Customer.  Restored in 8 Hours or Le	Percentage of Customers Restored in 24 Hours or Less	Percentage of Customers Restored in 48 Hours or Less		Amount of Line Cleared (miles) Capital Spend (\$000	O&M Spend (\$000)	Quarterly Line Clearing Target (miles)	Quarterly Line Clearing Target (% of internal target met)	Cumulative Line Clearing Target (%)		Total number of outages causes by equipment failure	outages caused by	Total number of planned and forced outages	Total number of outages caused by transmission or generation failure	outages caused by an act of the	Total number of outages caused by trees	Total number of outage caused by weather	Total number of outages caued by animal interference	outages caused by	utages caused by	System Average Interruption Duration Index	System Average Interruption Frequency Index	niterruption	Average Service Availability Index	Momentary Average Interruption Duration Index
Zip Code 1 Zip Code 2 Zip Code 2 Zip Code 3 Zip Code 4 Zip Code 4 Zip Code 5 Zip Code 6 Zip Code 7 Zip Code 7 Zip Code 7 Zip Code 9 Zip Code 9 Zip Code 10 All zip codes (mosth)																														
Zip Code 3 Zip Code 4																												# #		
Zip Code 5 Zip Code 6 Zip Code 7																												1		
Zip Code 8 Zip Code 9																												1		
Zip Code 10 All zip codes (month)																														
All zip codes (year to date)																												$\overline{}$		
MPSC Annual Performance Standard	95% or more	90% or more completed within 15 business days	90% or more within 120 minutes in MSAs	90% or more within 180 minutes in non-MSAs	90% or more customers restored in 36 hours or less	90% or more customers restored in 8 hours or les	90% or more customers restored in 24 hours or les	customers rectored in 49	6% or less before 2030; 5% or less in 2030 or later			•							•	•			•							

# RELIABILITY DATA REPORTED BY CENSUS TRACT Month:

						Outage Restora	ion		CEMI4											Outage	Causes						Reliabilit	y Metrics (all wea	ther)	
	Meter Reading Factor R460.732 (a)	New Service Installation Factor R460.732(b)	Wire Down Relief Factor	R460.73	All Conditions R460.732	Normal Conditions R460.732 (e)	Gray-Sky Conditions R460.732 (f)	Catastrophic Conditions R460.732 (g)	Sustained Interruptions R460.732 (h(i))		Line Cle	aring/ Tree Trimmi	ng		Total Customer outages	Equipment	Lightning	Planned	Power Supply	Public	Vegetation	Weather (other than lightning)	Wildlife	Unknown	Other	SAIDI	SAIFI	CAIDI	ASAI	MAIFI
sus Tract Number	Meter Reading Factor (Percentage)	Business Days or	Number of Minutes until Police/Fire Guarded Downed Wires Reached in Metropolitan Statistical Area	Downed Wires Reached in		Percentage of Customers Restored in 8 Hours or Les	Percentage of Customers Restored in 24 Hours or Less	Percentage of Customers Restored in 48 Hours or Less	Number of Customers Experiencing 4 or More Sustained Interruptions	Amount of Line Cleared (miles) Capital Spend (\$000)	O&M Spend (\$000)	Quarterly Line Clearing Target (miles)	Quarterly Line Clearing Target (% of internal target met)	Cumulative Line Clearing Target (%)	Total Customer outages	Total number of outages causes by equipment failure	Total number of outages caused by lightning	Total number of planned and forced outages	Total number of outages caused by transmission or generation failure	outages caused by an act of the	Total number of outages caused by trees	Total number of outage caused by weather	Total number of outages caued by animal interference	Total number of outages caused by unknonwn causes	outages caused by	System Average Interruption Duration Index	System Average Interruption Frequency Index	Customer Average Interruption Duration Index (contribution to total CAIDI)	Average Service Availability Index	Momentary Average Interruptio Duration Ind
ensus Tract 1 ensus Tract 2																														$\vdash$
ensus Tract 3 ensus Tract 4																														
ensus Tract 4 ensus Tract 5																														t
Census Tract 6																														
Census Tract 5 Census Tract 6 Census Tract 7 Census Tract 8																														<b>+</b>
Census Tract 9 Census Tract 10																														
Census Tract 10  Census Tracts (month)																														<del></del>
ensus Tracts (year to date)																														

On March 3, 2022, the Commission issued an order in U-21122 et al directing Staff to work with utilities to develop a reporting template for filing information pertaining to distribution system reliability, customer outages, and storm response. The schedule established by the Commission included Staff finalizing and filing the template in the U-21122 docket no later than November 18, 2022 and developing a website for this information in early 2023. The reporting template may be amended as it is transitioned to an online format. If you have any questions or concerns, please contact Nicholas Evans at <a href="mailto:evansn@michigan.gov">evansn@michigan.gov</a> or Julie Baldwin at <a href="mailto:baldwinj2@michigan.gov">baldwinj2@michigan.gov</a>.

Filing Frequency	Quarterly Basis	
	January – March data filed May 15	
	April – June data filed August 15	
	July – September data filed Novemb	per 15
		I 1 (90 days for providing year end info)
	· ·	, , , , ,
Where to File	TBD	
Format to File	TBD	
Revisions to	Yes.	
previously		
submitted data		
allowed?		
Sheet 1: Credits, Wor	rst Circuits, Storms (Monthly and Year	to Date Data)
Customer Credits	Number of Customers Eligible for	# of customers who became eligible for
Provided During the Month	Credits	credits during the month
	Total Customer Credits (\$)	Dollar amount of customer credits
		provided on customer bills during the month.
Worst Performing	Collects information about the 10 w	orst performing circuits during the month
Circuits	according to SAIDI and SAIFI	
	Report all weather SAIDI and SAIFI r	monthly and report an annual SAIDI and
	SAIFI excluding Major Event Days.	
	"Location of Circuit Span - Zip codes	" refers to the zip codes where spans of
	the circuit are located.	
	•	racts" refers to the Census tracts where
	spans of the circuit are located.	
	•	re was trimming on the circuit as part of a
	normal tree trim cycle (not reactive	•
	"List of Outages and Causes" - Colle	cts list of outages and their causes.
CEMI	Report both monthly and year-to-da	ate data using number of customers.
CELID	No double counting due to multiple	outages of that fall within the same time
		experiencing two nine-hour outages should
L	' '	, ,

	in multiple CELID metrics. For examoutage may be reported in CELID8h	
Number of Non- Residential Customers Experiencing Momentary Interruptions	5 5	onal time, but Staff expects them to be netric is in utility annual reporting in the
Storm Reporting	Storm	Gray Sky or Catastrophic Conditions for Consumers Energy and DTE Electric; Catastrophic Conditions for UPPCO, UMERC, Alpena, I&M, and NSP.
	Storm Name	Use your utility's naming convention
	Date(s) of Storm	The start date is the date the storm resulted in Gray Sky or Catastrophic Conditions for Consumers Energy and
		DTE Electric, and Catastrophic Conditions for UPPCO, UMERC, Alpena, I&M, and NSP. The end date, which can be the same as the start date, is the date the adverse weather conditions left the electric utility's service territory.
	Storm Type	Wind, Ice, rain, thunderstorm, snow, or some combination of the above.
	Storm Duration	Time, in hours, that the adverse weather conditions were present which resulted in Storm thresholds (see above) being met.
	Duration of Restoration Efforts	Time, in hours, from when the utility first began restoring customers whose outages were the result of the Storm to when the last customer whose outage can be attributed to the Storm is restored. Alternatively, storm declared time to storm closed time.
	\$ Spent per event	Does not include Outage Credits
	\$ paid in Outage Credits	Outage credits paid out as a result of the Storm.
	Non-baseload resources requested (Y/N)	"Non-baseload resources" refers to a subset of contractors that have not worked on the utility's distribution at any time during the seven days prior to the onset of a Storm.
	# of Company lineman used	Company lineman are those directly employed by the utility

	I 6	T
	# of contractor workers used	Contractor workers are those workers
		who are not directly employed by the
	# of non-baseload workers used	Number of non-baseload contractors
	# of non-baseload workers used	
	# of Company grows used	used during the course of the Storm.
	# of Company crews used	Company crews are those whose
		members are directly employed by the
	# of contractor crews used	utility.  Contractor crews are those whose
	# of contractor crews used	members are not directly employed by
		the utility.
	# of non-baseload crews used	Crews consisting of non-baseload
		contractors.
	# of wire down personnel used	Report the number of personnel
		(including contractors) used to travel to
		downed wires sites, guard, and secure
		downed wires. Do not include first
		responders.
	# of Downed Wires	Report only the number of downed
		electric utility wires.
	Non-baseload resources cost	Amount spent on non-baseload
		contractors during the course of the
		storm and subsequent restoration.
•	nthly and Year to Date Data)	
Circuit Name or	If the utility uses geographical areas	· · · · · · · · · · · · · · · · · · ·
Geographical Area-		zip codes, and Census tracks that are in that
Matau Dandina	area.	an an annual includes and all aims its an
Meter Reading	1 .	or geographical areas, and all circuits or
Factor New Service	areas year-to-date.	or areas, and all circuits or areas year to
		or areas, and all circuits or areas year-to-
Installation Factor Line Clearing/Tree	date. Capital spend and O&M spend on	
	1	
Trimming Outside	individual circuits is not required	
Outage Causes MAIFI	IEEE Standard 1366 categories used	T
IVIAIFI	Staff is willing to give utilities additional time, but Staff expects	
	them to be able to report it in one	
	· ·	
	year.	

Sheets 3 and 4: Zip Codes and Census Tracts – If a utility cannot provide information by zip code, the utility must list every circuit in their service territory, and for each circuit, list the zip codes that have circuit equipment located in them.

If a utility cannot pro	vide information by Census Tract, the	utility must list every circuit in their service
territory, and for each	h circuit, list the Census tracts that have	ve circuit equipment located within them.
MAIFI	Staff is willing to give utilities additional time, but Staff expects them to be able to report it in one year.	