## Wildfire Safety Division Attachment 2.3 Wildifire Mitigation Plan Quarterly report - non-spatial data template



Resolution WSD-011 Attachment 2.3

## Instructions for use

- 1. Fill out the tan cells (color represented here) starting with the cell below (D17: Utility). The Utility name will populate the Table tabs to follow. Date modified will vary by table.
- 2. Cells will only accept valid entries. For most cells, this is positive numbers
- 3. For each Table tab, after a modification is made, denote the date of the change in cell C4 for each Table tab.
- 4. Some columns have an additional header in row 5 to serve as clarification for several columns. With the exception of projected data, row 5 will be highlighted in blue (color represented here)
- 5. Some required metrics are future projections. For these, row 5, above the projections will be highlighted light green (color represented here)
  In future submissions, report updated projected numbers if / when projections have changed, and report actuals once the quarter / year has passed.
- 6. For data required annually rather than quarterly (see Tables 7.3 10), report for entire year even if part of the year is projected. Once year has passed, update cell with actuals
- Some tables will have additional instructions provided in a Notes box located in cells D2 D4
   Notes will explain terms, signal where projections are required, and provide other useful information.
- 8. For the initial quarterly submission, utilities are required to submit data on annual metrics for 2015 2020, which should represent the most updated data from the 2020 WMP for years 2015-2019
- \* Do not add or manipulate the template for any of the tabs

Update the below table to establish which year, quarter of the WMP cycle this submission this represents.

Utility	Liberty
First year of 3-year WMP cycle	2020
Submission year	2021
Submission quarter	Q4
Date Modified	3/1/2021

Utility Liberty Notes:
Table No. 1 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV. Date Modified 3/1/2021.

															laceholders for					
Table 1: Recent performance on progress m	netrics									Q2	Q3	Q4			Q4	Q1 Q				
Metric type	#	Progress metric name	2015	2016	2017	2018	18 20:	019 :	2020	2020	2020	2020	2021	2021 202	1 2021	2022 2	1022 2	122 2022		Comments
1. Grid condition findings from inspection -	1.a.	Number of circuit miles inspected from patrol inspections in HFTD - Distribution lines		0	0	0	0	0		)	0	n	0						# circuit miles	
Distribution lines in HFTD								·					•							
	1.b.	Number of circuit miles inspected from detailed inspections in HFTD - Distribution lines		16 1	.40	392	80.9	51.4	. 0	36	61 457	7 1	163						# circuit miles	
	1.c.	Number of circuit miles inspected from other inspections (list types of "other" inspections in comments) in HFTD - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# circuit miles	
	1.d.	Level 1 findings in HFTD for patrol inspections - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.e.	Level 1 findings in HFTD for detailed inspections - Distribution lines		0	0	3	0	0	) 0	) 1	19 3	7	0						# findings	
	1.f.	Level 1 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	) (	0	0	0						# findings	
	1.g.	Level 2 findings in HFTD for patrol inspections - Distribution lines		0	0	0	0	0	) 0	) (	0	0	0						# findings	
	1.h.	Level 2 findings in HFTD for detailed inspections - Distribution lines		0 9	98	17	8	43	0	31	16 110	2	7						# findings	
	1.i.	Level 2 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.j.	Level 3 findings in HFTD for patrol inspections - Distribution lines		0	0	0	0	0	) 0	) (	0	0	0						# findings	
	1.k.	Level 3 findings in HFTD for detailed inspections - Distribution lines	1	48 7:	28 2	2375	523	776	. 0	289	95 702	0 1	171						# findings	
	1.l.	Level 3 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
1. Grid condition findings from inspection -	1.a.ii.	Number of total circuit miles inspected from patrol inspections - Distribution lines																	# circuit miles	
Distribution lines total				U	0	U	U	U	, ,	,	U	U	U							
	1.b.ii.	Number of total circuit miles inspected from detailed inspections - Distribution lines		16 1	40	392	80.9	51.4	. 0	36	61 457	7 1	163						# circuit miles	
	1.c.ii.	Number of total circuit miles inspected from other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# circuit miles	
	1.d.ii.	Level 1 findings for patrol inspections - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.e.ii.	Level 1 findings for detailed inspections - Distribution lines		0	0	3	0	0	) 0	) 1	19 3	7	0						# findings	
	1.f.ii.	Level 1 findings for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.g.ii.	Level 2 findings for patrol inspections - Distribution lines		0	0	0	0	0	) 0	1	0	n	0						# findings	
	1.h.ii.	Level 2 findings for detailed inspections - Distribution lines		0 0	98	17	8	43		) 31	16 110	2	7						# findings	
	1.i.ii.	Level 2 findings for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	-0	, ,	) ),	0	0	0						# findings	
	1.j.ii.	Level 3 findings for patrol inspections - Distribution lines		0	0	0	0	0	, ,	,	0	0	0						# findings	
	1.k.ii.	Level 3 findings for detailed inspections - Distribution lines		48 7	28 2	375	523	776		289	95 701	0 1	71						# findings	
				46 /.	20 2	23/3	523	//6		209	95 /02	0 1								
	1.l.ii.	Level 3 findings for other inspections (list types of "other" inspections in comments) - Distribution lines		U	0	U	U	U	, ,	)	U	U	U						# findings	
Grid condition findings from inspection - Transmission lines in HFTD	1.a.iii.	Number of circuit miles inspected from patrol inspections in HFTD - Transmission lines		0	0	0	0	0	0	)	0	0	0						# circuit miles	
Transmission lines in HFTD	4.1.00	Number of circuit miles inspected from detailed inspections in HFTD - Transmission lines										1 17	20						# 1 16 H	
	1.b.iii.			0	0 4	47.7	14.5	0		) 6.	.4 1/	1 1/.	.28						# circuit miles # circuit miles	
	1.c.iii.	Number of circuit miles inspected from other inspections (list types of "other" inspections in comments) in HFTD - Transmission lines		0	0	0	U	0	) U		U		U							
	1.d.iii.	Level 1 findings in HFTD for patrol inspections - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.e.iii.	Level 1 findings in HFTD for detailed inspections - Transmission lines		0	0	0	0	0	) 0	) :	2	0	0						# findings	
	1.f.iii.	Level 1 findings in HFTD for other inspections (list types of "other" inspections in comments) - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.g.iii.	Level 2 findings in HFTD for patrol inspections - Transmission lines		0	0	0	0	0	) 0	) (	0	0	0						# findings	
	1.h.iii.	Level 2 findings in HFTD for detailed inspections - Transmission lines		0	0	0	0	0	) 0	) (	0	1	0						# findings	
	1.i.iii.	Level 2 findings in HFTD for other inspections (list types of "other" inspections in comments) - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.j.iii.	Level 3 findings in HFTD for patrol inspections - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.k.iii.	Level 3 findings in HFTD for detailed inspections - Transmission lines		0	0	386	152	0	) 0	)	0	7	19						# findings	
	1.l.iii.	Level 3 findings in HFTD for other inspections (list types of "other" inspections in comments) - Distribution lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
1. Grid condition findings from inspection -	1.a.iv.	Number of total circuit miles inspected from patrol inspections - Transmission lines		^	0						0	^	0						# circuit miles	
Transmission lines total				U	U	U	U	U	, ,	,	U	U	U							
	1.b.iv.	Number of total circuit miles inspected from detailed inspections - Transmission lines		0	0 4	47.7	14.5	0	0	0 6.	.4 17	1 17.	.28						# circuit miles	
	1.c.iv.	Number of total circuit miles inspected from other inspections (list types of "other" inspections in comments) - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# circuit miles	
	1.d.iv.	Level 1 findings for patrol inspections - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.e.iv.	Level 1 findings for detailed inspections - Transmission lines		0	0	0	0	0	) 0	) :	2	0	0						# findings	
	1.f.iv.	Level 1 findings for other inspections (list types of "other" inspections in comments) - Transmission lines		0	0	0	0	0	) 0	) (	0	0	0						# findings	
	1.g.iv.	Level 2 findings for patrol inspections - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.h.iv.	Level 2 findings for detailed inspections - Transmission lines		0	0	0	0	0	) 0	)	0	1	0						# findings	
	1.i.iv.	Level 2 findings for other inspections (list types of "other" inspections in comments) - Transmission lines		0	0	0	0	0	) 0	)	0	0	0						# findings	
	1.j.iv.	Level 3 findings for patrol inspections - Transmission lines		0	0	0	0	0	) 0	) !	0	n	0						# findings	
	1.k.iv.	Level 3 findings for detailed inspections - Transmission lines		0	0	206	152	0		,	0	7	10						# findings	
				0	0	300	152	0			0	0	19							
2 V	1.l.iv. 2.a.i	Level 3 findings for other inspections (list types of "other" inspections in comments) - Transmission lines	21	98 29	04	200	959	1352	190	0 24			051						# findings	
	2.a.i	Number of spans insepcted where at least some vegetation was found in non-compliant condition - total	2	98 2	.94	296	959	1352	190	J 24	4/ 30	9 10	J51						# of spans inspected with noncompliant clearance based on applicable rule	s and
inspection - total			19	40 45	05 0	1070	44450	40000			22 200	0 136							regulations at the time of inspection	
	2.a.ii	Number of spans insepcted for vegetation compliance - total					11159	13938											# of spans inspected for vegetation compliance	
2. Vegetation clearance findings from	2.b.i	Number of spans insepcted where at least some vegetation was found in non-compliant condition in HFTD	2:	98 29	94	296	959	1352	190	0 24	47 30	9 10	)51						# of spans inspected with noncompliant clearance based on applicable rule	s and
inspection - in HFTD																			regulations at the time of inspection	
	2.b.ii	Number of spans insepcted for vegetation compliance in HFTD	19	40 159	95 2	2072	11159	13938	4467	7 412	23 389	0 136	45						# of spans inspected for vegetation compliance	
3. Customer outreach metrics	3.a.	# Customers in an evacuation zone for utility-ignited wildfire																	# customers (if customer was in an evacuation zone for multiple wildfires,	ount the
																			customer for each relevant wildfire)	
		# Customers notified of evacuation orders																	# customers (count customer multiple times for each unique wildfire of wi	ich they were
	3.b.																			
	3.b.	# Customers notified of evacuation orders																	notified)	

 Utility
 Liberty Notes:

 Table No.
 2 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV.

 Date Modified
 3/1/2021

Metric type         #           1. Risk events         1.a.	Outcome metric name  Number of all events with probability of ignition, including wires down, contacts with objects, line slap, events with evidence of heat generation, and other events that cause sparking or have the potential to cause ignition	2015	2016	2017 20	018 20	110 20	020 202											
							020 202	0 202	20 202	202:	1 2021	2021	2021	2022	2022	2022	2022	Unit(s) Comments
1h	with evidence of heat generation, and other events that cause sparking or have the potential to cause ignition																	Number per year
1 h		99	111	137	115	278	22	17	31	54								
	Number of wires down (total)	5	10	3	4	5	2	1	2	1								Number of wires down per year
1.c.	Number of outage events not caused by contact with vegetation (total)	16	10	19	5	25	8	5	15	14								Number of outage events per year
1.d.	Number of outage events caused by contact with vegetation (total)	21	17	15	14	35	5	7	12	23								Number of outage events per year
Utility inspection findings - Distribution 2.a.	Number of Level 1 findings (distribution - total)	0	0	3	0	0	0	19	37	0								# findings
2.b.	Number of Level 2 findings (distribution - total)	0	98	17	8	43	0	316	1102	7								# findings
2.c.	Number of Level 3 findings (distribution - total)	148	728	2375	523	776	0	2895	7020	171								# findings
2.d.	Number of distribution circuit miles inspected	43	280	698.4	173.8	137.2	0	740	1161	371								# circuit miles
Utility inspection findings - Transmission 2.a.ii	Number of Level 1 findings (transmission - total)	0	0	0	0	0	0	2	0	0								# findings
2.b.ii	Number of Level 2 findings (transmission - total)	0	0	0	0	0	0	0	1	0								# findings
2.c.ii	Number of Level 3 findings (transmission - total)	0	0	386	152	0	0	0	7	19								# findings
2.d.ii	Number of transmission circuit miles inspected	0	0	45.26	14.48	0	0	6	17	17								# circuit miles
Utility ignited wildfire fatalities	Fatalities due to utility-ignited wildfire (total)	0	0	0	0	0	0	0	0	0								Number of fatalities per year
3.b.	Injuries due to utility-ignited wildfire (total)	0	0	0	0	0	0	0	0	0								Number of injuries per year
Value of assets destroyed by utility-ignited	Value of assets destroyed by utility-ignited wildfire (total)	0	315649	0	0	9855.29	0	0	0	0								Dollars of damage or destruction per year
Structures damaged or destroyed by utility-     ignited wildfire	Number of structures destroyed by utility-ignited wildfire (total)	0	18	0	0	0	0	0	0	0								Number of structures destroyed per year
5.b.	Critical infrastructure damaged/destroyed by utility-ignited wildfire (total)	0	0	0	0	0	0	0	0	0								Number of critical infrastructure damaged/destroyed per year
6. Acreage burned by utility-ignited wildfire 6.a.	Acreage burned by utility-ignited wildfire (total)	10.25	196	0	0	0.5	0	0	0	0								Acres burned per year
7. Number of utility wildfire ignitons 7.a.	Number of ignitions (total) according to existing ignition data reporting requirement	2	1	0	0	1	0	0	0	2								Number per year
7.b.	Number of ignitions in HFTD (subtotal)	2	1	0	0	1	0	0	0	0								Number in HFTD per year
7.c.	Number of ignitions in HFTD Zone 1	0	0	0	0	0	0	0	0	0								Number in HFTD Zone 1 per year
7.c.ii.	Number of ignitions in HFTD Tier 2	2	1	0	0	1	0	0	0	2								Number in HFTD Tier 2 per year
7.c.iii.	Number of ignitions in HFTD Tier 3	0	0	0	0	0	0	0	0	0								Number in HFTD Tier 3 per year
7.d.	Number of ignitions in non-HFTD (subtotal)	0	0	0	0	0	0	0	0	0								Number in non-HFTD per year
Fatalities resulting from utility wildfire     8.a.	Fatalities due to utility wildfire mitigation activities (total) - "activities" defined as all activities accounted for in	0	0	0	0	0	0	0	0	0								Number of fatalities per year
mitigation initiatives	the 2020 WMP proposed WMP spend																	
OSHA-reportable injuries from utility wildfire 9.a.	OSHA-reportable injuries due to utility wildfire mitigation activities (total) - "activities" defined as all activities	0	0	0	0	0	0	0	0	0								Number of OSHA-reportable injuries per year
mitigation initiatives	accounted for in the 2020 WMP proposed WMP spend																	

Utility	Liberty
Table No.	3
Date Modified	3/1/2021

	2 Q:			

Table 3: List an	description of additional metrics								Q1	Q	2 Q	3 Q	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Metric	Definition	Purpose	Assumptions made to connect metric to purpos	e Third-party validation (if any)	2015	016	2017 2	018 20	19 202	20 20	020 20	020 2	2020	2021	2021	2021	2021	2022	2022	2022	2022	Unit(s)	Comments

Utility	Liberty
Table No.	4
Date Modified	3/1/2021

Table 4: Fatalities due to utility wildf	ire mitigation in	itiatives						Q1	Q2	Q3	Q4	Q1	Q2	2 Q	23	Q4	Q1	Q2	Q3	Q4		
Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	2020	2020	202	20 202	0 202	1 20	21 20	2021	2021	2022	2022	2022	2022	Unit(s) Comments	
1. Fatalities - Full-time Employee	1.a.	Fatalities due to utility inspection - Full-time employee		0	0	0	0	0	0	0	0	0									# fatalities	
	1.b.	Fatalities due to vegetation management - Full-time employee		0	0	0	0	0	0	0	0	0									# fatalities	
	1.c.	Fatalities due to utility fuel management - Full-time employee		0	0	0	0	0	0	0	0	0									# fatalities	
	1.d.	Fatalities due to grid hardening - Full-time employee		0	0	0	0	0	0	0	0	0									# fatalities	
	1.e.	Fatalities due to other - Full-time employee		0	0	0	0	0	0	0	0	0									# fatalities	
2. Fatalities - Contractor	2.a.	Fatalities due to utility inspection - Contractor		0	0	0	0	0	0	0	0	0									# fatalities	
	2.b.	Fatalities due to vegetation management - Contractor		0	0	0	0	0	0	0	0	0									# fatalities	
	2.c.	Fatalities due to utility fuel management - Contractor		0	0	0	0	0	0	0	0	0									# fatalities	
	2.d.	Fatalities due to grid hardening - Contractor		0	0	0	0	0	0	0	0	0									# fatalities	
	2.e.	Fatalities due to other - Contractor		0	0	0	0	0	0	0	0	0									# fatalities	
3. Fatalities - Member of public	3.a.	Fatalities due to utility inspection - Public		0	0	0	0	0	0	0	0	0									# fatalities	
	3.b.	Fatalities due to vegetation management - Public		0	0	0	0	0	0	0	0	0									# fatalities	
	3.c.	Fatalities due to utility fuel management - Public		0	0	0	0	0	0	0	0	0									# fatalities	
	3.d.	Fatalities due to grid hardening - Public		0	0	0	0	0	0	0	0	0									# fatalities	
	3.e.	Fatalities due to other - Public		0	0	0	0	0	0	0	0	0									# fatalities	

Utility	Liberty
Table No.	5
Date Modified	3/1/2021

Date Modified	3/1/2	VEZ.										Note: T	hese colum	nc are nla	ceholders for	future OP	suhmissions				
Table 5: OSUA								01	0.3	0.3	0.4	O1	nese coluin	iiis ure più	centituers jui	Julure Qn	SUDITIISSIOTIS	. 02	Q4		
Table 5: OSHA-reportable injuries due to	utility wildrif								Ų2	Ų3	Ų4	QI	Ų2	Ų3	Ų4	QI	Ų2	Ų3	Q4		
Metric type	#	Outcome metric name	2015	2016	2017	2018	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022	2022	Unit(s)	Comments
1. OSHA injuries - Full-time Employee	1.a.	OSHA injuries due to utility inspection - Full-time employee		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	1.b.	OSHA injuries due to vegetation management - Full-time employee		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	1.c.	OSHA injuries due to utility fuel management - Full-time employee		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	1.d.	OSHA injuries due to grid hardening - Full-time employee		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	1.e.	OSHA injuries due to other - Full-time employee		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
2. OSHA injuries - Contractor	2.a.	OSHA injuries due to utility inspection - Contractor		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	2.b.	OSHA injuries due to vegetation management - Contractor		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	2.c.	OSHA injuries due to utility fuel management - Contractor		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	2.d.	OSHA injuries due to grid hardening - Contractor		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	2.e.	OSHA injuries due to other - Contractor		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
<ol><li>OSHA injuries - Member of public</li></ol>	3.a.	OSHA injuries due to utility inspection - Public		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	3.b.	OSHA injuries due to vegetation management - Public		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	3.c.	OSHA injuries due to utility fuel management - Public		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	3.d.	OSHA injuries due to grid hardening - Public		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	
	3.e.	OSHA injuries due to other - Public		0	0	0	0	0	0	0	0	0								# OSHA-reportable injuries	

Utility	Liberty
Table No.	6
Date Modified	3/1/2021

													Note: Th	hese column	s are place	eholders fo	r future QF	R submissi	ons.		
able 6: Weather patterns								Q1	Q2	2 (	Q3 (	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Metric type	#	Outcome metric name	2015	2016	2017	201	18 201	.9 202	0 20	20 2	2020 2	2020	2021	2021	2021	2021	2022	2022	202	2022	Unit(s) Comments
. Red Flag Warning Overhead circuit mile	1.a.	Red Flag Warning Overhead circuit mile days - entire utility territory	2	72	94	193	3134	869	0	101	4679	2093	3								Sum of overhead circuit miles of utility grid subject to Red Flag Warning each
Days																					day within a given time period, calculated as the number of overhead circuit
																					miles that were under an RFW multiplied by the number of days those circuit
																					miles were under said RFW. For example, if 100 overhead circuit miles were
																					under an RFW for 1 day, and 10 of those miles were under RFW for an
																					additional day, then the total RFW OH circuit mile days would be 110.
	1.b.	Red Flag Warning Overhead circuit mile days - HFTD Zone 1		0	0	0	0	1	0	0	3	2	2								Red Flag Warning Overhead circuit mile days, see above for definition
	1.c.	Red Flag Warning Overhead circuit mile days - HFTD Tier 2	1	40	78	118	2593	727	0	99	3822	1737	7								Red Flag Warning Overhead circuit mile days, see above for definition
	1.d.	Red Flag Warning Overhead circuit mile days - HFTD Tier 3		0	0	0	306	77	0	0	442	212	2								Red Flag Warning Overhead circuit mile days, see above for definition
	1.e.	Red Flag Warning Overhead circuit mile days - Non-HFTD	1	.12	14	64	171	48	0	2	313	101	1								Red Flag Warning Overhead circuit mile days, see above for definition
2. Wind conditions	2.a.		8	64 3	3508	180	126	108	11	0	0	862	2								Sum of overhead circuit miles of utility grid subject to High Wind Warnings
																					(HWW, as defined by the National Weather Service) each day within a given
																					time period, calculated as the number of overhead circuit miles that were under
																					an HWW multiplied by the number of days those miles were under said HWW.
																					For example, if 100 overhead circuit miles were under an HWW for 1 day, and
																					10 of those miles were under HWW for an additional day, then the total HWW
																					OH circuit mile days would be 110.
		High wind warning overhead circuit mile days																			
. Other	3.a.	Other relevant weather pattern metrics tracked (add additional rows as																			
		needed)																			

Tel. Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV.

3/1/2021
Data from 2015 - 2020 Q2 should be actual numbers. 2020 Q3 - 2023 should be projected. In future submissions update projected numbers with actuals

 
 Number of risk events
 Q1
 Q2
 Q3
 Q4
 Q1
 Q2
 Q3
 Q4
 Q1
 Q2
 Q3
 Q4
 Table 7.1: Key recent and projected drivers of risk events

	ojected drivers of risk events		Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4		
Risk Event category	Cause category	II Sub-cause category	Are risk events tracked for ignition driver? (yes / no) 2015 2016 2017 2018 2019 2020 2020 2020 2020 2021 2021 2021	Unit(s)	Comments
Wire down event - Distribution	on 1. Contact from object - Distribution	1.a. Veg. contact- Distribution	Yes 1 1 1 1 1 2 1 1 1 1 1 1 1 1	# risk events (excluding ignitions)	
		1.b. Animal contact- Distribution	Yes	# risk events (excluding ignitions)	
		1.c. Balloon contact- Distribution	Урс	# risk events (excluding ignitions)	
		1.d. Vehicle contact- Distribution	Vac 1 1 1 1 1	# risk events (excluding ignitions)	
		1.0. Venice contact- Distribution	TES 1 1 1 1	# risk events (excluding ignitions)	
		1.e. Other contact from object - Distribution	Yes	# risk events (excluding ignitions)	
	2. Equipment / facility failure - Distribution	2.a. Connector damage or failure- Distribution	Yes 1	# risk events (excluding ignitions)	
		2.b. Splice damage or failure — Distribution	Yes	# risk events (excluding ignitions)	
		2.c. Crossarm damage or failure - Distribution	Yes 1	# risk events (excluding ignitions)	
		2.d. Insulator damage or failure- Distribution	Yes	# risk events (excluding ignitions)	
		2.e. Lightning arrestor damage or failure- Distribution	Yes	# risk events (excluding ignitions)	
		2.f. Tap damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		2.g. Tie wire damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		2.h. Other - Distribution	Yes 1 2 1 1	# risk events (excluding ignitions)	
	3. Wire-to-wire contact - Distribution	3.a. Wire-to-wire contact / contamination- Distribution	Yes 2 1 1 1	# risk events (excluding ignitions)	
	4. Contamination - Distribution	4.a. Contamination - Distribution	Yac	# risk events (excluding ignitions)	
	5. Utility work / Operation	5.a. Utility work / Operation	Vac	# risk events (excluding ignitions)	
	6. Vandalism / Theft - Distribution	6.a. Vandalism / Theft - Distribution	TO Ver	# risk events (excluding ignitions)	
	7. Other- Distribution	7.a. All Other- Distribution	Tes	# risk events (excluding ignitions)	
			res Yes 9 3 1 5 1 1	# risk events (excluding ignitions) # risk events (excluding ignitions)	
	8. Unknown- Distribution	8.a. Unknown - Distribution	Yes 9 3 1 5 1 1	# risk events (excluding ignitions)	
Wire down event - Transmissio	ion 9. Contact from object - Transmission	9.a. Veg. contact-Transmission		# risk events (excluding ignitions)	
		9.b. Animal contact- Transmission		# risk events (excluding ignitions)	
		9.c. Balloon contact- Transmission		# risk events (excluding ignitions)	
		9.d. Vehicle contact- Transmission		# risk events (excluding ignitions)	
		9.e. Other contact from object - Transmission		# risk events (excluding ignitions)	
	10. Equipment / facility failure - Transmission	10.a.		# risk events (excluding ignitions)	
		Connector damage or failure- Transmission			
		<ol> <li>Splice damage or failure — Transmission</li> </ol>		# risk events (excluding ignitions)	
		10.c. Crossarm damage or failure - Transmission		# risk events (excluding ignitions)	
		10.d. Insulator damage or failure- Transmission		# risk events (excluding ignitions)	
		10.e. Lightning arrestor damage or failure-Transmission		# risk events (excluding ignitions)	
		10.f. Tap damage or failure - Transmission		# risk events (excluding ignitions)	
		10.g. Tie wire damage or failure - Transmission		# risk events (excluding ignitions)	
		10 g. The wire damage or failure - Transmission  10 h Other - Transmission		# rick quants (aveluding ignitions)	
	44 140-14-1-0-1-1-1-1			# risk events (excluding ignitions)	
		11.a. Wire-to-wire contact / contamination- Transmission		# risk events (excluding ignitions)	
		12.a. Contamination - Transmission		# risk events (excluding ignitions)	
	13. Utility work / Operation	13.a. Utility work / Operation		# risk events (excluding ignitions)	
		14.a. Vandalism / Theft - Transmission		# risk events (excluding ignitions)	
	15. Other- Transmission	15.a. All Other-Transmission		# risk events (excluding ignitions)	
		16.a. Unknown - Transmission		# risk events (excluding ignitions)	
Outage - Distribution	17. Contact from object - Distribution	17.a. Veg. contact- Distribution	Yes 16 18 14 34 5 7 11 21 5 5 10 10 5 5 10 10	# risk events (excluding ignitions)	
		17.b. Animal contact- Distribution	Yes 3 11 2 22 1 14 6 1 2 6 6 1 2 6 6	# risk events (excluding ignitions)	
		17.c. Balloon contact- Distribution	Yes	# risk events (excluding ignitions)	
		17.d. Vehicle contact- Distribution	Yes 10 1 6 8 4 2 7 2 2 2 2 2 2 2 2	# risk events (excluding ignitions)	
		17.e. Other contact from object - Distribution	Yac	# risk events (excluding ignitions)	
		18.a. Capacitor bank damage or failure- Distribution	Vac	# risk events (excluding ignitions)	
	20. Equipment / recintly reliable Distribution	18.b. Conductor damage or failure — Distribution	Var. 40 5 4 0 2 4 5 45 2 2 7 7 2 2 7 7	# risk events (excluding ignitions)	
		18.c. Fuse damage or failure – Distribution	Yes         10         5         4         9         3         4         6         16         3         3         7         7         3         3         7         7           Yes         16         46         50         122         10         9         10         13         15         15         15         15         15         15         15         15         15         15         15         15         11         1	# risk events (excluding ignitions)	
			Tes 10 40 50 122 10 9 10 13 15 15 15 15 15 15 15	# risk events (excluding ignitions)	
		18.d. Lightning arrestor damage or failure- Distribution	Yes 1 1 4 1 1 1 1 1 1	# risk events (excluding ignitions)	
		18.e. Switch damage or failure- Distribution	Yes	# risk events (excluding ignitions)	
		18.f. Pole damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		<ol> <li>Insulator and brushing damage or failure - Distribution</li> </ol>	Yes	# risk events (excluding ignitions)	
		18.h. Crossarm damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		<ol> <li>Voltage regulator / booster damage or failure - Distribution</li> </ol>	Yes	# risk events (excluding ignitions)	
		18.j. Recloser damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		18.k. Anchor / guy damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		18.I. Sectionalizer damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		18.m. Connection device damage or failure - Distribution	Yes	# risk events (excluding ignitions)	
		18.n. Transformer damage or failure - Distribution	Yes 7 13 7 22 2 3 12 15 3 3 7 7 3 3 7 7	# risk events (excluding ignitions)	
		18.o. Other - Distribution	Yes 59 23 28 42 8 11 12 22 12 12 12 12 12 12 12 12 12	# risk events (excluding ignitions)	
		19.a. Wire-to-wire contact / contamination- Distribution	Yes         7         13         7         22         2         3         12         15         3         3         7         7         3         3         7         7           Yes         59         23         28         42         8         11         12         22         12	# risk events (excluding ignitions)	
	20. Contamination - Distribution	20.a. Contamination - Distribution	Yac	# risk events (excluding ignitions)	
		21.a. Utility work / Operation	Yac	# risk events (excluding ignitions)	
		22.a. Vandalism / Theft - Distribution	Vac	# risk events (excluding ignitions)	
		23.a. All Other- Distribution	Yes 14 7 8 22 15 10 10 15 15 10 10 15	# risk events (excluding ignitions)	
	24. Unknown- Distribution	24.a. Unknown - Distribution	1es 14 / 0 22 13 10 10 13 13 10 10 15	# risk events (excluding ignitions)	
		24.8. Unknown - Distribution	165	# risk events (excluding ignitions)	
Outage - Transmission	25. Contact from object - Transmission	25.a. Veg. contact- Transmission		# risk events (excluding ignitions)	
		25.b. Animal contact-Transmission		# risk events (excluding ignitions)	
		25.c. Balloon contact- Transmission		# risk events (excluding ignitions)	
		25.d. Vehicle contact-Transmission		# risk events (excluding ignitions)	
		25.e. Other contact from object - Transmission		# risk events (excluding ignitions)	
	26. Equipment / facility failure - Transmission	26.a.		# risk events (excluding ignitions)	
		Capacitor bank damage or failure-Transmission			
		26.b. Conductor damage or failure — Transmission		# risk events (excluding ignitions)	
		26.c. Fuse damage or failure - Transmission		# risk events (excluding ignitions)	
		26.d. Lightning arrestor damage or failure- Transmission		# risk events (excluding ignitions)	
		26.e. Switch damage or failure- Transmission		# risk events (excluding ignitions)	
		26.f. Pole damage or failure - Transmission		# risk events (excluding ignitions)	
		26.g. Insulator and brushing damage or failure - Transmission		# risk events (excluding ignitions)	
		26.h. Crossarm damage or failure - Transmission		# risk events (excluding ignitions)	
		26.i. Voltage regulator / booster damage or failure - Transmission		# risk events (excluding ignitions)	
		26.j. Recloser damage or failure - Transmission		# risk events (excluding ignitions)	
		26.k. Anchor / guy damage or failure - Transmission		# risk events (excluding ignitions)	
		26.1. Sectionalizer damage or failure - Transmission		# risk events (excluding ignitions)	
		26.m. Connection device damage or failure - Transmission		# rick events (excluding ignitions)	
				# risk events (excluding ignitions)	
		26.n. Transformer damage or failure - Transmission		# risk events (excluding ignitions)	
		26.o. Other - Transmission		# risk events (excluding ignitions)	
		27.a. Wire-to-wire contact / contamination- Transmission 28.a. Contamination - Transmission		# risk events (excluding ignitions)	
				# risk events (excluding ignitions)	
		29.a. Utility work / Operation		# risk events (excluding ignitions)	
		30.a. Vandalism / Theft - Transmission		# risk events (excluding ignitions)	
		31.a. All Other-Transmission		# risk events (excluding ignitions)	
	32. Unknown- Transmission	32.a. Unknown - Transmission		# risk events (excluding ignitions)	
Ignition - Distribution	33. Contact from object - Distribution	33.a. Veg. contact- Distribution	Yes 1 1 2 1 1	# ignitions	
		33.b. Animal contact- Distribution	Yes	# ignitions	
		33.c. Balloon contact- Distribution	Yes	# ignitions	
		33.d. Vehicle contact- Distribution	Yes 1 1 1 1 1	# ignitions	
		33.e. Other contact from object - Distribution	Урс	# ignitions	
	34. Equipment / facility failure - Distribution	34.a. Capacitor bank damage or failure- Distribution	Vac	# ignitions	
	54. Equipment / facility failure - distribution	34.b. Conductor damage or failure — Distribution	Vac 2 4	# ignitions	
		34.b. Conductor damage or failure — Distribution  34.c. Fuse damage or failure - Distribution	Yes 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	# ignitions	
		34.c. Fuse damage or failure - Distribution 34.d. Lightning arrestor damage or failure- Distribution	res 1 1 2 1 1 1 1 1	# ignitions # ignitions	
		34.u. Ligitining arrestor damage or railure- Distribution	TES.		
		34.e. Switch damage or failure - Distribution  34.f. Pole damage or failure - Distribution	res		
		34.e. Switch damage or failure- Distribution	Yes		# ignitions # ignitions # ignitions

		34.g.	Insulator and brushing damage or failure - Distribution	Yes					# ignitions	
		34.h.	Crossarm damage or failure - Distribution	Yes		1			# ignitions	
		34.i.	Voltage regulator / booster damage or failure - Distribution	Yes					# ignitions	
		34.j.	Recloser damage or failure - Distribution	Yes					# ignitions	
		34.k.	Anchor / guy damage or failure - Distribution	Yes					# ignitions	
		34.I.	Sectionalizer damage or failure - Distribution	Yes					# ignitions	
		34.m.	Connection device damage or failure - Distribution	Yes					# ignitions	
		34.n.	Transformer damage or failure - Distribution	Yes	1	2 1	2	1	# ignitions	
		34.0.	Other - Distribution	Yes	4	3 9 1 2	4 1 1	1 1 1 1	# ignitions	
	35. Wire-to-wire contact - Distribution	35.a.	Wire-to-wire contact / contamination- Distribution	Yes					# ignitions	
	36. Contamination - Distribution	36.a.	Contamination - Distribution	Yes					# ignitions	
	37. Utility work / Operation	37.a.	Utility work / Operation	Yes					# ignitions	
	38. Vandalism / Theft - Distribution	38.a.	Vandalism / Theft - Distribution	Yes	1				# ignitions	
	39. Other- Distribution	39.a.	All Other- Distribution	Yes					# ignitions	
	40. Unknown- Distribution	40.a.	Unknown - Distribution	Yes					# ignitions	
×	Ignition - Transmission 41. Contact from object - Transmission	41.a.	Veg. contact-Transmission						# ignitions	
		41.b.	Animal contact- Transmission						# ignitions	
		41.c.	Balloon contact- Transmission						# ignitions	
		41.d.	Vehicle contact- Transmission						# ignitions	
		41.e.	Other contact from object - Transmission						# ignitions	
	42. Equipment / facility failure - Transmission	42.a.							# ignitions	
			Capacitor bank damage or failure- Transmission							
		42.b.	Conductor damage or failure — Transmission						# ignitions	
		42.c.	Fuse damage or failure - Transmission						# ignitions	
		42.d.	Lightning arrestor damage or failure- Transmission						# ignitions	
		42.e.	Switch damage or failure- Transmission						# ignitions	
		42.f.	Pole damage or failure - Transmission						# ignitions	
		42.g.	Insulator and brushing damage or failure - Transmission						# ignitions	
		42.h.	Crossarm damage or failure - Transmission						# ignitions	
		42.i.	Voltage regulator / booster damage or failure - Transmission						# ignitions	
		42.j.	Recloser damage or failure - Transmission						# ignitions	
		42.k.	Anchor / guy damage or failure - Transmission						# ignitions	
		42.I.	Sectionalizer damage or failure - Transmission						# ignitions	
		42.m.	Connection device damage or failure - Transmission						# ignitions	
		42.n.	Transformer damage or failure - Transmission						# ignitions	
		42.0.	Other - Transmission						# ignitions	
	43. Wire-to-wire contact - Transmission	43.a.	Wire-to-wire contact / contamination- Transmission						# ignitions	
	44. Contamination - Transmission	44.a.	Contamination - Transmission						# ignitions	
	45. Utility work / Operation	45.a.	Utility work / Operation						# ignitions	
	46. Vandalism / Theft - Transmission	46.a.	Vandalism / Theft - Transmission						# ignitions	
	47. Other- Transmission	47.a.	All Other-Transmission						# ignitions	
	48. Unknown- Transmission	48.a.	Unknown - Transmission						# ignitions	

Liberty Motes:
7.2 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV.
3/1/2021 Data from 2015 - 2019 should be actual numbers 2020 - 2023 should be projected. In future submissions update projected numbers with actuals. Table 7.2: Key recent and projected drivers of ignitions by HFTD region x Ignition - Distribution 1. Contact from object - Distribution Veg. contact- Distribution
Animal contact- Distribution
Balloon contact- Distribution
Vehicle contact- Distribution
Other contact from object - Distribution Other create Time deglict - Datebolen Capation has American Capation Capation Has Datebolen Capation 1.e.
2. Equipment / facility failure - Distribution 2.a. 1 1 2 2 # ignitions
# ignitions 3. Wire-to-wire contact - Distribution 3. Wirk-to-wire contact - Distribution
4. Centamination - Distribution
5. Utility work / Operation
6. Vandalism / Theft - Distribution
7. Other- Distribution
8. Unknown - Distribution
9. Centact from object - Transmission x Ignition - Transmission 8 d. Velotic costact Transmission

3.3 December 1 Transmission

3.3 December 1 Transmission

3.4 December 1 Transmission

3.5 December 1 Transmission

3.6 December 1 Transmission

3.7 December 1 Transmission

3.8 Decemb 10. Equipment / facility failure -Transmission

11. Wire-to-wire contact - Transmission
12. Contamination - Transmission
13. Utility work / Operation
14. Vandalism / Theft - Transmission
15. Other - Transmission
16. Unknown - Transmission

Utility Liberty
Table No. 8
Oate Modified 3/1/2021

Note: These columns on picocholders for future QR submissions.

Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 2 HTD Tier 3 Non-HTD HTD Zone 1 HTD Tier 3 Non-HTD HTD Zone 3 Non-HTD

c type #	Outcome metric name	2015 201	2015	2015	2016	2016	2016	2016 2	017 20	117 20	017 201		2018	2018	2019	2019 20	119 2019	2020		020 21	120 2021	2021 202							Commen	ts
ervice territory and equipment 1.a.	Circuit miles (including WUI and non-WUI)																		30	429	0				Circuit miles					
areas																					-									
1.b.	Circuit miles in WUI																		27	401					Circuit miles	- 1401.0				
	Number of critical facilities (including WUI and non-WUI)																		21	138						itical facilities				
1.c.																					3									
1.d.	Number of critical facilities in WUI																			79	3					itical facilities in WUI				
1.e.	Number of customers (including WUI and non-WUI)																		14	16521	1				Number of c					
1.f.	Number of customers in WUI																	11	.91	16194	1				Number of c	ustomers in WUI				
1.g.	Number of customers belonging to access and functional needs populations																		5	124					Number of o	stomers belonging to	access and function	nal needs populat	ons	
	(including WUI and non-WUI)																													
1.h.	Number of customers belonging to access and functional needs populations in																		4	123					Number of c	ustomers belonging to	access and function	nal needs populat	ons in	
	WIII																								WUI					
1.i.																										of overhead transmiss	dan Bass			
4.1.	Circuit miles of overnead transmission lines (including wor and non-wor)																		1	1					Circuit miles	r overnead transmiss	AUTI IIIIES			
1.j.	Circuit miles of overhead transmission lines in WUI																		0	- 1						of overhead transmiss				
1.k.	Circuit miles of overhead distribution lines (including WUI and non-WUI)																		6	324	0				Circuit miles	of overhead distribution	un lines			
1.L	Circuit miles of overhead distribution lines in WUI																		5	306	0				Circuit miles	of overhead distribution	on lines in WUI			
1.m.																				2					Number of s					
1.0																										abstations in WUI				
1.0																				- 2						eather stations				
																				- 1										
1.p.																										eather stations in WU				
State of service territory and equipment 2.a.	Circuit miles (including WUI and non-WUI)																		24	1135	136				Circuit miles					
ural areas																														
2.b.	Circuit miles in WUI																		16	874	116				Circuit miles	n WUI				
2 c	Number of critical facilities (including WUI and non-WUI)																			138	1				Number of c	itical facilities				
2.d.	Number of critical facilities in WUI																			49	- 1					itical facilities in WUI				
2.e.	Number of customers (including WUI and non-WUI)																		74	23260	2961				Number of c					
2.f.	Number of customers in WUI																	4	47	21705	2816					ustomers in WUI				
2.g.	Number of customers belonging to access and functional needs populations																		3	34	24				Number of c	stomers belonging to	access and function	nal needs populat	ons	
	(including WUI and non-WUI)																													
2.h.																			3	32	20				Number of c	ustomers belonging to	arress and function	nal needs nonulat	ons in	
	WIII																		-						WUI					
2.i.	Circuit miles of overhead transmission lines (including WUI and non-WUI)																		0	15	2					of overhead transmiss	rion liner			
a.i.	Circuit inter or overnead datamason lines (including wor and non-wor)																			13	-				Cittate	/ Overmead transmiss	.on mea			
2.j.	Circuit miles of overhead transmission lines in WUI																		0	3	0					of overhead transmiss				
2.k.	Circuit miles of overhead distribution lines (including WUI and non-WUI)																		19	757	123				Circuit miles	of overhead distribution	un lines			
2.l.	Circuit miles of overhead distribution lines in WUI																		13	583	108				Circuit miles	of overhead distribution	on lines in WUI			
2.m.																				7	1				Number of s					
2 n	Number of substations in WUI																									ubstations in WUI				
2.0	Number of weather stations (including WUI and non-WUI)																									eather stations				
																				15	-									
2.p.	Number of weather stations in WUI																									eather stations in WU				
State of service territory and equipment 3.a.	Circuit miles (including WUI and non-WUI)																		79	228					Circuit miles					
highly rural areas																														
3.b.	Circuit miles in WUI																		61	146					Circuit miles	△ WUI				
3.c.	Number of critical facilities (including WUI and non-WUI)																			138					Number of o	itical facilities				
3.4	Number of critical facilities in WUI																									itical facilities in WUI				
3.0.	Number of customers (including WUI and non-WUI)																	15		2468					Number of c					
3.e.																														
3.f.	Number of customers in WUI																	17	64	2113						ustomers in WUI				
3.g.	Number of customers belonging to access and functional needs populations																		38	30					Number of o	ustomers belonging to	access and function	nal needs populat	ons	
	(including WUI and non-WUI)																													
3.h.																			37	30					Number of o	ustomers belonging to	access and functio	nal needs populat	ons in	
	WUI																								WUI			, popular		
3.1.	Circuit miles of overhead transmission lines (including WUI and non-WUI)																			0						of overhead transmiss	rion liner			
3.i.	Concerning of Overhead transmission lines (including woll and non-WUI)																			0					Circuit miles	r overmeau transmiss	Ann miles			
3.j.	Circuit miles of overhead transmission lines in WUI																									of overhead transmiss				
3.k.	Circuit miles of overhead distribution lines (including WUI and non-WUI)																		70	184					Circuit miles	of overhead distribution	an lines			
3.1.	Circuit miles of overhead distribution lines in WUI																		54	112					Circuit miles	of overhead distribution	on lines in WUI			
3.m.																			1	2					Number of s					
3.n																										ubstations in WUI				
																				1										
3.0.																			3	9						eather stations				
3.p.	Number of weather stations in WUI																									eather stations in WU				

Utility	Libe	erty Notes:														
Table No.		9 Transmission lines refer to all lines at or above 65kV, and distribution lines refer to all lines below 65kV. Repo	rt net addition:	using positive	numbers a	and net ren	movals and	d undergroun	nding using n	egative numl	bers for circui	t miles and r	numbers of sub	stations. Only	report changes expected within the target year.	
Date Modified	3/1/20	O21 For example, if 20 net overhead circuit miles are planned for addition by 2023, with 15 being added by 2022	and 5 more add	ed by 2023, th	en report "	"15" for 20	22 and "5"	" for 2023. D	o not report	cumulative of	hange across	years. In thi	is case, do not	report "20" for	2023, but instead the number planned to be added for just that year, which	ah is "5".
			Actual				Project	ted								
Table 9: Location of actual and planned ut	lity equipm	nent additions or removal year over year	Non-HFTD	HFTD Zone 1	HFTD Tier 2	HFTD Tier	r 3 Non-H	IFTD HFTD Zo	one 1 HFTD	Tier 2 HFTD	Tier 3 Non-HI	FTD HFTD Z	one 1 HFTD Ti	er 2 HFTD Tier	3	
Metric type	#	Outcome metric name	2020	2020	020	2020	2021	2021	2021	2021	2022	2022	2022	2022	Unit(s)	Comments
1. Planned utility equipment net addition	1.a.	Circuit miles of overhead transmission lines (including WUI and non-WUI)													Circuit miles	
(or removal) year over year - in urban areas																
	1.b.	Circuit miles of overhead distribution lines (including WUI and non-WUI)													Circuit miles	
	1.c.	Circuit miles of overhead transmission lines in WUI													Circuit miles in WUI	
	1.d.	Circuit miles of overhead distribution lines in WUI													Circuit miles in WUI	
	1.e.	Number of substations (including WUI and non-WUI)	0	0	0	)	0	0	0	-1	0	0	0	0	0 Number of substations	
	1.f.	Number of substations in WUI	0	0	0	)	0	0	0	-1	0	0	0	0	Number of substations in WUI	
	1.g.	Number of weather stations (including WUI and non-WUI)	0	0	1	1	0								Number of weather stations	TBD
	1.h.	Number of weather stations in WUI	0	0	1	1	0								Number of weather stations in WUI	TBD
2. Planned utility equipment net addition	2.a.	Circuit miles of overhead transmission lines (including WUI and non-WUI)													Circuit miles	
(or removal) year over year - in rural areas																
	2.b.	Circuit miles of overhead distribution lines (including WUI and non-WUI)													Circuit miles	
	2.c.	Circuit miles of overhead transmission lines in WUI													Circuit miles in WUI	
	2.d.	Circuit miles of overhead distribution lines in WUI													Circuit miles in WUI	
	2.e.	Number of substations (including WUI and non-WUI)	0	0	0	)	0	0	0	0	0	0	0	0	0 Number of substations	
	2.f.	Number of substations in WUI	0	0	0	)	0	0	0	0	0	0	0	0	Number of substations in WUI	
	2.g.	Number of weather stations (including WUI and non-WUI)	0	0	8	3	0								Number of weather stations	TBD
	2.h.	Number of weather stations in WUI	0	0	8	3	0								Number of weather stations in WUI	TBD
3. Planned utility equipment net addition	3.a.	Circuit miles of overhead transmission lines (including WUI and non-WUI)													Circuit miles	
(or removal) year over year - in highly rural																
areas																
	3.b.	Circuit miles of overhead distribution lines (including WUI and non-WUI)													Circuit miles	
	3.c.	Circuit miles of overhead transmission lines in WUI													Circuit miles in WUI	
	3.d.	Circuit miles of overhead distribution lines in WUI													Circuit miles in WUI	
	3.e.	Number of substations (including WUI and non-WUI)	0	0	0	)	0	0	0	0	0	0	0	0	0 Number of substations	
	3.f.	Number of substations in WUI	0	0	0	)	0	0	0	0	0	0	0	0	Number of substations in WUI	
	3.g.	Number of weather stations (including WUI and non-WUI)	2	0	8	3	0								Number of weather stations	TBD
	3.h.	Number of weather stations in WUI	0	0	0	)	0								Number of weather stations in WUI	TBD

Table No.   10   Tabl	
In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the Comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the Comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the Comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the Comments column on the far-right, enter the relevant program target(s) associated  Actual Pale In the Comments column on the far-right, enter the relevant program to program to program the fare of the pale of	
Table 10: Location of actual and planned will wind restructure upgrades year over year.  Non-HFT   HFTD   1 HFT	
Metric type  # Outcome metric name    Palanned utility infrastructure upgrades   1.a.   Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)   1.a.   Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)   1.a.   Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead distribution lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit miles of overhead transmission lines planned for upgrades in WUI   1.a.   Circuit m	
1. Planned utility infrastructure upgrades a very rear in urban areas  1. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI)  1. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI)  1. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI)  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Circuit miles of overhead distribution lines planned for upgrades in WUI  1. Number of substations planned for upgrades (including WUI and non-WUI)  1. Number of weather stations planned for upgrades (including WUI and non-WUI)  1. Number of weather stations planned for upgrades (including WUI and non-WUI)  2. Planned utility infrastructure upgrades  1. Circuit miles  1. C	
y ear over year - in urban areas  1.b. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI)  1.c. Circuit miles of overhead itsribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgrades in WUI  1.c. Number of substations planned for upgra	
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1.c. Circuit miles of overhead transmission lines planned for upgrades in WUI  1.d. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.e. Number of substations planned for upgrades in WUI  1.e. Number of substations planned for upgrades in WUI  1.e. Number of substations planned for upgrades in WUI  1.e. Number of substations planned for upgrades in WUI  1.e. Number of substations planned for upgrades in WUI  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.e. Number of weather stations planned for upgrades (including WUI and non-WUI)	
1.d. Circuit miles of overhead distribution lines planned for upgrades in WUI  1.e. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upgrades (including WUI and non-WUI)  1.f. Number of substations planned for upg	
1.e. Number of substations planned for upgrades (including WU and non-WU)	
1.f. Number of substations planned for upgrades in WUI  1.g. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.g. Number of weather stations planned for upgrades (including WUI and non-WUI)  1.h. Number of weather stations planned for upgrades (including WUI and non-WUI)  2. Planned utility infrastructure upgrades  2. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)	
1.g. Number of weather stations planned for upgrades (including WUI and non-WUI)  0 0 1 0 0 0 0 0 0 Number of weather stations  1.h. Number of weather stations planned for upgrades in WUI  2. Planned utility infrastructure upgrades  2. Circuit miles  2. Circuit miles  3. Circuit miles  4. Circuit miles  5. Circuit miles  6. O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
1.h. Number of weather stations planned for upgrades in WUI  2. Planned utility infrastructure upgrades 2.a. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)  2. Planned utility infrastructure upgrades 2.a. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)  2. Planned utility infrastructure upgrades 2.a. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)	
2. Planned utility infrastructure upgrades 2.a. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI)	
x vear over vear - in rural areas	
2.b. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI)  0 0 10 0 0 18 7 Circuit miles	
2.c. Circuit miles of overhead transmission lines planned for upgrades in WUI 0 0 0 0 0 0 0 Circuit miles in WUI	
2.d. Circuit miles of overhead distribution lines planned for upgrades in WUI 0 0 4 0 0 112 0 Circuit miles in WUI	
2.e. Number of substations planned for upgrades (including WUI and non-WUI)  0 0 0 0 0 2 1 1 0 0 0 Number of substations	
2.f. Number of substations planned for upgrades in WUI 0 0 0 0 0 2 1 1 0 0 0 Number of substations in WUI	
2.g. Number of weather stations planned for upgrades (including WUI and non-WUI)  0 0 0 0 0 2 1 1 0 0 0 Number of weather stations	
2.h. Number of weather stations planned for upgrades in WUI 0 0 0 0 0 2 1 1 0 0 0 Number of weather stations in WUI	
3. Planned utility infrastructure upgrades 3.a. Circuit miles of overhead transmission lines planned for upgrades (including WUI and non-WUI) Circuit miles	
year over year - in highly rural areas 0 0 0 0 0 0 0 0 0	
X	
3.b. Circuit miles of overhead distribution lines planned for upgrades (including WUI and non-WUI) 0 0 0 0 0 0 0 Circuit miles	
3.c. Circuit miles of overhead transmission lines planned for upgrades in WUI 0 0 0 0 0 0 0 Circuit miles in WUI	
3.d. Circuit miles of overhead distribution lines planned for upgrades in WUI 0 0 0 0 0 0 0 Circuit miles in WUI	
3.e. Number of substations planned for upgrades (including WUI and non-WUI)  0 0 0 0 0 0 0 0 0 0 0 Number of substations	
3.f. Number of substations planned for upgrades in WUI 0 0 0 0 1 0 0 0 0 0 0 Number of substations in WUI	
3.g. Number of weather stations planned for upgrades (including WUI and non-WUI)  0 0 0 0 0 0 0 0 0 0 0 Number of weather stations	
3.h. Number of weather stations planned for upgrades in WUI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Utility	Liberty Notes:
Table No.	11 "PSPS" = Public Safety Power Shutoff
	In future submissions update planned
Date Modified	3/1/2021 upgrade numbers with actuals

Date Modified	3/1/20	21 upgrade numbers with actuals																			
Table 11: Recent use of PSPS and other PS	DC		Actual						.1	03	03	Q4	Pro Q1	ojected Q2	Q3	Q4	01	03	03	04	
											Q3						Q1	Q2	Q3	Q4	
letric type	#	Outcome metric name	2015	2016	20	17 2	2018	2019 2	020	2020	2020	2020	20	21 2021	2021	2021	2022	2022	2022	2022	Unit(s) Comments
. Recent use of PSPS	1.a.	Frequency of PSPS events (total)																			Number of instances where utility operating protocol requires de-
				0	0	0	1	0	0	(	)	0	0								energization of a circuit or portion thereof to reduce ignition probability,
																					per year. Only include events in which de-energization ultimately
	1.b.	Scope of PSPS events (total)																			Circuit-events, measured in number of events multiplied by number of
	1.0.	scope of PSPS events (total)		0	0	0	3	0	0	0	)	0	0								circuits de-energized per year
	1.c.	Duration of PSPS events (total)		0	0	0	90	0	0	(	,	0	0								Customer hours per year
2. Customer hours of PSPS and other	2.a.	Customer hours of planned outages		U	U	U	90	U	U		J	U	U								Total customer hours of planned outages per year
utages	Z.a.	including PSPS (total)			5,124	7,025	31,470	113,282	30	16,743	1,	522 31,	517								Total customer hours or planned outages per year
outages	2.b.	Customer hours of unplanned outages, no	nt.																		Total customer hours of unplanned outages per year
	2.0.	including PSPS (total)	112,5	99 11:	11,988	133,267	75,720	246,866	6,294	10,143	47,	305 84,	162								Total customer hours of unplanned outages per year
	2.c.	System Average Interruption Duration																			SAIDI index value = sum of all interruptions in time period where each
	2.0.	Index (SAIDI) (including PSPS)																			interruption is defined as sum(duration of interruption * # of customer
		maex (SAIDI) (including 1515)	3	358	214	1597	288	417	8	12	2	58	103								interruptions) / Total number of customers served
																					interruptions// Total number of customers served
	2.d.	System Average Interruption Duration																			SAIDI index value = sum of all interruptions in time period where each
	2.0.	Index (SAIDI) (excluding PSPS)																			interruption is defined as sum(duration of interruption * # of customer
		maex (SAIDI) (excluding ESES)	3	358	214	1597	288	417	8	12	2	58	103								interruption) / Total number of customers served
																					merruphons// rotal number of customers served
	2.e.	System Average Interruption Frequency																			SAIFI index value = sum of all interruptions in time period where each
	2.6.	Index (SAIFI) (including PSPS)		2	1	4	2	3	0	0	1	1	0								interruption is defined as (total # of customer interruptions) / (total # of
		ilidex (SAIFI) (iliciddling FSFS)		2	1	*	2	3	U	,	,	1	U								customers served)
	2.f.	System Average Interruption Frequency																			SAIFI index value = sum of all interruptions in time period where each
	2.1.	Index (SAIFI) (excluding PSPS)		2	1	4	2	3	0	0	1	1	0								interruption is defined as (total # of customer interruptions) / (total # of
		index (SAIFI) (excluding PSPS)		2	1	4	2	3	U		,	1	U								
. Critical infrastructure impacted by PSPS	2 -	Critical infrastructure impacted by PSPS																			customers served)  Number of critical infrastructure (in accordance with D.19-05-042)
3. Critical infrastructure impacted by PSPS	3.a.	Critical infrastructure impacted by PSPS		0	0	0	0	0	0	(	,	0	0								
				U	U	U	U	U	U		,	U	U								locations impacted per hour multiplied by hours offline per year
4. Community outreach of PSPS metrics	4 -	# of customers impacted by PSPS																			# of customers impacted by PSPS (if multiple PSPS events impact the
. Community outreach of PSPS metrics	4.d.	# of customers impacted by PSPS		0	0	0	30	0	0	(	)	0	0								same customer, count each event as a separate customer)
	4.b.	# of medical baseline customers impacted																			# of customers impacted by PSPS (if multiple PSPS events impact the
	4.D.	by PSPS	1	0	0	0	0	0	0	0	)	0	0								
	4.c.	# of customers notified prior to initiation																			same customer, count each event as a separate customer)  # of customers notified of PSPS event prior to initiation (if multiple PSPS
	4.C.			0	0	0	0	0	0	(		•	0								
		of PSPS event		U	U	U	U	U	U		J	U	U								events impact the same customer, count each event in which customer was notified as a separate customer)
	4.d.	# of medical baseline customers notified																			
	4.0.				0	0	0	0	0	(		0	0								# of customers notified of PSPS event prior to initiation (if multiple PSPS
		prior to initiation of PSPS event		0	U	U	U	U	U		J	U	U								events impact the same customer, count each event in which customer
		0/ -f1																			was notified as a separate customer)
	4.e.	% of customers notified prior to a PSPS		0	0	0	0	0	0	C	)	0	0								=4.c. / 4.a.
	4.f.	event impacting them																			=4.d. / 4.b.
	4.T.	% of medical baseline customers notified		_	_	_	_	_	_		_	_	_								=4.0. / 4.0.
		prior to a PSPS event impacting them		0	0	0	0	0	0	C	)	0	0								
Out - Pene		Nhfpepe																			N. de de la constant
5. Other PSPS metrics	5.a.	Number of PSPS events triggered where		0	0	0	0	0	0	C	)	0	0								Number of instances where utility notified the public of a potential PSPS
		no de-energization occurred																			event but no de-energization followed
	5.b.	Number of customers located on de-		0	0	0	185	0	0	0	)	0	0								Number of customers
		energized circuit																			
	5.c.	Customer hours of PSPS per RFW OH		0	0	0	0.03	0	0	C	)	0	0								=1.c. / RFW OH circuit mile days in time period
		circuit mile day																			
	5.d.	Frequency of PSPS events (total) - High		0	0	0	0	0	0	0	)	0	0								Events over time period that overlapped with a High Wind Warning as
		Wind Warning wind conditions																			defined by the National Weather Service
	5.e.	Scope of PSPS events (total) - High Wind																			Estimated customers impacted over time period that overlapped with a
		Warning wind conditions		0	0	0	30	0	0	C	)	0	0								High Wind Warning as defined by the National Weather Service
	5.f.	Duration of PSPS events (total) - High Win	ıd																		Customer hours over time period that overlapped with a High Wind
	J.1.	Warning wind conditions		0	0	0	90	0	0	(		0	0								Warning as defined by the National Weather Service

Sing

Line Market

Line According to Sept. Special Sept. S

Date Modified	2/1,	In future submissio /2021 instructions can be	ins update planned spend, line miles treated, RSE, etc. with updated projections and actuals. Additional found in QR information.	4														
Table 12: Mitiration initiative for	Inancials											Actual CAPEX (5 thousands	Actual Actual  OPEX (5 thousands) Line miles to be	Actual treated Alternative units (if used):	rojected F APEX (5 thousands) 0	rojected Projected OPEX (5 thousands) Line mile	Projected Projected Projected to be treated Alternative units (if used)CAPEX (5 thousands) OPEX (5 thou	Projected Projected sands) Line miles to be treated. Alternative units (if used)
					Estimated RSE	n Estimated RSE in Estimated	RSE in Estimated RSE in If existing: r	most recent proceeding that	Current complance status - In /	if spend not disaggregate sociated rule(s) - if multiple, note activity where relev parate by semi-colon - ";" or mark "general operati	ed by this activity, Alternative units in which initiative is reported ant spend is tracked in (if not line miles); still required to report line							
Metric type Other	WMP Table # / Category Risk Assessment & Mapping	WMP Initiative # 7.3.1.1.	Initative activity  A summarized risk map that shows the overall ignition probability and estimated wildfine	Primary driver targeted Secondary driver targeted Yeal Contact with vegetation Equipment failure	initiated non-HFTD regis 2020	n HFTD Zone 1 HFTD Tier	NA NA NA	ed program If new: memorandu N/A	am account exceeding compliance with regulations	parate by semi-colon - ";" or mark "general operati	ons" miles Cr	Comments 2020	2020 2020 - 67,465	2020	021 2	10,000	2021 2022 2022	2022 2022 10,000
Other	Risk Assessment & Mappine	7.3.1.2.		PSPS - for Contact with vegetation				N/A										
Other	Risk Assessment & Mapping	7.3.1.3.	Ignition probability mapping showing the probability of ignition along the electric lines and	sectionalization, etc.  Contact with vegetation Other contact with object		IA NA		N/A										
Other	Risk Assessment & Magoina	7.3.14	equipment Initiative mapping and estimation of wildfire and PSPS risk-reduction impact	PSPS - for Other contact with object	3021	ia Na	NA NA	N/A										
200	Risk Assessment & Mapping	7.3.15.	Match drop simulations showing the potential widdlire consequence of ignitions that occur along the electric lines and equipment	sectionalization, etc.  Other contact with Contact with vegetation	2020			N/A										
Olini Time	Stuational Awareness & Forecasting	7.121	the electric lines and equipment  Advanced weather monitoring and weather stations			iA NA		2020 WMP	WFMMA - Exceeds compliance with regulations		F of weather stations installed		9 -	- 20 weather stations	120,000		- 10 weather stations 15,000	
Other			Advanced weather monitoring and weather stations	PSPS - for sectionalization, etc.				2020 WMP	WFMMA Exceeds compliance with regulations		# of weather stations installed	242,8		- 20 weather stations		115,000	- 10 weather stations 15,000	- 1 weather station
Other	Situational Awareness & Forecasting Situational Awareness & Forecasting Situational Awareness & Forecasting	7.12.2 7.12.1 7.12.4	Continuous monitoring sensors Fault indicators for detecting faults on electric lines and equipment Forcesor for a fire risk index, fire potential index, or similar	sectionalization, etc. Equipment failure PSPS - for	2020	IA 171.56 IA NA IA NA	171.56 171.56 NA NA NA NA	2020 WWP	WFMMA Scoreds			158,1	5		50,000	10,000	- 100,000	113,000
Other	Situational Awareness & Forecasting Situational Awareness & Forecasting	7.124				IA NA		2020 WMP	WFMMA Exceeds		N/A		- 64,313			10,000		10,000
Other										Personnel work pn conditi	ocedures and training in ions of elevated fire risk							
Other	Situational Awareness & Forecasting	7.12.6.	Weather forecasting and estimating impacts on electric lines and equipment	PSPS - for sectionalization, etc.		IA NA	NA NA											
Grid hardening Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.2.2.1	Cagacitor maintenance and replacement program  Circuit breaker maintenance and installation to de-energize lines upon detecting a fault	Equipment failure Equipment failure	2011 TBD	IA NA	NA NA		In compliance GO 965 Exceeds compliance with regulations	GO 965					500,000		5.500.000	
Grid hardening	Grid Design & System Hardening	7.133	Covered conductor installation	Other contact with Equipment failure	2019	IA 0.27	0.27 0.27	2020 WMP	In compliance with R20A	RZOA		7,820,1	5 .		16,564,617		- 12,034,498	
Grid hardening			Counsel conductor maintenance	object	TEO	IA NA	NA NA											
Grid hardening Grid hardening Grid hardening Grid hardening Grid hardening Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.124. 7.125.	Covered conductor maintenance Obstamm maintenance, repoil, and replacement Obstamm maintenance, repoil, and replacement Obstations only replacement and reinforcement, including with composite poles Sepation has replacement. Obstamment of the poles of the poles of the poles of the poles of poles. Obstamment of the poles of the po	Equipment failure				2020.14840	T80 In compliance with G095, G0 165 In compliance G0 365	GO 95; GD165		89,1 3,651,5 727,9 671,8	1 5,450		10.000.000			
Grid hardening	Grid Design & System Hardening	7.117.	Expulsion fuse replacement	Equipment failure Equipment failure PSPS - for	2011 2	19 2.29	2.29 2.29	2020 WMP	in compliance GO 365 in compliance GO 365 in compliance with R20A	GO 565 GO 565 9204		727,9		853	10,605,000 1,200,000		- 2,610,250 - 1,500 1,702,260	
Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.2.28.	installation of system automation equipment	sectionalization, etc. PSPS - for	2011			2020 WMP	in compliance with KAUK  Succeds compliance with regulations	KABA		453,5					- 260,000	
				sectionalization, etc.	2011			2020 WWP		GO 174		454,5	• •		200,000		- aug.000	
Grid hardening Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.3.3.11	Maintenance, repair, and replacement of connectors, including hotline clamps Mitigation of impact on customers and other residents affected during PSPS event		2011 2020				in compliance GO 174 Exceeds compliance with regulations	60 1/4								
Grid hardening Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.3.3.12. 7.3.3.13.	Other corrective action  Pole loading infrastructure hardening and replacement program based on pole loading assessment	ent Equipment failure	TEO	80 0.80		2020 WMP	TBD In compliance GO 565	GO MS		1,357,6	1 14,861		2,290,000		- 2,501,500	
			Pole loading infrastructure hardening and replacement program based on pole loading assessment program	ent Equipment failure				2020 WMP										
Grid hardening Grid hardening	Grid Design & System Hardening Grid Design & System Hardening	7.3.3.14 7.3.3.15	program Transformers maintenance and replacement Transformers maintenance and replacement Transformers tower maintenance and replacement		2011 2019	IA NA	NA NA		in compliance GO 165, GO 95 Exceeds compliance with regulations	GO 95; GO 165								
Grid hardening	Grid Design & System Hardening	7.3.3.16.	Undergrounding of electric lines and/or equipment	Other contact with Equipment failure	TEO 0	0.44	0.44 0.44	2020 WMP	Exceeds compliance with regulations			522,4	4 -		1,445,414		- 7,654,120	
Grid hardening	Grid Design & System Hardening	7.3.3.17.	Updates to grid topology to minimize risk of ignition in HFTDs	object Equipment failure Other contact with object	2020			2020 WMP	Exceeds compliance with regulations									
Asset inspection	Asset Management & Inspections	7.241	Detailed inspections of distribution electric lines and equipment	Equipment failure Other contact with object		0 0	0 0	2019 GRC	in Compliance	GD95: GD128: GD165 Detailed inspections of d	Sitribution electric lines. Detailed inspections of distribution electric lines.	Liberty Califeco does not	- 837.622			200,000		900.000
											Estribution electric lines Detailed inspections of distribution electric lines and equipment and equipment	have separate programs for distribution and						
												transmission inspections						
Asset inspection	Asset Management & Inspections	7342	Detailed inspections of transmission electric lines and equipment	Equipment failure Other contact with object	2011	0 0	0 0	2019 GRC	in Compliance	GOSS GOLDS GOSS Detailed incombine	of transmission alactric Datalast inspertions of transmission alactric	Liberty Californ does not						
Asset imperson	Active management at improvement	7.242	Secured impressions of various state entire lines and equipment.	Equipment later Count Conset was copied	2011			2017-041	ii conpute	duri, duris, duris - Decisio imperioris	of transmission electric Detailed inspections of transmission electric lines and equipment lines and equipment	have separate programs						
												tor distribution and transmission inspections						
Asset inspection	Asset Management & Inspections	7.24.2	improvement of inspections	Equipment failure Other contact with object				2020 WMP	in Compliance		overnent of inspections Improvement of inspections					150,000		150,000
Asset Inspection	Asset Management & Inspections	7.24.4.	Infrared inspections of distribution electric lines and equipment	Equipment failure Other contact with object	2021	0 0	0 0	N/A	in Compliance	Infrared inspections of d	Estribution electric lines infrared inspections of distribution electric lines and equipment and equipment	RFP in 2021, pilot in 2022				25,000		200,000
	Asset Management & Inspections	7.3.4.5.		Equipment failure Other contact with object	2021	0 0	0 0	N/A	in Compliance	Infrared inspections of tra	and equipment thrustve pole inspections (intrustve pole inspections)	RFP in 2021, pilot in 2022						
Asset inspection	Asset Management & Inspections	7.3.4.6.		Equipment failure Other contact with object				2019 GRC	In Compliance	G095; G0165 In	trusive pole inspections Intrusive pole inspections		- 10,404			147,000		101,626
Asset inspection	Asset Management & Inspections		LIDAR inspections of distribution electric lines and equipment	Equipment failure Other contact with object	0	0 0	0 0	N/A	in Compliance	LIDAR inspections of d	Estribution electric lines LIDAR inspections of distribution electric lines and equipment and equipment ansmission electric lines LIDAR inspections of transmission electric lines	No plans for LIDAR						
Asset inspection	Asset Management & Inspections	7.248.	LIDAR inspections of transmission electric lines and equipment	Equipment failure Other contact with object	0	0 0	0 0	N/A	in Compliance	LIDAR inspections of tra	ansmission electric lines LIDAR inspections of transmission electric lines	No plans for LIDAR						
Asset inspection	Asset Management & Inspections	7.249.	Other discretionary inspection of distribution electric lines and equipment, beyond inspections	Equipment failure Other contact with object	2020	0 0	0 0	2020 WMP	Exceeds Compliance	G095; G0128; G0165 Other discretionary in	and equipment and equipment supertion of distribution. Other discretionary inspection of distribution and based inspection of distribution and based inspections also the control of the c	System Survey completed				2,300,000		
			mandated by rules and regulations															
Asset Inspection	Asset Management & Inspections	7.3.4.10	Other discretionary inspection of transmission electric lines and	Equipment failure Other contact with object	2020	0 0	0 0	2020 WMP	Exceeds Compliance	G095; G0128; G0165 Other discretionary ins	pection of transmission   Other discretionary inspection of transmission	System Survey completed 2,994,2	4 -					
	Asset Management & Inspections	7.3.4.11.		Equipment failure Other contact with object	2011	0 0	0 0	2019 GRC	In Compliance	GD95; GD165 Patrol inspections of d	electric lines and electric lines and listribution electric lines Patrol inspections of distribution electric lines	in 2020 Liberty Califeco does not						
											by quife and regulations mandated by rules and regulations perction of transmission electric loss and equipment and equipment	have separate programs for distribution and						
												transmission inspections						
Asset inspection	Asset Management & Inspections	7.3.4.12.	Patrol inspections of transmission electric lines and equipment	Equipment failure Other contact with object	2011	0 0	0 0	2019 GRC	in Compliance	GD95; GD165 Patrol inspections of tra	anumission electric lines Patrol inspections of transmission electric lines and equipment and equipment	Liberty CalPeco does not						
											and equipment and equipment	have separate programs for distribution and						
												transmission inspections						
Total Institution	Asset Management & Inspections	7.3413	Pole loading assessment program to determine safety factor	Equipment failure Other contact with object	2012		0 0	2019 GRC	to Complete	COST Bala lander commen	And the second s					100,000		100.000
	Asset Management & Inspections	7.3.4.14		Equipment failure Other contact with object	2022	0 0		N/A	in Complete.	COSE COLOR COLER OLD AND AND AND AND AND AND AND AND AND AN	t program to determine Pole loading assessment program to determine safety factor safety factor by control of inspections. Quality assurance / quality control of inspections	870 to 2021 adea to 2022				35,000		200.000
	Asset Management & Inspections		Substation impercions	Equipment failure Other contact with object				2019 GRC	in Compliance	G0174	Substation inspections Substation inspections					10,000		10,000
	Ventation Management & Inspections	7.151		Contact with vegetation				2020 WMP		GO 95 Rule 35; PRC 4293	assault impressis assault impressis		- 771.043			750,000		772.900
	Vegetation Management & Inspections	7.152		Contact with vegetation		17 0.27		2019 GRC		GO 95 Rule 35; PRC 4293	Number of trees inspected resulting in a work		- 555,763			610,000		528,300
Vegetation inspection	Vegetation Management & Inspections	7.15.2	Detailed inspections of vegetation around distribution electric lines and equipment	Contact with vegetation	2011 0	17 0.27	0.27 0.27	2019 GRC	Exceeding	GO 95 Rule 35; PRC 4293	Number of trees inspected resulting in a work order		- 555,763			610,000		128,300
Vegetation Inspection	Vegetation Management & Inspections	7.3.5.3.	Detailed inspections of vegetation around transmission electric lines and equipment															
	t Vegetation Management & Inspections	7.354	Emergency response vegetation management due to red flag warning or other urgent conditions.															
	t Vegetation Management & Inspections	7.155	Fuel management and reduction of "slash" from vegetation management activities	Equipment failure	2020			2020 WMP	WMPMA Exceeding	PRC 4291; PRC 4292			- 254,689			2,000,000	- 2)	300,000
Vegetation Inspection Vegetation Inspection	Vegetation Management & Inspections Vegetation Management & Inspections	7.3.5.6. 7.3.5.7.	Improvement of inspections LIDAR inspections of vegetation around distribution electric lines and equipment	Contact with vegetation	2020	27 0.27	0.27 0.27		WMPMA Exceeding	GD 95 Rule 35; PRC 4293		369.2	4 .	320 -	400,000	420,000	328	120,000
	Vegetation Management & Inspections	7.15.8	LIDAR inspections of vegetation around transmission electric lines and equipment															
	Vegetation Management & Inspections	7.359.	Other discretionary impections of vegetation around distribution electric lines and equipment	Contact with vegetation	2020			2020 WMP	WMPMA Exceeding	GO 95 Rule 35; PRC 4293	Number of trees inspected resulting in a work		- 85,129					
	Vegetation Management & Inspections	7.3.5.10.	Other discretionary inspections of weestation around transmission electric lines and equipment								order							
	Vegetation Management & Inspections	7.3.5.11.		Contact with vegetation	2018			2019 GRC			Number of trees inspected resulting in a work order		- 420,800			450,000		965,000 -
Vegetation Inspection	Vegetation Management & Inspections Vegetation Management & Inspections	7.3.5.12. 7.3.5.13.	Patrol inspections of vegetation around transmission electric lines and equipment Quality assurance / quality control of vegetation impections	Contact with vegetation	3030	IA NA		2020 WMP	WMPMA		crear		- NA - 67,033			250,000		250,000
	Vegetation Management & Inspections  t. Vegetation Management & Inspections	7.15.11	Quality assurance / quality control of vegetation inspections  Recruiting and training of vegetation management personnel				NA NA	ALAN WIND	WAR AND				47,088			230,000		
	t Vegetation Management & Inspections t Vegetation Management & Inspections	7.3.5.14		Contact with venetation	2011	NA NA	ner NA	2019 GRC		GD 95 Rule 35; PRC 4293	Number of trees pruned or removed		. 7.338.323			5.500,000	* * * * * * * * * * * * * * * * * * * *	190,000
	t Vegetation Management & Inspections t Vegetation Management & Inspections	7.3.5.15.		Contact with vegetation  Contact with vegetation	2011			2019 GRC 2019 GRC		GD 95 Rule 35; PRC 4293 GD 95 Rule 35; PRC 4293			- 7,838,323 - 2,722,590			5,500,000		150,000
				Contact with vegetation				2019 GRC	Exceeding	GO 95 Rule 35; PRC 4293	Number of trees pruned or removed		- 2,722,590			2,200,000	- 2;	200,000
Vegetation inspection Vegetation management project	Vegetation Management & Inspections 1 Vegetation Management & Inspections	7.3.5.17. 7.3.5.18.	Substation inspection Substation vegetation management			IA NA	NA NA											
	t Vegetation Management & Inspections	7.3.5.19.	Vigetation Inventory system			IA NA												
	1 Vegetation Management & Inspections	7.3.5.20		Contact with vegetation	2011			2019 GRC	Eventina	GO 95 Rule 35; PRC 4293						1,000,000		500,000
Other	Grid Operations & Operating Protocols	7.161			2011	IA NA	NA NA	2020 WMP	WMPMA In compliance									
Other							NA NA											
Other	Grid Operations & Operating Protocols Grid Operations & Operating Protocols Grid Operations & Operating Protocols	7.162 7.163 7.164	Crev-accompanying ignition prevention and suppression resources and services Personnel work procedures and training in conditions of elevated fire risk Protocols for PSPS re-energization	PSPS - for Other contact with object	3030	IA NA IA NA	NA NA	60 166	14040044				- 278,576			250,000		250,000
JIM	Grid Operations & Operating Protocols  Grid Operations & Operating Protocols	7.164		Para - for Uther contact with object sectionalization, etc.	2000	MA NA	NA NA	60166	www.mones in compliance									
Other	Grid Operations & Operating Protocols	7.46.5. 7.16.6.	Stationed and on-call lightion prevention and suppression resources and services			IA NA	NA NA					92,7	4		298,000		- 200,000	
Other	Data Governance Data Governance	7.3.7.1.	Pais-seasts and mitigation or irans impacts Stationed and on-call lightion prevention and suppression resources and services Centralized repository for data Collaborative research on utility lightion and/or wildfire	Contact with vegetation Other contact with object	2021	IA NA	NA NA	2020 WMP	WMPMA In compliance				- 1,138			162,500 255,000	- 100,000	165,875
Other	Data Governance	7.2.7.2	Documentation and disclosure of wildfor-related data and alexations			IA NA	NA NA											
Other Other	Data Governance Data Governance Recorror Allocation Methodology Resource Allocation Methodology	7.17.1 7.17.4 7.18.1 7.18.2	Tracting and analysis of near miss data Assistance rehindelings development and application Allocation methodologic development and application Allocation received development and analysis Risk spand efficiency accessed to development and analysis Allocation and trained workstore for service restoration			IA NA	NA NA NA									123,750		254,925
Other	Resource Allocation Methodology  Resource Allocation Methodology	7.182	Risk reduction scenario development and analysis Sisk resert afficiency analysis			IA NA	NA NA											
Other	Resource Allocation Methodology Emergency Planning & Preparedness	7.282 7.291	Adequate and trained workforce for service restoration	PSPS - for Other contact with object sectionalization, etc.	2011	IA NA	NA NA	2020 WMP	WMPMA In compliance				- 502,233			899,598	1 1	304,068
Other	Emergency Planning & Preparedness Emergency Planning & Preparedness	7.19.2 7.19.3	Community outreach, public awareness, and communications efforts Customer support in emergencies			IA NA	NA NA											
Other	Emergency Planning & Preparedness  Emergency Planning & Preparedness  Emergency Planning & Preparedness	7.393 7.394 7.395	Customer support in emergencies  Disaster and emergency preparedness plan  Preparedness and planning for service restoration	WW day	WII	IA NA IA NA	NA NA NA NA NA NA	2020 WWP	In compliance									
Uther				PSPS - for Equipment failure sectionalization, etc.				2020 WMP	in compliance									
Other Other	Emergency Planning & Preparedness Stakeholder Cooperation & Community Engagement Stakeholder Cooperation & Community Engagement Stakeholder Cooperation & Community Engagement	7.3.9.6 7.3.10.1 7.3.10.2 7.3.10.3	Protocols in place to learn from wildfine events Community engagement		2019	IA NA	NA NA	2020 WMP	WMPMA Exceeds	P.U. Code § 451			92,084			251,250		290,375
Other	scakeholder Cooperation & Community Engagement Stakeholder Cooperation & Community Engagement	7.3.10.2 7.3.10.3	Community engagement Cooperation and best practice sharing with agencies outside CA Cooperation with suppression agencies															
Other	Stakeholder Cooperation & Community Engagement	7.3.10.4	Forest service and fuel reduction cooperation and joint roadmap									\$ 29,161,62	5 14,169,467		23,773,031	\$ 18,234,098	\$ 32,777,628 \$ 17,4	32,269