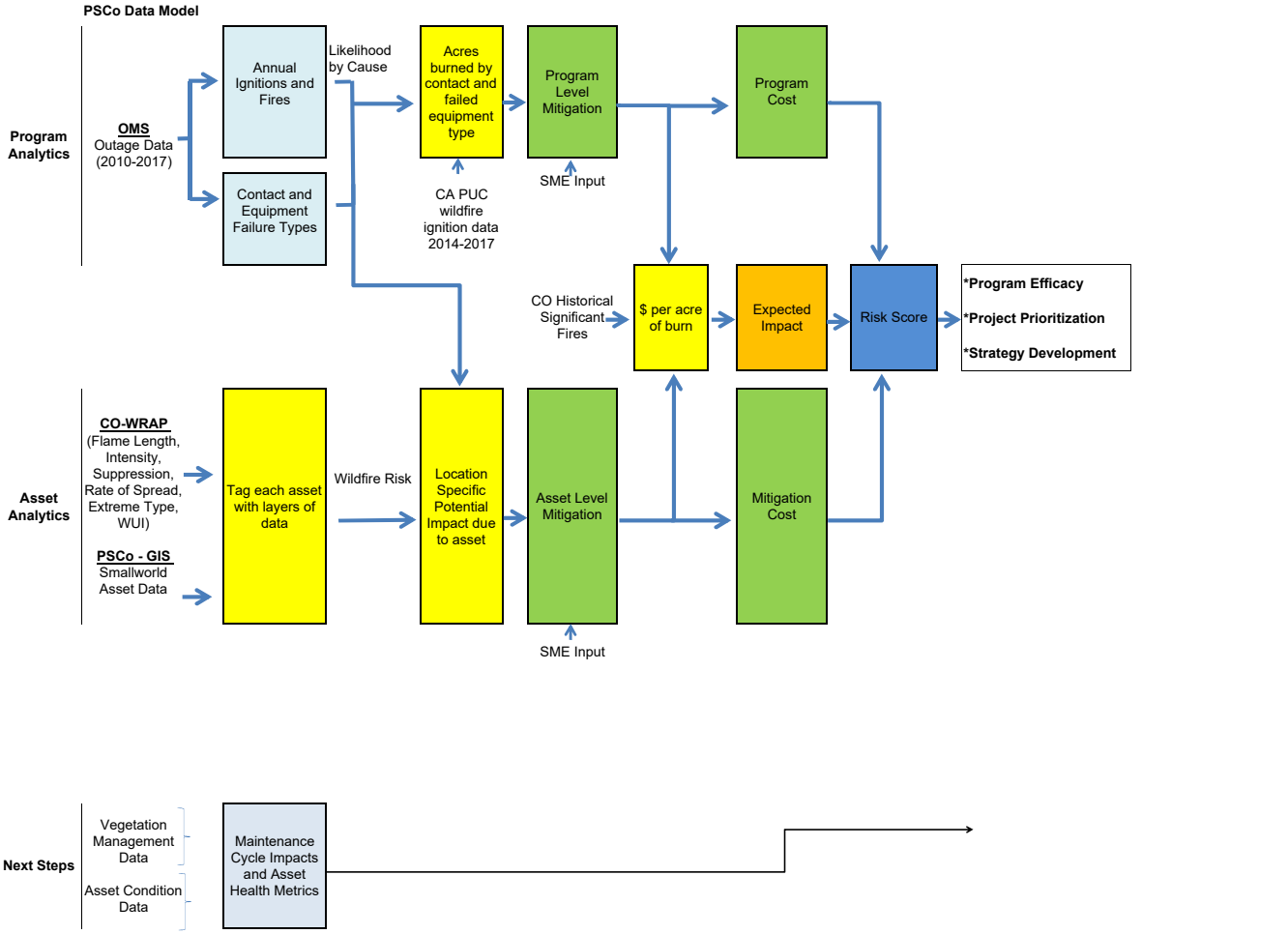
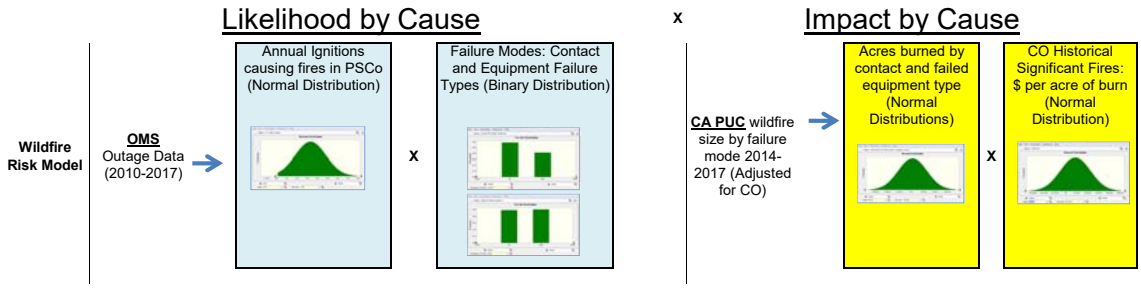
Wildfire Analysis Flow Chart



Wildfire Analysis Flow Chart

PSCo Data Model

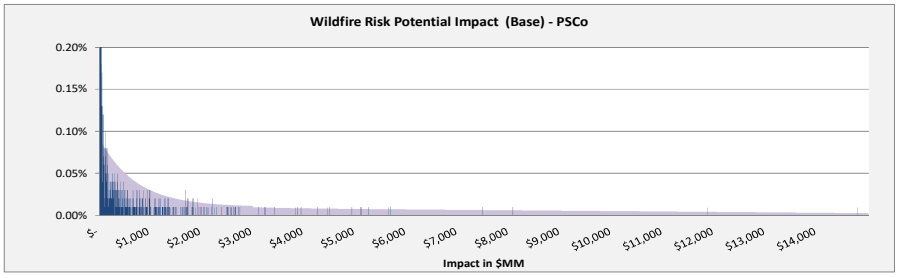


Results

Contact from Object and Equipment Failure Yes-No Distributions

$ per Acre Burned Distribution (Ave = $8,762, SD = $13,722)
If negative cost, equals zero

∑= Expected Impact (Skewed Right Distribution)



Goal: score the proposed projects to mitigate the wildfire risk in CO

Likelihood	**Annually**
Annual Utility Caused WildFires in Colorado PSCo - Calculation	15.00
CO/CA ratio	100.0%
Liability Factor Assumption	40.0%
Punitive damages can be up to 5 times the compensatory amount constitutionally, historically 10% of punitive damages are awarded	0.1
Deterioration Factor - only for equipment failure	10.0%

Impact: historical fires for the Cost Per Acre Calculation

Description	Year	Acres Burned	Cost in millions	$/Acre Burned	Homes	Fatalities	Cause
Spring Creek Fire	2018	108,045	117	1,083	141	0	Arson
Iron Mountain	2002	4,439	7.5	1,690	100	0	Unknown
Burn Canyon fire	2002	30,573	12.7	415	0	0	Lightning
Missionary Ridge Fire	2002	71,739	40	558	46	1	Human Caused
Coal Seam fire	2002	12,209	24.5	2,007	43	0	Burning Underground coal seam (ignited in 1910)
416 & Burro Fire Complex	2018	55,000	43	782	0	0	Embers emitted from a coal-powered train
Hayman Fire	2002	137,760	38.7	281	133	6	Arson
High Park Fire	2012	87,284	113.7	1,303	259	1	Lightning
Fourmile Canyon fire	2010	6,181	217	35,108	168	0	Reignited extinguished fire pit
Black Forest Fire	2013	14,280	420.5	29,447	511	2	Human Caused
Waldo Canyon Fire	2012	18,247	453.7	24,864	346	2	Unknown

Average	$ 8,867	$ 8,867.00
Standard Deviation	$ 13,652	

Included in Probablitities

Likelihood of ignition (2 scenarios)

- Ignition from contact - Vegetation
- Ignition from equipment failure by asset

Fire Incidents by Suspected Ignition Cause	Colorado Data	Percentage
Contact from Object	16.8%	16.84%
Contamination	0.6%	0.63%
Equipment/Facility Failure	75.0%	75.00%
Other	0.0%	0.00%
Unknown	5.4%	5.40%
Vandalism	1.1%	1.13%
Wire/Wire Contact	1.0%	1.00%
Total	100.0%	

Using a Normal Distribution and all negative values are considered 0

Object Contact - Object Type	Colorado Data	Percentage	Historical Fire Size Mean (acres)	Historical Fire Size Stand Dev (acres)	CO expected acres burned annually from Utility Caused Fires	Colorado expected acres burned annually from Utility Caused Fires		Expected Consequence	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting
Animal	25.20%	25.20%	23.19	192.47	14.76	14.76	$	183,241	85,854	10,205	3,033	1,650	2,444	30
Balloons	3.25%	3.25%	1.43	4.81	0.12	0.12	$	1,455	423,690	24,757	6,634	2,433	3,587	13
Other	4.07%	4.07%	12.30	65.02	1.26	1.26	$	15,674	451,253	68,256	19,385	9,855	12,963	30
Vegetation	49.59%	49.59%	230.68	2971.10	288.98	288.98	$	3,587,377	423,690	24,757	6,634	2,433	3,587	13
Vehicle	17.89%	17.89%	3.66	34.55	1.65	1.65	$	20,543	451,253	68,256	19,385	9,855	12,963	30
SubTotal			271.25		306.78	306.78	$	3,808,291						
Equipment/Facility Failure														
Cap Bank	0.37%	0.37%	0.58	1.30	0.03	0.026	$	325	1,360	35	4	2	2	6
Conductor and Conductor Splice	11.01%	11.01%	4.85	36.80	6.60	6.603	$	81,964	423,690	24,757	6,634	2,433	3,587	13
Crossarm	0.18%	0.18%	29.08	93.18	0.66	0.660	$	8,198	214,635	25,512	7,582	4,126	6,109	30
Fuse	3.30%	3.30%	1.00	1.71	0.41	0.410	$	5,087	33,055	4,052	1,163	562	1,020	31
Guy/Span Wire	0.18%	0.18%	1.50	2.25	0.03	0.034	$	423	64,390	7,654	2,275	1,238	1,833	30
Insulator	51.38%	51.38%	2.99	9.44	19.02	19.018	$	236,082	451,253	68,256	19,385	9,855	12,963	30
Lightning Arrestor	0.92%	0.92%	26.70	106.41	3.03	3.031	$	37,632	65,003	8,240	2,946	1,721	3,900	51
Pole	1.83%	1.83%	44.49	135.13	10.10	10.102	$	125,410	451,253	68,256	19,385	9,855	12,963	30
Recloser	0.00%	0.00%	0.00	0.00	-	0.000	$	-						
Sectionalizer	0.00%	0.00%	0.00	0.00	-	0.000	$	-						
Switch	5.14%	5.14%	0.70	1.44	0.45	0.446	$	5,543	738	195	9	2	-	7
Transformer	2.94%	2.94%	2.49	8.60	0.91	0.906	$	11,251	65,003	8,240	2,946	1,721	3,900	51
Voltage Regulator	0.00%	0.00%	0.14	0.10	-	0.000	$	-	738	195	9	2	-	7
Other	22.75%	22.75%	1.12	5.41	3.16	3.156	$	39,183	451,253	68,256	19,385	9,855	12,963	30
SubTotal			115.65		44.3939	44.3939	$	551,097						
Other Utility Caused issues (other 8%)														
Contact with 3rd Party			1.18	1.95										
Contamination		0.627%	8.08	17.47	0.76	0.761	$	9,443	451,253	68,256	19,385	9,855	12,963	30
Unknown		5.400%	372.46	3,686.40	301.70	301.696	$	3,745,197	21,984	17,232	4,221	1,604	745	34
Vandalism/Theft		1.129%	8.78	16.70	1.49	1.487	$	18,454	85,854	10,205	3,033	1,650	2,444	30
Wire-Wire Contact		1.004%	0.56	1.25	0.08	0.084	$	1,047	1,437	807	345	188	15	32
Subtotal		8%					$	3,774,141						
								Weighting from CO-WRAP (Fire Intensity)	4	15	56	218	840	1,133
Totals					655.20	655.20		15						
						2827.62								

				Mean expected consequence	
Total Impact - Base Case	Status Quo	$	8,133,528	$35,845,016	$87,987,135

Wild Fire Program Summary

	MITIGATION ACTION ACTIVITIES			Program ID
Mitigation Number	**Protection Plan**	**Summary**	**Risk/Action**	
PP-1	Review need for existing reclosers	Quick assessment of coordination, control functionality, placement and usefulness	Removal, replacement or modification of existing reclosers to reduce wildfire risk	PP-1
PP-2	Distribution Wild Fire Protection Guidelines	Guideline document for overcurrent protection application	Improve reliability while lowering the risk of fire due to a fault	PP-2
PP-3	Protection Study for WFRZ feeders	Detailed overcurrent protection review, design and construction planning	Improve reliability while lowering the risk of fire due to a fault	PP-3
PP-4	Design/Construct new protection schemes	Complete field configuration of protection	Improve reliability while lowering the risk of fire due to a fault	PP-4
PP-5	Dist. Sub Relay Upgrade	Relay upgrade to enable non-reclosing functionality	Permit not-reclosing during periods of high fire risk	PP-5
PP-6	Red Flag Procedure for Distribution	Xcel meteorologists determine Red Flag Warning Day	Matches waring to specific to Xcel Energy assets	PP-6
PP-7	Plan to Add to ADMS	Addition of tools to ADMS to improve circuit breaker operation	Improves protection and performance	PP-7
PP-8	Recloser Communications	Establish field communications network for remote recloser settings control	Enable change to recloser settings for high risk days	PP-8

PP-9	FLISR	System that will isolate faults and restore power to the rest of the system.	Improve reliability while lowering the risk of fire due to a fault	PP-9
PP-10	Falling Conductor Detection	Research and implement advanced detection schemes	Reduce risk of live conductor on ground	PP-10
	Total Costs			
	Hardening Plan	**Summary**	**Risk/Action**	
HP-1	Spin Secondary	Upgrade open wire secondary to spun secondary (#1/0 or #4/0 Triplex) (about $5/ft)	Improve reliability while lowering risk of fire due to a fault.	HP-1
HP-2	Wind Strength Review (Distribution)	Evaluate and verify the capability of existing transmission lines to withstand winds up to 90 mph	Evaluate all moderate and high risk wildfire zone poles for structural strength to comply with NESC - Grade B, extreme wind (90 mph) standard. Reduce the risk of structural and wire failure.	HP-2
HP-3	Down Wire Report & Fire Ignition Report	Develop a process to track all down wire orders for PSC (also Fire Ignition)	Evaluation of data will help determine higher risk failure components and higher risk circuits. Will support decisions on mitigating risk.	HP-3
HP-4a	Replace 60 year old Poles	Replace 60 year old Poles	Reduce possible ignitions from older assets	HP-4a
HP-4	Replace 60 year old OH	Replace 60 year old OH Conductor	Reduce possible ignitions from older assets	HP-4
	Total Costs			
	Vegetation Management Plan	**Summary**	**Risk/Action**	
VM-1	On 4 Year Cycle	Maintain 100% on-cycle (4yr) in wild fire zones	Create a project management plan to prioritize and schedule area of work. Plan will keep cycle on track. Program will reduce the number of electrical failures due to vegetation.	VM-1

VM-1a	On 4 Year Cycle	Distribution non-WRZ - Reestablish 100% on-cycle status in remainder of PSCo	Create a project management plan to prioritize and schedule area of work. Plan will keep cycle on track. Program will reduce the number of electrical failures due to vegetation.	VM-1a
VM-1b	On 4 Year Cycle-trans	Maintain 100% on-cycle (4yr) in wild fire zones	Create a project management plan to prioritize and schedule area of work. Plan will keep cycle on track. Program will reduce the number of electrical failures due to vegetation.	VM-1b
VM-2	Pole Brushing (10' radius on base of equipment pole)	Clearing a 10' radius around the base of all equipment poles.	Equipment poles have a higher potential of creating high thermo component upon failure. By clearing the vegetation and debris at these poles, the fuel source has been limited and reduces the risk of a wild fire.	VM-2
VM-2b	Pole Brushing (10' radius on base of transformer poles)	Pole Brushing (10' radius on base of transformer poles)	By clearing the vegetation and debris at these poles, the fuel source has been limited and reduces the risk of a wild fire.	VM-2b
VM-3	Service Line Clearance	Trimming stand alone secondary voltage lines	Determine the necessary clearance for stand alone secondary voltage lines and clearing them to reduce electrical failure. Will reduce line to ground failures and vegetation burn.	VM-3
VM-4	Ground to Sky Clearance (In Progress)	Expanded Veg Clearance	Reduced risk of contact	VM-4
VM-5	Mountain Hazard Tree Program (In Progress)	Enhance the existing Mountain Hazard Trees program - stand alone program	Separate the current Mountain Hazard Tree program from the existing tree vendor's annual books of work program and establish its own stand alone program.	VM-5
	Total Costs			
	Distribution Pole	**Summary**	**Risk/Action**	
PI-1	Pole Inspection / Replacement Program	Perform ground line inspection to identify pole deterioration	Identify and perform an inspection on all poles in the WFRZ. Replace or repair all poles with high risk of failure. This will reduce electrical line on ground failures.	PI-1
PI-4	Infrared Inspection Program	Infrared Inspection Program	Infrared Inspection Program	PI-4

PI-3	Pole Repair/Replace (Infrared)	Pole Repair/Replace (Infrared)	Pole Repair/Replace (Infrared)	PI-3
PI-2	Above Ground Line Inspection Program	Review and Inspect all poles with above ground line issues.	Target poles with above ground line issues from the Pole Inspection program dataset. Verify if poles needs to be repaired or replaced to mitigate future failures	PI-2
	Total Costs			
	Inspection	**Summary**	**Risk/Action**	
IN-1	Infrared Inspection Program	Inspect all equipment in the WFRZ with thermo imaging technology	Program will identify any electrical component running above its recommended thermo limits. Replacement of these components will be necessary to mitigate equipment failure.	IN-1
IN-2	Open Wire Quantification	Field verification of all OH secondary data for system accuracy	Verify 71 feeders in the WFRZ.	IN-2
	Total Costs			
	Transmission Mitigation Plan	**Summary**	**Risk/Action**	
TR-1	Transmission Infrared Inspection Program	Increase transmission line assets' reliability by using thermal imagin technology to identify equipment thermal hot spots.	Inspect 300 circuit miles for hot spots. Replace or repair equipment with high potential risk.	TR-1
TR-2	Wind Strength Review (Transmission)	Evaluate and verify the capability of existing transmission lines to withstand winds up to 100 mph	Transmission system evaluated with the aid of computer software modeling and will identify weaknesses in the system.	TR-2
TR-3	Downed Conductor Tracking	Track downed conductor on transmission lines	Document all occurrences of down conductor and splice failures.	TR-3
TR-4	High Priority Pole and Component Replacement	Identify and address transmission line defects within the high wildfire risk areas.	Continue 12-year cycle pole inspection program and annual inspection program.	TR-4

TR-4b	High Priority Pole and Component Replacement-2nd tier	Identify and address transmission line defects within the high wildfire risk areas.	Continue 12-year cycle pole inspection program and annual inspection program.	TR-4b
TR-6	ROW Vegetation Conversion to Long Term Sustainability	Changing vegetation cover type from easements edge-to-edge to less woody vegetaion, and more prairie	Changing vegetation cover type from easements edge-to-edge to less woody vegetaion, and more prairie	TR-6
TR-7	Transmission Wildfire Protection (TWP)	Reducing fuel load in radius around selected structures	Reducing fuel load in radius around selected structures	TR-7
TR-8	Trans Visual Inspection	Trans Visual Inspection	Trans Visual Inspection	TR-8
TR-5	Wood Pole Coating For Transmission	Increase wood pole fire resistivity through the installation of fire resistive material on at-risk poles.	Develop standards and identify high risk zones. Install fire resistive material	TR-5
	Total Costs			

	WFR 1	WFR 2	WFR 3	WFR 4	WFR 5	
Weighting	4	15	56	218	840	1,133

PP-1	Review need for existing reclosers

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation			6,634	2,433	3,587	8	67%	2	30.0%	231.3084439	$ 2,871,417
Vehicle						-	0%		0.0%	1.654869799	$ 20,543
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ 3,745,197
Vandalism/Theft						-	0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 7,417,568
											$10,211,438
Benefit (95th Percentile)											$ 77,775,697

PP-2	Distribution Wild Fire Protection Guidelines	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle	451,253	68,256	19,385	9,855	12,963	30	100%	5	90.0%	0.16548698	$ 2,054
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other	451,253	68,256	19,385	9,855	12,963	29.98	100%	2	30.0%	2.209458165	$ 27,428
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination							0%		0.0%	0.760664994	$ 9,443
Unknown	21,984	17,232	4,221	1,604	745	33.84	100%	2	30.0%	211.1873763	$ 2,621,638
Vandalism/Theft							0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact							0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 6,979,726
											$77,278,005
Benefit (95th Percentile)											$ 10,709,130

PP-3	Protection Study for WFRZ feeders	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal	7,899	1,408	2,790	1,518	2,248	24	79%	2	30.0%	11.24699055	$ 139,618
Balloons	38,979	3,416	6,103	2,238	3,300	8	65%	2	30.0%	0.094513783	$ 1,173
Other	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	0.963637303	$ 11,962
Vegetation	38,979	3,416	6,103	2,238	3,300	8	65%	3	50.0%	195.6897363	$ 2,429,253
Vehicle	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	1.262981278	$ 15,678
SubTotal											
Equipment/Facility Failure											
Cap Bank	125	5	4	2	2	1.92	34%	2	30.0%	0.023521522	$ 292
Conductor and Conductor Splice	38,979	3,416	6,103	2,238	3,300	8.25	65%	2	30.0%	5.323732646	$ 66,088
Crossarm	19,746	3,521	6,975	3,795	5,620	23.52	79%	2	30.0%	0.503170336	$ 6,246
Fuse	3,041	559	1,070	517	938	24.62	80%	2	30.0%	0.311727507	$ 3,870
Guy/Span Wire	5,924	1,056	2,093	1,139	1,686	23.52	79%	2	30.0%	0.025951208	$ 322
Insulator	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	14.5141231	$ 180,175
Lightning Arrestor	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	2.259702093	$ 28,051
Pole	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	7.710096467	$ 95,712
Recloser											
Sectionalizer											
Switch	68	27	8	2	-	1.61	23%	2	30.0%	0.415652526	$ 5,160
Transformer	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	0.675598615	$ 8,387
Voltage Regulator	68	27	8	2	-	1.61	23%	2	30.0%	0	$ -
Other	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	2.408911391	$ 29,904
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	0.580532466	$ 7,207
Unknown	2,023	2,378	3,883	1,476	685	25.31	75%	2	30.0%	233.9929858	$ 2,904,742
Vandalism/Theft	7,899	1,408	2,790	1,518	2,248	23.52	79%	2	30.0%	1.132694958	$ 14,061
Wire-Wire Contact	132	111	317	173	14	24.83	77%	2	30.0%	0.064898866	$ 806
Subtotal											
Total Expected Consequence											$ 5,948,707
											$62,369,349
Benefit (95th Percentile)											$ 25,617,786

PP-4	Design/Construct new protection schemes	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal	7,899	1,408	2,790	1,518	2,248	24	79%	2	30.0%	11.24699055	$ 139,618
Balloons	38,979	3,416	6,103	2,238	3,300	8	65%	2	30.0%	0.094513783	$ 1,173
Other	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	0.963637303	$ 11,962
Vegetation	38,979	3,416	6,103	2,238	3,300	8	65%	3	50.0%	195.6897363	$ 2,429,253
Vehicle	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	1.262981278	$ 15,678
SubTotal											
Equipment/Facility Failure											
Cap Bank	125	5	4	2	2	1.92	34%	2	30.0%	0.023521522	$ 292
Conductor and Conductor Splice	38,979	3,416	6,103	2,238	3,300	8.25	65%	2	30.0%	5.323732646	$ 66,088
Crossarm	19,746	3,521	6,975	3,795	5,620	23.52	79%	2	30.0%	0.503170336	$ 6,246
Fuse	3,041	559	1,070	517	938	24.62	80%	2	30.0%	0.311727507	$ 3,870
Guy/Span Wire	5,924	1,056	2,093	1,139	1,686	23.52	79%	2	30.0%	0.025951208	$ 322
Insulator	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	14.5141231	$ 180,175
Lightning Arrestor	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	2.259702093	$ 28,051
Pole	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	7.710096467	$ 95,712
Recloser											
Sectionalizer											
Switch	68	27	8	2	-	1.61	23%	2	30.0%	0.415652526	$ 5,160
Transformer	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	0.675598615	$ 8,387
Voltage Regulator	68	27	8	2	-	1.61	23%	2	30.0%	0	$ -
Other	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	2.408911391	$ 29,904
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	0.580532466	$ 7,207
Unknown	2,023	2,378	3,883	1,476	685	25.31	75%	2	30.0%	233.9929858	$ 2,904,742
Vandalism/Theft	7,899	1,408	2,790	1,518	2,248	23.52	79%	2	30.0%	1.132694958	$ 14,061
Wire-Wire Contact	132	111	317	173	14	24.83	77%	2	30.0%	0.064898866	$ 806
Subtotal											
Total Expected Consequence											$ 5,948,707
											$62,369,349
Benefit (95th Percentile)											$ 25,617,786

PP-5	Dist. Sub Relay Upgrade	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal	7,899	1,408	2,790	1,518	2,248	24	79%	2	30.0%	11.24699055	$ 139,618
Balloons	38,979	3,416	6,103	2,238	3,300	8	65%	2	30.0%	0.094513783	$ 1,173
Other	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	0.963637303	$ 11,962
Vegetation	38,979	3,416	6,103	2,238	3,300	8	65%	3	50.0%	195.6897363	$ 2,429,253
Vehicle	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	1.262981278	$ 15,678
SubTotal											
Equipment/Facility Failure											
Cap Bank	125	5	4	2	2	1.92	34%	2	30.0%	0.023521522	$ 292
Conductor and Conductor Splice	38,979	3,416	6,103	2,238	3,300	8.25	65%	2	30.0%	5.323732646	$ 66,088
Crossarm	19,746	3,521	6,975	3,795	5,620	23.52	79%	2	30.0%	0.503170336	$ 6,246
Fuse	3,041	559	1,070	517	938	24.62	80%	2	30.0%	0.311727507	$ 3,870
Guy/Span Wire	5,924	1,056	2,093	1,139	1,686	23.52	79%	2	30.0%	0.025951208	$ 322
Insulator	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	14.5141231	$ 180,175
Lightning Arrestor	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	2.259702093	$ 28,051
Pole	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	7.710096467	$ 95,712
Recloser											
Sectionalizer											
Switch	68	27	8	2	-	1.61	23%	2	30.0%	0.415652526	$ 5,160
Transformer	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	0.675598615	$ 8,387
Voltage Regulator	68	27	8	2	-	1.61	23%	2	30.0%	0	$ -
Other	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	2.408911391	$ 29,904
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	0.580532466	$ 7,207
Unknown	2,023	2,378	3,883	1,476	685	25.31	75%	2	30.0%	233.9929858	$ 2,904,742
Vandalism/Theft	7,899	1,408	2,790	1,518	2,248	23.52	79%	2	30.0%	1.132694958	$ 14,061
Wire-Wire Contact	132	111	317	173	14	24.83	77%	2	30.0%	0.064898866	$ 806
Subtotal											
Total Expected Consequence											$ 5,948,707
											$62,369,349
Benefit (95th Percentile)											$ 25,617,786

PP-6	Red Flag Procedure for Distribution	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle	451,253	68,256	19,385	9,855	12,963	30	100%	2	30.0%	1.158408859	$ 14,380
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other	451,253	68,256	19,385	9,855	12,963	29.98	100%	2	30.0%	2.209458165	$ 27,428
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown	21,984	17,232	4,221	1,604	745	33.84	100%	2	30.0%	211.1873763	$ 2,621,638
Vandalism/Theft						-	0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 6,992,051
											$77,278,005
Benefit (95th Percentile)											$ 10,709,130

PP-7	Plan to Add to ADMS	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation			6,634	2,433	3,587	8	67%	3	50.0%	192.8587664	$ 2,394,110
Vehicle						-	0%		0.0%	1.654869799	$ 20,543
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ 3,745,197
Vandalism/Theft						-	0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 6,940,262
											$68,363,558
Benefit (95th Percentile)											$ 19,623,577

PP-8	Recloser Communications	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal	7,899	1,408	2,790	1,518	2,248	24	79%	2	30.0%	11.24699055	$ 139,618
Balloons	38,979	3,416	6,103	2,238	3,300	8	65%	2	30.0%	0.094513783	$ 1,173
Other	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	0.963637303	$ 11,962
Vegetation	38,979	3,416	6,103	2,238	3,300	8	65%	3	50.0%	195.6897363	$ 2,429,253
Vehicle	41,515	9,419	17,834	9,067	11,926	24	79%	2	30.0%	1.262981278	$ 15,678
SubTotal											
Equipment/Facility Failure											
Cap Bank	125	5	4	2	2	1.92	34%	2	30.0%	0.023521522	$ 292
Conductor and Conductor Splice	38,979	3,416	6,103	2,238	3,300	8.25	65%	2	30.0%	5.323732646	$ 66,088
Crossarm	19,746	3,521	6,975	3,795	5,620	23.52	79%	2	30.0%	0.503170336	$ 6,246
Fuse	3,041	559	1,070	517	938	24.62	80%	2	30.0%	0.311727507	$ 3,870
Guy/Span Wire	5,924	1,056	2,093	1,139	1,686	23.52	79%	2	30.0%	0.025951208	$ 322
Insulator	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	14.5141231	$ 180,175
Lightning Arrestor	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	2.259702093	$ 28,051
Pole	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	7.710096467	$ 95,712
Recloser											
Sectionalizer											
Switch	68	27	8	2	-	1.61	23%	2	30.0%	0.415652526	$ 5,160
Transformer	5,980	1,137	2,710	1,583	3,588	43.41	85%	2	30.0%	0.675598615	$ 8,387
Voltage Regulator	68	27	8	2	-	1.61	23%	2	30.0%	0	$ -
Other	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	2.408911391	$ 29,904
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination	41,515	9,419	17,834	9,067	11,926	23.67	79%	2	30.0%	0.580532466	$ 7,207
Unknown	2,023	2,378	3,883	1,476	685	25.31	75%	2	30.0%	233.9929858	$ 2,904,742
Vandalism/Theft	7,899	1,408	2,790	1,518	2,248	23.52	79%	2	30.0%	1.132694958	$ 14,061
Wire-Wire Contact	132	111	317	173	14	24.83	77%	2	30.0%	0.064898866	$ 806
Subtotal											
Total Expected Consequence											$ 5,948,707
											$62,369,349
Benefit (95th Percentile)											$ 25,617,786

PP-9	FLISR	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation	423,690	24,757	6,634	2,433	3,587	13	100%	3	50.0%	144.4914801	$ 1,793,688
Vehicle						-	0%		0.0%	1.654869799	$ 20,543
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ 3,745,197
Vandalism/Theft						-	0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 6,339,840
											$59,928,471
Benefit (95th Percentile)											$ 28,058,664

PP-10	Falling Conductor Detection	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ 183,241
Balloons						-	0%		0.0%	0.117219095	$ 1,455
Other						-	0%		0.0%	1.262642842	$ 15,674
Vegetation			6,634	2,433	3,587	8	67%	4	70.0%	154.4090889	$ 1,916,804
Vehicle						-	0%		0.0%	1.654869799	$ 20,543
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice			6,634	2,433	3,587	8.50	67%	4	70.0%	3.527930989	$ 43,795
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ 3,745,197
Vandalism/Theft						-	0%		0.0%	1.486604177	$ 18,454
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 6,424,786
											$60,039,181
Benefit (95th Percentile)											$ 27,947,954

HP-1 Spin Secondary

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			84	13	1	0	0.143%	4	70.0%	288.6938866	$ 3,583,788
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank							0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact			84	13	1	3.01	9%	5	90.0%	0.077244614	$ 959
Subtotal											
Total Expected Consequence											$ 4,145,287
											$4,919,570
Benefit (90th Percentile)											$ 83,067,565

HP-2	Wind Strength Review (Distribution)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			5,454	2,119	3,568	8	64%	5	90.0%	122.6279659	$ 1,522,279
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			15,164	8,251	12,218	22.99	77%	3	50.0%	6.228763677	$ 77,323
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 2,035,778
											$4,297,875
Benefit (90th Percentile)											$ 83,689,261

HP-3	Down Wire Report & Fire Ignition Report	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			6,634	2,433	3,587	8	67%	2	30.0%	231.3084439	$ 2,871,417
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator			19,385	9,855	12,963	25.15	84%	2	30.0%	14.23133221	$ 176,665
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact			345	188	15	26.16	81%	2	30.0%	0.06385975	$ 793
Subtotal											
Total Expected Consequence											$ 3,373,332
											$4,077,988
Benefit (90th Percentile)											$ 83,909,147

HP-4	Replace 60 year old OH	Yes	13%		

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal			394	215	318	3	11%	4	70.0%	13.62662168	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			862	316	466	1	9%	4	70.0%	271.488357	$ 3,370,202
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			1	0	0	0.22	4%	4	70.0%	0.02546945	$ 316
Conductor and Conductor Splice			862	316	466	1.10	9%	5	90.0%	6.088747621	$ 75,584
Crossarm			986	536	794	3.25	11%	5	90.0%	0.595129504	$ 7,388
Fuse			151	73	133	3.41	11%	4	70.0%	0.378118714	$ 4,694
Guy/Span Wire			296	161	238	3.25	11%	5	90.0%	0.030694039	$ 381
Insulator			2,520	1,281	1,685	3.27	11%	5	90.0%	17.15100929	$ 212,909
Lightning Arrestor			383	224	507	6.07	12%	5	90.0%	2.707932119	$ 33,616
Pole			2,520	1,281	1,685	3.27	11%	5	90.0%	9.110845702	$ 113,100
Recloser											
Sectionalizer											
Switch			1	0	-	0.13	2%	4	70.0%	0.44068961	$ 5,471
Transformer			383	224	507	6.07	12%	4	70.0%	0.831104489	$ 10,317
Voltage Regulator			1	0	-	0.13	2%	3	50.0%	0	$ -
Other							0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			2,520	1,281	1,685	3.27	11%	5	90.0%	0.686002017	$ 8,516
Unknown			549	209	97	3.45	10%	4	70.0%	280.1924213	$ -
Vandalism/Theft							0%		0.0%	1.486604177	$ -
Wire-Wire Contact							0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 3,882,724
											$4,612,754
Benefit (90th Percentile)											$ 83,374,381

HP-4a	Replace 60 year old Poles	Yes		0.15%

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal			129	15	5	0	0%	4	70.0%	14.71235947	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			636	37	10	0	1%	4	70.0%	287.1850798	$ 3,565,058
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			2	0	0	0.09	2%	4	70.0%	0.025863978	$ 321
Conductor and Conductor Splice			636	37	10	0.11	1%	5	90.0%	6.549853521	$ 81,309
Crossarm			322	38	11	0.14	0%	5	90.0%	0.657581759	$ 8,163
Fuse			50	6	2	0.14	0%	4	70.0%	0.408501649	$ 5,071
Guy/Span Wire			97	11	3	0.14	0%	5	90.0%	0.033915038	$ 421
Insulator			677	102	29	0.15	1%	5	90.0%	18.93136008	$ 235,010
Lightning Arrestor			98	12	4	0.15	0%	5	90.0%	3.023702182	$ 37,536
Pole			677	102	29	0.15	1%	5	90.0%	10.05659187	$ 124,841
Recloser											
Sectionalizer											
Switch			1	0	0	0.15	2%	4	70.0%	0.43998603	$ 5,462
Transformer			98	12	4	0.15	0%	4	70.0%	0.904532886	$ 11,229
Voltage Regulator			1	0	0	0.15	2%	3	50.0%	0	$ -
Other							0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			677	102	29	0.15	1%	5	90.0%	0.757212067	$ 9,400
Unknown			33	26	6	0.28	1%	4	70.0%	299.9500762	$ -
Vandalism/Theft							0%		0.0%	1.486604177	$ -
Wire-Wire Contact							0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,124,049
											$4,908,085
Benefit (90th Percentile)											$ 83,079,050

VM-1	On 4 Year Cycle

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			5,454	2,119	3,568	8	64%	4	70.0%	159.5957424	$ 1,415,135
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm						-	0%		0.0%	0.660385321	$ 5,856
Fuse						-	0%		0.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator						-	0%		0.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 26,880
Pole						-	0%		0.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer						-	0%		0.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 6,745
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 1,816,269
											$3,741,241
Benefit (95th Percentile)											$ 84,245,894

VM-1b | On 4 Year Cycle-trans

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			345	188	15	0	1%	4	70.0%	286.4742892	$ 2,540,168
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm						-	0%		0.0%	0.660385321	$ 5,856
Fuse						-	0%		0.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator						-	0%		0.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 26,880
Pole						-	0%		0.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer						-	0%		0.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 6,745
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,941,301
											$3,878,441
Benefit (95th Percentile)											$ 84,108,694

VM-2	Pole Brushing (10' radius on base of equipment pole)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 2,562,412
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			4	2	2	1.67	29%	4	70.0%	0.020816058	$ 185
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm						-	0%		0.0%	0.660385321	$ 5,856
Fuse			1,163	562	1,020	26.22	85%	4	70.0%	0.166060964	$ 1,472
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator			6,106	3,104	4,083	7.92	26%	4	70.0%	15.49971652	$ 137,436
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 26,880
Pole						-	0%		0.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer						-	0%		0.0%	0.906338642	$ 8,037
Voltage Regulator			9	2	-	1.00	14%	4	70.0%	0	$ -
Other							0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination							0%		0.0%	0.760664994	$ 6,745
Unknown							0%		0.0%	301.6962519	$ -
Vandalism/Theft							0%		0.0%	1.486604177	$ -
Wire-Wire Contact							0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,930,142
											$3,343,862
Benefit (95th Percentile)											$ 84,643,273

VM-2b	Pole Brushing (10' radius on base of transformer poles)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 2,562,412
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm						-	0%		0.0%	0.660385321	$ 5,856
Fuse						-	0%		0.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator						-	0%		0.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 26,880
Pole						-	0%		0.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer			2,946	1,721	3,900	46.66	91%	4	70.0%	0.327614388	$ 2,905
Voltage Regulator						-	0%		0.0%	0	$ -
Other							0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination							0%		0.0%	0.760664994	$ 6,745
Unknown							0%		0.0%	301.6962519	$ -
Vandalism/Theft							0%		0.0%	1.486604177	$ -
Wire-Wire Contact							0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,958,413
											$3,741,241
Benefit (95th Percentile)											$ 84,245,894

VM-3	Service Line Clearance	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			315	115	170	0.40	3%	5	90.0%	280.7789039	$ 2,489,667
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm						-	0%		0.0%	0.660385321	$ 5,856
Fuse						-	0%		0.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator						-	0%		0.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 26,880
Pole						-	0%		0.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer						-	0%		0.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 6,745
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,890,800
											$3,878,441
Benefit (95th Percentile)											$ 84,108,694

VM-4	Ground to Sky Clearance (In Progress)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%	-	0.0%	14.76109964	$ -
Balloons						-	0%	-	0.0%	0.117219095	$ -
Other						-	0%	-	0.0%	1.262642842	$ -
Vegetation			1,049	385	567	1.3	11%	5	90.0%	261.6361057	$ 2,319,927
Vehicle						-	0%	-	0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%	2	30.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%	2	30.0%	6.60266794	$ 58,546
Crossarm						-	0%	2	30.0%	0.660385321	$ 5,856
Fuse						-	0%	2	30.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%	2	30.0%	0.034059633	$ 302
Insulator						-	0%	2	30.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%	2	30.0%	3.03146762	$ 26,880
Pole						-	0%	2	30.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%	2	30.0%	0.446499083	$ 3,959
Transformer						-	0%	2	30.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%	2	30.0%	0	$ -
Other						-	0%	2	30.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%	2	30.0%	0.760664994	$ 6,745
Unknown						-	0%	2	30.0%	301.6962519	$ -
Vandalism/Theft						-	0%	2	30.0%	1.486604177	$ -
Wire-Wire Contact						-	0%	2	30.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,721,060
											$3,878,441
Benefit (95th Percentile)											$ 84,108,694

VM-5	Mountain Hazard Tree Program (In Progress)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%	-	0.0%	14.76109964	$ -
Balloons						-	0%	-	0.0%	0.117219095	$ -
Other						-	0%	-	0.0%	1.262642842	$ -
Vegetation			6,634	2,433	3,587	8	67%	4	70.0%	154.4090889	$ 1,369,145
Vehicle						-	0%	-	0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%	2	30.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%	2	30.0%	6.60266794	$ 58,546
Crossarm						-	0%	2	30.0%	0.660385321	$ 5,856
Fuse						-	0%	2	30.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%	2	30.0%	0.034059633	$ 302
Insulator						-	0%	2	30.0%	19.01768807	$ 168,630
Lightning Arrestor						-	0%	2	30.0%	3.03146762	$ 26,880
Pole						-	0%	2	30.0%	10.10245046	$ 89,578
Recloser											
Sectionalizer											
Switch						-	0%	2	30.0%	0.446499083	$ 3,959
Transformer						-	0%	2	30.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%	2	30.0%	0	$ -
Other						-	0%	2	30.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%	2	30.0%	0.760664994	$ 6,745
Unknown						-	0%	2	30.0%	301.6962519	$ -
Vandalism/Theft						-	0%	2	30.0%	1.486604177	$ -
Wire-Wire Contact						-	0%	2	30.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 1,770,279
											$3,741,241
Benefit (95th Percentile)											$ 84,245,894

PI-1	Pole Inspection / Replacement Program	10%	of assets

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			42,369	2,476	663	8	59%	4	70.0%	169.1242627	$ 1,499,625
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 232
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 58,546
Crossarm			21,463	2,551	758	9.32	31%	3	50.0%	0.55654969	$ 4,935
Fuse						-	0%		0.0%	0.409805505	$ 3,634
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 302
Insulator						-	0%		0.0%	19.01768807	$ 168,630
Lightning Arrestor			6,500	824	295	9.71	19%	3	50.0%	2.743858805	$ 24,330
Pole			45,125	6,826	1,939	10.08	34%	5	90.0%	7.045211534	$ 62,470
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 3,959
Transformer						-	0%		0.0%	0.906338642	$ 8,037
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			45,125	6,826	1,939	10.08	34%	3	50.0%	0.632778825	$ 5,611
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 1,869,045
											$3,741,241
Benefit (95th Percentile)											$ 84,245,894

PI-2	Above Ground Line Inspection Program	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%	-	0.0%	14.76109964	$ -
Balloons						-	0%	-	0.0%	0.117219095	$ -
Other						-	0%	-	0.0%	1.262642842	$ -
Vegetation			42,369	2,476	663	8	59%	4	70.0%	169.1242627	$ 1,499,625
Vehicle						-	0%	-	0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			136	4	0	6.26	109%	2	30.0%	0.017570301	$ 156
Conductor and Conductor Splice			42,369	2,476	663	7.57	59%	2	30.0%	5.429014193	$ 48,139
Crossarm			21,463	2,551	758	9.32	31%	5	90.0%	0.473481186	$ 4,198
Fuse			3,306	405	116	9.35	30%	2	30.0%	0.3725525	$ 3,303
Guy/Span Wire			6,439	765	227	9.32	31%	2	30.0%	0.030846415	$ 274
Insulator			45,125	6,826	1,939	10.08	34%	5	90.0%	13.26248873	$ 117,598
Lightning Arrestor			6,500	824	295	9.71	19%	2	30.0%	2.858902331	$ 25,350
Pole			45,125	6,826	1,939	10.08	34%	2	30.0%	9.083370817	$ 80,542
Recloser											
Sectionalizer											
Switch			74	20	1	9.71	139%	2	30.0%	0.260411878	$ 2,309
Transformer			6,500	824	295	9.71	19%	2	30.0%	0.854745616	$ 7,579
Voltage Regulator			74	20	1	9.71	139%	2	30.0%	0	$ -
Other			45,125	6,826	1,939	10.08	34%	2	30.0%	2.837971681	$ 25,164
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			45,125	6,826	1,939	10.08	34%	2	30.0%	0.683933293	$ 6,064
Unknown			2,198	1,723	422	18.65	55%	2	30.0%	251.8055198	$ -
Vandalism/Theft			8,585	1,020	303	9.32	31%	2	30.0%	1.346356527	$ -
Wire-Wire Contact			317	173	14	24.06	74%	2	30.0%	0.065496265	$ 581
Subtotal											
Total Expected Consequence											$ 1,820,883
											$2,889,015
Benefit (95th Percentile)											$ 85,098,120

PI-3	Pole Repair/Replace (Infrared)	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal			32	4	1	0	0%	2	30.0%	14.75587747	$ -
Balloons						-	0%	-	0.0%	0.117219095	$ -
Other						-	0%	-	0.0%	1.262642842	$ -
Vegetation			159	9	2	0	0%	2	30.0%	288.7903302	$ 2,560,704
Vehicle						-	0%	-	0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			1	0	0	0.02	0%	2	30.0%	0.026132555	$ 232
Conductor and Conductor Splice			159	9	2	0.03	0%	2	30.0%	6.598266738	$ 58,507
Crossarm			80	10	3	0.03	0%	2	30.0%	0.660151691	$ 5,854
Fuse			12	2	0	0.04	0%	2	30.0%	0.409665806	$ 3,633
Guy/Span Wire			24	3	1	0.03	0%	2	30.0%	0.034047583	$ 302
Insulator			169	26	7	0.04	0%	2	30.0%	19.01049407	$ 168,566
Lightning Arrestor			24	3	1	0.04	0%	2	30.0%	3.0308205	$ 26,874
Pole			169	26	7	0.04	0%	2	30.0%	10.09862891	$ 89,545
Recloser											
Sectionalizer											
Switch			0	0	0	0.04	1%	2	30.0%	0.445801256	$ 3,953
Transformer			24	3	1	0.04	0%	2	30.0%	0.906145168	$ 8,035
Voltage Regulator			0	0	0	0.04	1%	2	30.0%	0	$ -
Other						-	0%	2	30.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			169	26	7	0.04	0%	2	30.0%	0.76037725	$ 6,742
Unknown			8	6	2	0.07	0%	2	30.0%	301.5091616	$ -
Vandalism/Theft						-	0%	2	30.0%	1.486604177	$ -
Wire-Wire Contact						-	0%	2	30.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,961,680
											$3,876,701
Benefit (95th Percentile)											$ 84,110,434

PI-4	Infrared Inspection Program	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal			485	264	391	4	14%	1	10.0%	14.56163098	$ -
Balloons						-	0%	-	0.0%	0.117219095	$ -
Other						-	0%	-	0.0%	1.262642842	$ -
Vegetation			1,061	389	574	1	11%	1	10.0%	285.906986	$ 2,535,137
Vehicle						-	0%	-	0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			1	0	0	0.27	5%	1	10.0%	0.026042528	$ 231
Conductor and Conductor Splice			1,061	389	574	1.36	11%	1	10.0%	6.532388238	$ 57,923
Crossarm			1,213	660	977	4.01	14%	1	10.0%	0.651461449	$ 5,777
Fuse			186	90	163	4.19	14%	1	10.0%	0.404234201	$ 3,584
Guy/Span Wire			364	198	293	4.01	14%	1	10.0%	0.033599381	$ 298
Insulator			3,102	1,577	2,074	4.02	13%	1	10.0%	18.76241576	$ 166,366
Lightning Arrestor			471	275	624	7.47	15%	1	10.0%	2.987223449	$ 26,488
Pole			3,102	1,577	2,074	4.02	13%	1	10.0%	9.966846389	$ 88,376
Recloser											
Sectionalizer											
Switch			1	0	-	0.16	2%	1	10.0%	0.445477637	$ 3,950
Transformer			471	275	624	7.47	15%	1	10.0%	0.893110659	$ 7,919
Voltage Regulator			1	0	-	0.16	2%	1	10.0%	0	$ -
Other						-	0%	1	10.0%	3.156368807	$ 27,988
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			3,102	1,577	2,074	4.02	13%	1	10.0%	0.750454672	$ 6,654
Unknown			675	257	119	4.24	13%	1	10.0%	297.9153586	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 748
Subtotal											
Total Expected Consequence											$ 2,931,438
											$3,791,614
Benefit (95th Percentile)											$ 84,195,521

IN-1	Infrared Inspection Program

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank			4	2	2	1.67	29%	3	50.0%	0.022344265	$ 277
Conductor and Conductor Splice			6,634	2,433	3,587	8.50	67%	3	50.0%	4.40642726	$ 54,701
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor			2,946	1,721	3,900	46.66	91%	3	50.0%	1.648837272	$ 20,468
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch			9	2	-	1.00	14%	3	50.0%	0.414578905	$ 5,146
Transformer			2,946	1,721	3,900	46.66	91%	3	50.0%	0.492964175	$ 6,120
Voltage Regulator			9	2	-	1.00	14%	3	50.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,098,960
											$44,620,472
Benefit (95th Percentile)											$ 43,366,663

IN-2	Open Wire Quantification	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice			663	243	359	0.85	7%	3	50.0%	6.383043872	$ 79,238
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,146,237
											$44,620,472
Benefit (95th Percentile)											$ 43,366,663

TR-1	Transmission Infrared Inspection Program

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice			345	188	15	0.16	1%	2	30.0%	6.578103088	$ 81,659
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,148,658
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-2	Wind Strength Review (Transmission)	Yes

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			4,221	1,604	745	2.16	7%	3	50.0%	9.738510075	$ 120,892
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown			2,111	802	373	13.25	39%	4	70.0%	218.9892112	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,144,445
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-3	Downed Conductor Tracking	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			531	195	287	1	5%	2	30.0%	284.3689989	$ 3,530,100
Vehicle			1,551	788	1,037	2	7%	2	30.0%	1.621550099	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice			531	195	287	0.68	5%	3	50.0%	6.426968686	$ 79,783
Crossarm			607	330	489	2.00	7%	2	30.0%	0.646999512	$ 8,032
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire			182	99	147	2.00	7%	2	30.0%	0.033369255	$ 414
Insulator			1,551	788	1,037	2.01	7%	2	30.0%	18.6347796	$ 231,328
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			1,551	788	1,037	2.01	7%	2	30.0%	9.899044355	$ 122,885
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination			1,551	788	1,037	2.01	7%	2	30.0%	0.745349511	$ 9,253
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,081,862
											$4,882,643
Benefit (95th Percentile)											$ 83,104,492

TR-4	High Priority Pole and Component Replacement	Yes

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation				188	15	0	1%	3	50.0%	287.6691133	$ 3,571,067
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole				1,604	745	1.74	6%	4	70.0%	9.693020728	$ 120,327
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown			2,111	802	373	13.25	39%	4	70.0%	218.9892112	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,127,571
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-4b	High Priority Pole and Component Replacement-2nd tier	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			345			0	0%	3	50.0%	288.5048993	$ 3,581,442
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			4,221			0.42	1%	4	70.0%	10.00236365	$ 124,167
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,141,786
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-5	Wood Pole Coating For Transmission	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation						-	0%		0.0%	288.9829602	$ 3,587,377
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			2,533	962	447	1.30	4%	2	30.0%	9.971431921	$ 123,783
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,147,337
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-6	ROW Vegetation Conversion to Long Term Sustainability	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			345	188	15	0	1%	4	70.0%	286.4742892	$ 3,556,235
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%		0.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,117,821
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

	TR-7	Transmission Wildfire Protection (TWP)	Yes

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation			345	188	15	0	1%	2	30.0%	287.9078155	$ 3,574,030
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole						-	0%	2	30.0%	10.10245046	$ 125,410
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,135,616
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

TR-8	Trans Visual Inspection	Yes	

Object Contact - Object Type	Assets in WFR 1	Assets in WFR 2	Assets in WFR 3	Assets in WFR 4	Assets in WFR 5	weighting	Percent of total risk	Effectiveness	Percent Effective	Expected Acres Burned	New Expected Consequence
Animal						-	0%		0.0%	14.76109964	$ -
Balloons						-	0%		0.0%	0.117219095	$ -
Other						-	0%		0.0%	1.262642842	$ -
Vegetation	1,437	807	345	188	15	0	2%	4	70.0%	285.8809305	$ 3,548,869
Vehicle						-	0%		0.0%	1.654869799	$ -
SubTotal											
Equipment/Facility Failure											
Cap Bank						-	0%		0.0%	0.026164785	$ 325
Conductor and Conductor Splice						-	0%		0.0%	6.60266794	$ 81,964
Crossarm						-	0%		0.0%	0.660385321	$ 8,198
Fuse						-	0%		0.0%	0.409805505	$ 5,087
Guy/Span Wire						-	0%		0.0%	0.034059633	$ 423
Insulator						-	0%		0.0%	19.01768807	$ 236,082
Lightning Arrestor						-	0%		0.0%	3.03146762	$ 37,632
Pole			2,533	962	447	1.30	4%	3	50.0%	9.884086229	$ 122,699
Recloser											
Sectionalizer											
Switch						-	0%		0.0%	0.446499083	$ 5,543
Transformer						-	0%		0.0%	0.906338642	$ 11,251
Voltage Regulator						-	0%		0.0%	0	$ -
Other						-	0%		0.0%	3.156368807	$ 39,183
SubTotal											
Other Utility Caused issues (other 8%)											
Contact with 3rd Party											
Contamination						-	0%		0.0%	0.760664994	$ 9,443
Unknown						-	0%		0.0%	301.6962519	$ -
Vandalism/Theft						-	0%		0.0%	1.486604177	$ -
Wire-Wire Contact						-	0%		0.0%	0.084316186	$ 1,047
Subtotal											
Total Expected Consequence											$ 4,107,744
											$4,919,570
Benefit (95th Percentile)											$ 83,067,565

Mitigation Effectiveness Scale	Percent Effective-Min	Percent Effective - Max	Average	
0	0%	0%	0%	
1	0%	20%	10.0%	10.0%
2	20%	40%	30.0%	30.0%
3	40%	60%	50.0%	50.0%
4	60%	80%	70.0%	70.0%
5	80%	100%	90.0%	90.0%

Wildfires By State, 2018

State	Number of fires	Number of acres burned
Alabama	970	15,464
Alaska	367	410,683
Arizona	2,000	165,356
Arkansas	1,119	24,071
California	8,054	1,823,153
Colorado	1328	475,803
Connecticut	52	40
Delaware	0	0
Florida	2,249	138,820
Georgia	2,572	14,236
Hawaii	3	21,979
Idaho	1,132	604,481
Illinois	6	120
Indiana	26	115
Iowa	386	8,014
Kansas	71	59,234
Kentucky	376	8,417
Louisiana	647	10,742
Maine	542	678
Maryland	76	359
Massachusetts	320	210
Michigan	431	3786
Minnesota	1,344	17,005
Mississippi	1,168	21,194

Wildfires By State, 2017

State	Number of fires	Number of acres burned
Alabama	1,254	20,192
Alaska	364	653,023
Arizona	2,321	429,564
Arkansas	1,706	34,624
California	9,560	1,266,224
Colorado	967	111,667
Connecticut	97	243
Delaware	5	6
Florida	3,280	298,831
Georgia	3,929	200,785
Hawaii	3	2,098
Idaho	1,598	686,262
Illinois	13	98
Indiana	22	553
Iowa	427	7,216
Kansas	71	476,306
Kentucky	892	28,927
Louisiana	1,064	11,356
Maine	489	369
Maryland	108	2,178
Massachusetts	1,216	844
Michigan	270	736
Minnesota	1,036	5,553
Mississippi	2,775	40,595

Wildfires By State, 2016

State	Number of fires	Number of acres burned
Alaska	572	496,467
Alabama	3923	59,030
Arizona	2,288	308,245
Arkansas	1,513	33,371
California	7,349	560,815
Colorado	1190	129,495
Connecticut	268	778
Delaware	(1)	(1)
Florida	3,067	74,416
Georgia	5,086	52,119
Hawaii	10	15,098
Idaho	630	361,649
Illinois	12	133
Indiana	27	620
Iowa	465	21,371
Kansas	75	349,829
Kentucky	1220	73,864
Louisiana	508	7,799
Maine	796	946
Maryland	120	242
Massachusetts	1,526	1381
Michigan	389	3666
Minnesota	1,422	12,268
Mississippi	94	8,128

Wildfires By State, 2015

State	Number of fires	Number of acres burned
Alabama	3,198	47,380
Alaska	768	5,111,404
Arizona	1,662	160,152
Arkansas	1,837	26,630
California	8,745	893,362
Colorado	709	22,602
Connecticut	76	159
Delaware	-1	-1
Florida	2,422	73,432
Georgia	2,331	10,556
Hawaii	17	5,611
Idaho	1,324	804,094
Illinois	18	806
Indiana	16	868
Iowa	533	14,945
Kansas	154	53,936
Kentucky	774	19,207
Louisiana	1,172	21,036
Maine	375	574
Maryland	158	1,078
Massachusetts	1,525	1763
Michigan	526	3806
Minnesota	1,849	30,563
Mississippi	2,294	34,769

Wildfires By State, 2014

State	Number of fires	Number of acres burned
Alabama	2,093	40,527
Alaska	384	233,561
Arizona	1,543	205,199
Arkansas	1,302	20,164
California	7,865	555,044
Colorado	830	24,949
Connecticut	28	69
Delaware	-1	-1
Florida	2,436	101,599
Georgia	3,562	19,199
Hawaii	-1	-1
Idaho	1,180	189,430
Illinois	36	727
Indiana	54	276
Iowa	577	11,347
Kansas	68	31,261
Kentucky	1466	43,199
Louisiana	1,005	25,337
Maine	282	158
Maryland	125	1,802
Massachusetts	1,169	1197
Michigan	268	716
Minnesota	990	4,367
Mississippi	97	10,053

Wildfires By State, 2013

State	Number of fires	Number of acres burned	Average Number	Average Size	Stand Dev	Total Number (2014-2017	Total Acres (2014-2017	Average Size (2014-2017)	Percentage
Alabama	1,284	25,623							
Alaska	603	1,316,876							
Arizona	1,756	105,281							
Arkansas	881	14,733							
California	9,907	577,675	8,580	946,046	1,005	33,519	3,275,445	97.71905	
Colorado	1176	195,145	1,033	159,944	238	3,696	288,713	78.11499	80%
Connecticut	76	238							
Delaware	4	17							
Florida	101	7,660							
Georgia	2,942	6,736							
Hawaii	-1	-1							
Idaho	1,471	722,204							
Illinois	24	55							
Indiana	19	806							
Iowa	436	14,704							
Kansas	16	7,137							
Kentucky	1030	25,084							
Louisiana	1,027	17,883							
Maine	426	743							
Maryland	126	182							
Massachusetts	1,132	879							
Michigan	436	940							
Minnesota	1,115	22,107							
Mississippi	5	33							

Wildfires By State, 2018

State	Number of fires	Number of acres burned
Missouri	103	6,025
Montana	1,342	97,814
Nebraska	35	122
Nevada	649	1,001,966
New Hampshire	145	61
New Jersey	625	1,347
New Mexico	1334	382,345
New York	109	848
North Carolina	3,625	18,058
North Dakota	1,026	19,557
Ohio	67	337
Oklahoma	1,707	745,097
Oregon	2,019	897,263
Pennsylvania	1276	3,614
Rhode Island	32	14
South Carolina	1,136	9,939
South Dakota	433	5,027
Tennessee	341	3,763
Texas	10,541	569,811

Wildfires By State, 2017

State	Number of fires	Number of acres burned
Missouri	3,398	8,459
Montana	2,422	1,366,498
Nebraska	49	3,160
Nevada	768	1,329,289
New Hampshire	36	123
New Jersey	735	5,144
New Mexico	813	141,663
New York	57	191
North Carolina	5,125	46,507
North Dakota	1,086	19,841
Ohio	68	733
Oklahoma	1,906	502,625
Oregon	2,049	714,520
Pennsylvania	537	1,652
Rhode Island	31	30
South Carolina	1,092	11,041
South Dakota	1,420	77,386
Tennessee	593	6,949
Texas	9,827	734,682

Wildfires By State, 2016

State	Number of fires	Number of acres burned
Missouri	2,610	32,134
Montana	2,026	114,594
Nebraska	45	24,498
Nevada	467	265,156
New Hampshire	148	880
New Jersey	1050	4,445
New Mexico	1240	212,425
New York	196	4236
North Carolina	4,007	88,109
North Dakota	563	4,657
Ohio	410	1116
Oklahoma	1,938	767,780
Oregon	1,245	219,509
Pennsylvania	871	12,245
Rhode Island	79	57
South Carolina	982	3,804
South Dakota	1,216	81,561
Tennessee	2165	88,038
Texas	9,300	356,680

Wildfires By State, 2015

State	Number of fires	Number of acres burned
Missouri	3,161	29,893
Montana	2,432	351,264
Nebraska	51	4,854
Nevada	551	42,479
New Hampshire	114	622
New Jersey	1013	2,685
New Mexico	696	44,104
New York	186	3844
North Carolina	3,828	15,220
North Dakota	726	32,321
Ohio	69	548
Oklahoma	1,309	100,382
Oregon	2,588	685,809
Pennsylvania	831	4,473
Rhode Island	86	132
South Carolina	976	3,800
South Dakota	1,032	72,985
Tennessee	611	8,478
Texas	9,272	184,418

Wildfires By State, 2014

State	Number of fires	Number of acres burned
Missouri	105	5,607
Montana	1,646	38,118
Nebraska	38	992
Nevada	531	59,252
New Hampshire	62	45
New Jersey	962	10,400
New Mexico	728	23,440
New York	94	582
North Carolina	4,625	15,601
North Dakota	567	4,069
Ohio	63	684
Oklahoma	1,007	157,080
Oregon	3,087	984,629
Pennsylvania	877	4,519
Rhode Island	1	0
South Carolina	1,374	8,312
South Dakota	918	13,127
Tennessee	1249	156,391
Texas	9,677	131,138

Wildfires By State, 2013

State	Number of fires	Number of acres burned	Average Number	Average Size	Stand Dev	Total Number (2014-2017	Total Acres (2014-2017	Average Size (2014-2017)	Percentage
Missouri	51	1,660							
Montana	1,723	124,209							
Nebraska	10	63							
Nevada	763	162,907							
New Hampshire	85	137							
New Jersey	1013	1,430							
New Mexico	1064	221,951							
New York	138	1073							
North Carolina	3,514	24,547							
North Dakota	515	16,116							
Ohio	31	152							
Oklahoma	610	26,490							
Oregon	2,848	350,786							
Pennsylvania	639	1,788							
Rhode Island	7	27							
South Carolina	1,337	7,082							
South Dakota	889	4,475							
Tennessee	424	7,080							
Texas	70	10,743							

Wildfires By State, 2018

State	Number of fires	Number of acres burned
Utah	1,333	438,983
Vermont	59	113
Virginia	1,266	15,224
Washington	1,743	438,834
West Virginia	467	6,370
Wisconsin	825	1678
Wyoming	611	279,243
United States (1)	**58,083**	**8,767,492**

(1) Includes Puerto Rico which had 25 fires t

Source: National Interagency Fire Center.

View Archived Tables

Wildfires By State, 2017

State	Number of fires	Number of acres burned
Utah	1,166	249,829
Vermont	55	50
Virginia	1,522	20,194
Washington	1,346	404,223
West Virginia	520	6,866
Wisconsin	696	661
Wyoming	599	90,115
United States (1)	**71,499**	**10,024,086**

(1) Includes Puerto Rico which had 116 fires t

Source: National Interagency Fire Center.

View Archived Tables

Wildfires By State, 2016

State	Number of fires	Number of acres burned
Utah	1,078	101,096
Vermont	150	386
Virginia	580	41,441
Washington	1,272	293,717
West Virginia	18	443
Wisconsin	713	695
Wyoming	711	218,077
United States (2)	**67,743**	**5,509,995**

(1) Delaware had no wildfires in 2016.

(2) Includes Puerto Rico which had 113 fires t

Source: National Interagency Fire Center.

Wildfires By State, 2015

State	Number of fires	Number of acres burned
Utah	930	10,203
Vermont	102	346
Virginia	631	6,574
Washington	2,013	1,137,664
West Virginia	8	219
Wisconsin	993	2970
Wyoming	512	35,652
United States (2)	**68,151**	**10,125,149**

(1) Delaware had no wildfires in 2015.

(2) Includes Puerto Rico which had 947 fire

Source: National Interagency Fire Center.

Wildfires By State, 2014

State	Number of fires	Number of acres burned
Utah	1,035	28,255
Vermont	53	91
Virginia	736	10,446
Washington	1,480	386,972
West Virginia	671	8,286
Wisconsin	613	3268
Wyoming	403	7,836
United States (2)	**63,612**	**3,595,613**

(1) Delaware and Hawaii had no wildfires in 2

es t (2) Includes Puerto Rico which had 3,647 fire

Source: National Interagency Fire Center.

Wildfires By State, 2013

State	Number of fires	Number of acres burned	Average Number	Average Size	Stand Dev	Total Number (2014-2017	Total Acres (2014-2017	Average Size (2014-2017)	Percentage
Utah	1,276	70,282							
Vermont	124	281							
Virginia	482	4,418							
Washington	1,527	152,603							
West Virginia	557	8,577							
Wisconsin	671	9196							
Wyoming	468	44,016							
United States (2)	**47,579**	**4,319,546**							

(1) Hawaii had no wildfires in 2013.

(2) Includes Puerto Rico which had 750 fires that burned 4,716 acres.

Source: National Interagency Fire Center.