



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 135 ft Monopole
ATC Site Name : Dublin Scioto Park, OH
ATC Asset Number : 81552
Engineering Number : OAA765390_C3_02
Proposed Carrier : AMERICAN ELECTRIC POWER COMPANY
Carrier Site Name : S-CMHFRK0267-B
Carrier Site Number : S-CMHFRK0267-B
Site Location : 4500 Tuller Rd.(Or 6924)
Dublin, OH 43017-5033
40.108300,-83.110600
County : Franklin
Date : April 19, 2021
Max Usage : 92%
Result : Pass

Prepared By:
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Reviewed By:



COA: COA.02041



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection and Sway	3
Standard Conditions	4
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 135 ft monopole to reflect the change in loading by AMERICAN ELECTRIC POWER COMPANY.

Supporting Documents

Tower Drawings	EEI Job #OH 1249, dated July 19, 1995
Foundation Drawing	EEI Job #OH 1249, dated July 18, 1995
Geotechnical Report	CTL Project #95050165, dated July 11, 1995

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	108 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	40 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2017 Ohio Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Crest Height (H):	0 ft
Spectral Response:	$S_s = 0.12, S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
135.0	3	Nokia AHFIC AirScale Dual RRH 4T4R B2/66a 320W	Platform with Handrails	(15) 1 5/8" Coax (2) 1 5/8" Hybriflex	VERIZON WIRELESS
	9	Andrew SBNHH-1D65C (49.6lb)			
	3	RFS APL866513-42T6-00			
	1	Commscope RC3DC-3315-PF-48			
	1	Raycap RCMD-3315-PF-48			
	3	Nokia AHBCC AirScale Dual RRH 4T4R B5/13 320W			
103.0	3	Kathrein Scala 80010798	Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (6) 0.92" (23.4mm) Cable (3) 2" conduit (12) 7/8" Coax	AT&T MOBILITY
	3	Nokia AEQK AirScale MAA 64T64R 192AE n77 200W			
	3	Alcatel-Lucent RRH4x25-WCS-4R			
	3	Nokia Airscale Dual RRH 4T4R B12/B14 320W AHLBA			
	3	Nokia AirScale Dual RRH 4T4R B25/66 320W AHFIB (66.1lbs)			
	3	Raycap DC6-48-60-18-8F(32.8 lbs)			
	6	Commscope NNH4-65C-R6 (102.1 lbs)			
3	Nokia AirScale RRH 4T4R B5 160W AHCA				

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
No loading was considered as removed as part of this analysis.					

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
95.0	3	Generic 12" x 12" Junction Box	Pole Mount	(1) 0.145" (3.7mm) Control Cable (1) 0.26" (6.6mm) Cat 5e (1) 0.45" (11.5mm) Fiber (3) 2" conduit	AMERICAN ELECTRIC POWER COMPANY
	3	Generic Radio/ODU			
	4	Starry Titan A 37C60			
	1	Generic Masterline Distribution Box			

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines inside the pole shaft.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	66%	Pass
Shaft	91%	Pass
Base Plate	57%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	1,522.3	2,055.1	1,887.9	92%
Shear (Kips)	17.7	23.9	19.6	82%

* The design reactions are factored by 1.35 per ANSI/TIA-222-H, Sec. 15.6.2

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
95.0	Generic 12" x 12" Junction Box	AMERICAN ELECTRIC POWER COMPAN	1.537	2.105
	Generic Radio/ODU			
	Starry Titan A 37C60			
	Generic Masterline Distribution Box			

*Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H



Standard Conditions

All engineering services performed by ATC Tower Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

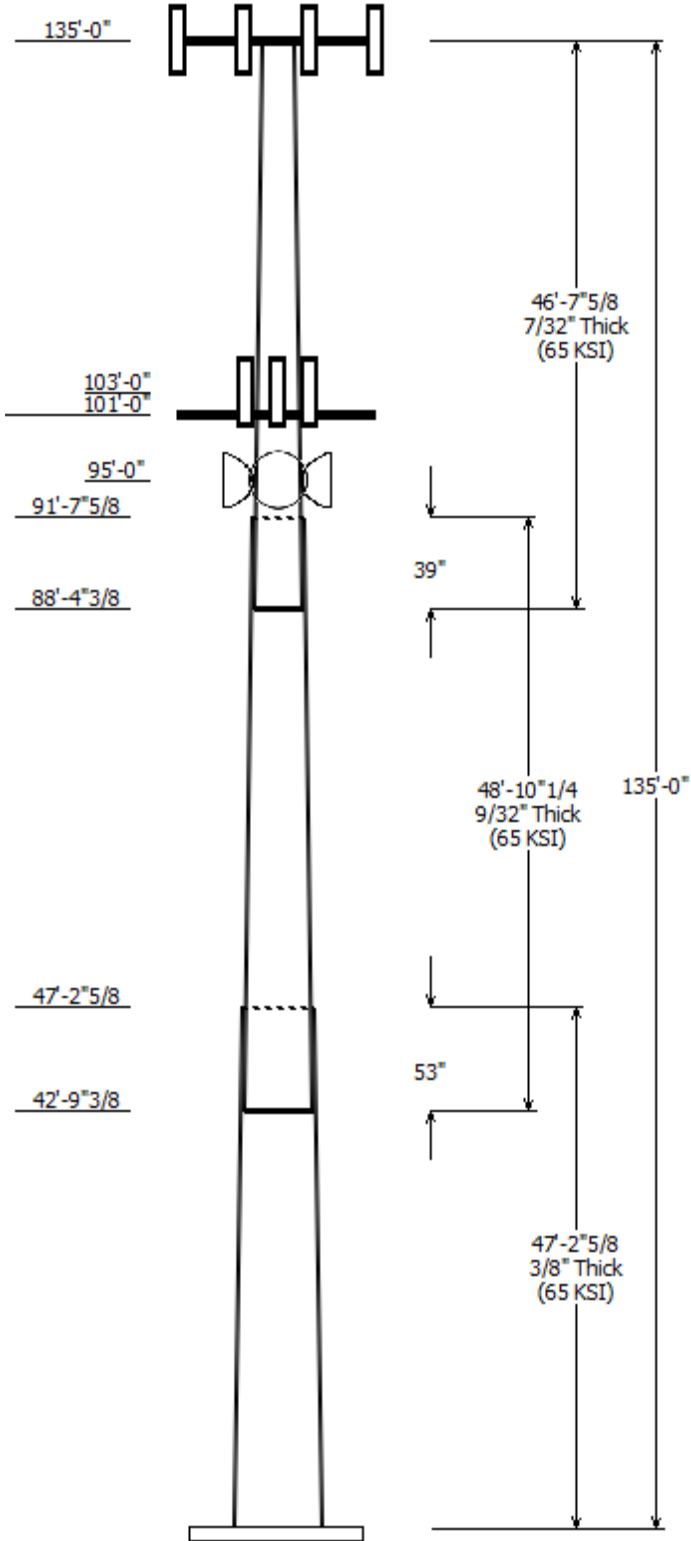
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of ATC Tower Services LLC

It is the responsibility of the client to ensure that the information provided to ATC Tower Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and ATC Tower Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Job Information	
Client : AMERICAN ELECTRIC POWER COMPANY	
Pole : 81552	Code: ANSI/TIA-222-H
Location : Dublin Scioto Park, OH	
Description : 135 ft EEI Monopole	Risk Category : II
Shape : 12 Sides	Exposure : C
Height : 135.00 (ft)	Topo Method : Method 1
Base Elev (ft): 0.00	Topographic Category : 1
Taper: 0.214815in/ft)	

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade
		Accross Top	Flats Bottom				
1	47.217	29.85	40.00	0.375		0.000	12 Sides 65
2	48.852	20.87	31.37	0.281	Slip Joint	53.212	12 Sides 65
3	46.635	12.00	22.01	0.219	Slip Joint	39.247	12 Sides 65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
135.000	135.000	1	Flat Platform w/ Handrails
135.000	135.000	9	Andrew SBNHH-1D65C (49.6lb)
135.000	135.000	3	RFS APL866513-42T6-00
135.000	135.000	1	Commscope RC3DC-3315-PF-
135.000	135.000	1	Raycap RCMDC-3315-PF-48
135.000	135.000	3	Nokia AHBCA AirScale Dual
135.000	135.000	3	Nokia AHFIC AirScale Dual RRH
103.000	103.000	6	Commscope NNH4-65C-R6
103.000	103.000	3	Kathrein Scala 80010798
103.000	103.000	3	Nokia AEQK AirScale MAA
103.000	103.000	3	Alcatel-Lucent RRH4x25-WCS-
103.000	103.000	3	Nokia Airscale Dual RRH 4T4R B
103.000	103.000	3	Nokia AirScale Dual RRH 4T4R B
103.000	103.000	3	Raycap DC6-48-60-18-8F(32.8 lb
103.000	103.000	3	Nokia AirScale RRH 4T4R B5 160
101.000	101.000	1	Flat Platform w/ Handrails
95.000	95.000	1	Generic Masterline Distributio
95.000	95.000	4	Starry Titan A 37C60
95.000	95.000	3	Generic Radio/ODU
95.000	95.000	3	Generic 12" x 12" Junction Box

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
0.000	95.000	0.145" (3.7mm)	No
0.000	95.000	0.26" (6.6mm) Cat	No
0.000	95.000	0.45" (11.5mm)	No
0.000	95.000	2" conduit	No
0.000	103.0	0.39" (10mm)	No
0.000	103.0	0.92" (23.4mm)	No
0.000	103.0	2" conduit	No
0.000	103.0	7/8" Coax	No
0.000	135.0	1 5/8" Coax	No
0.000	135.0	1 5/8" Hybriflex	No

Load Cases	
1.2D + 1.0W	108 mph with No Ice
0.9D + 1.0W	108 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic

0.9D - 1.0Ev + 1.0Eh
1.0D + 1.0W

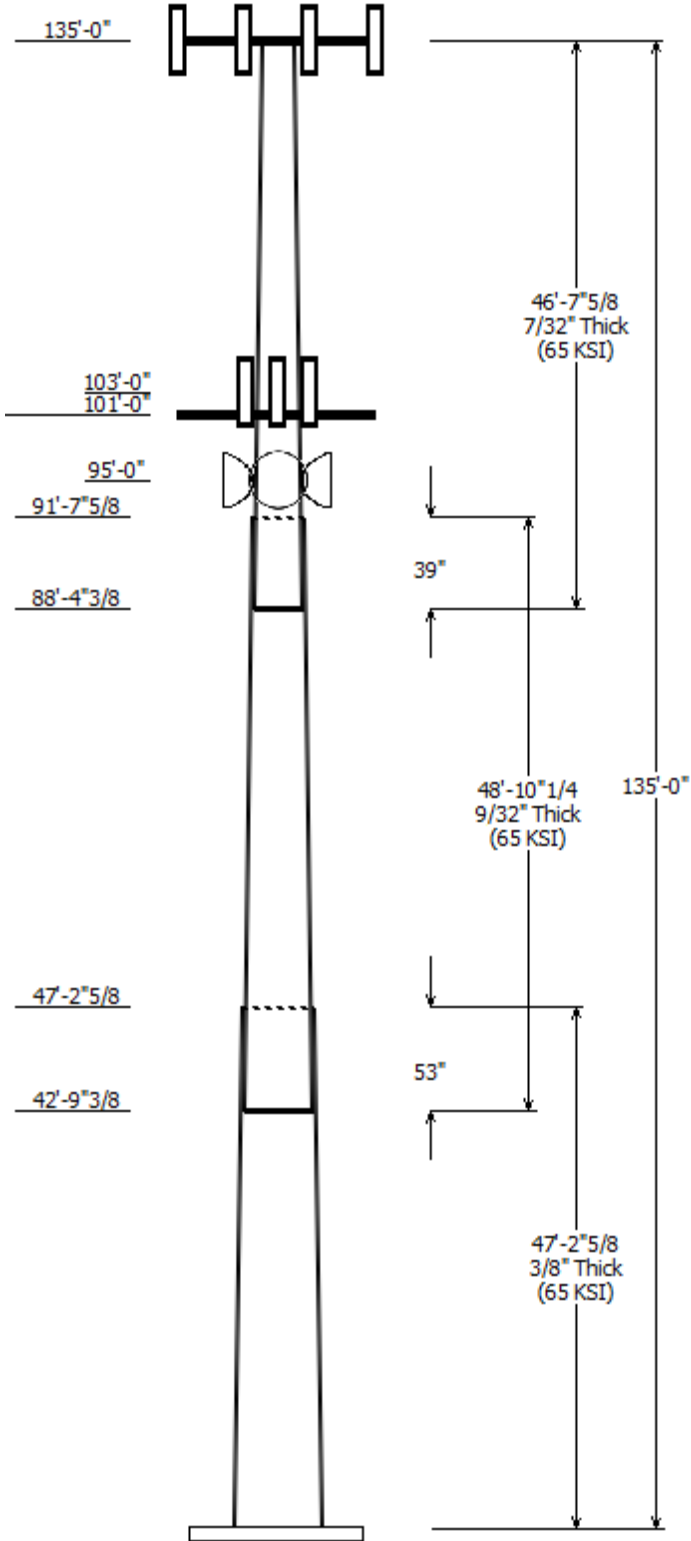
Seismic (Reduced DL)
Serviceability 60 mph

Reactions

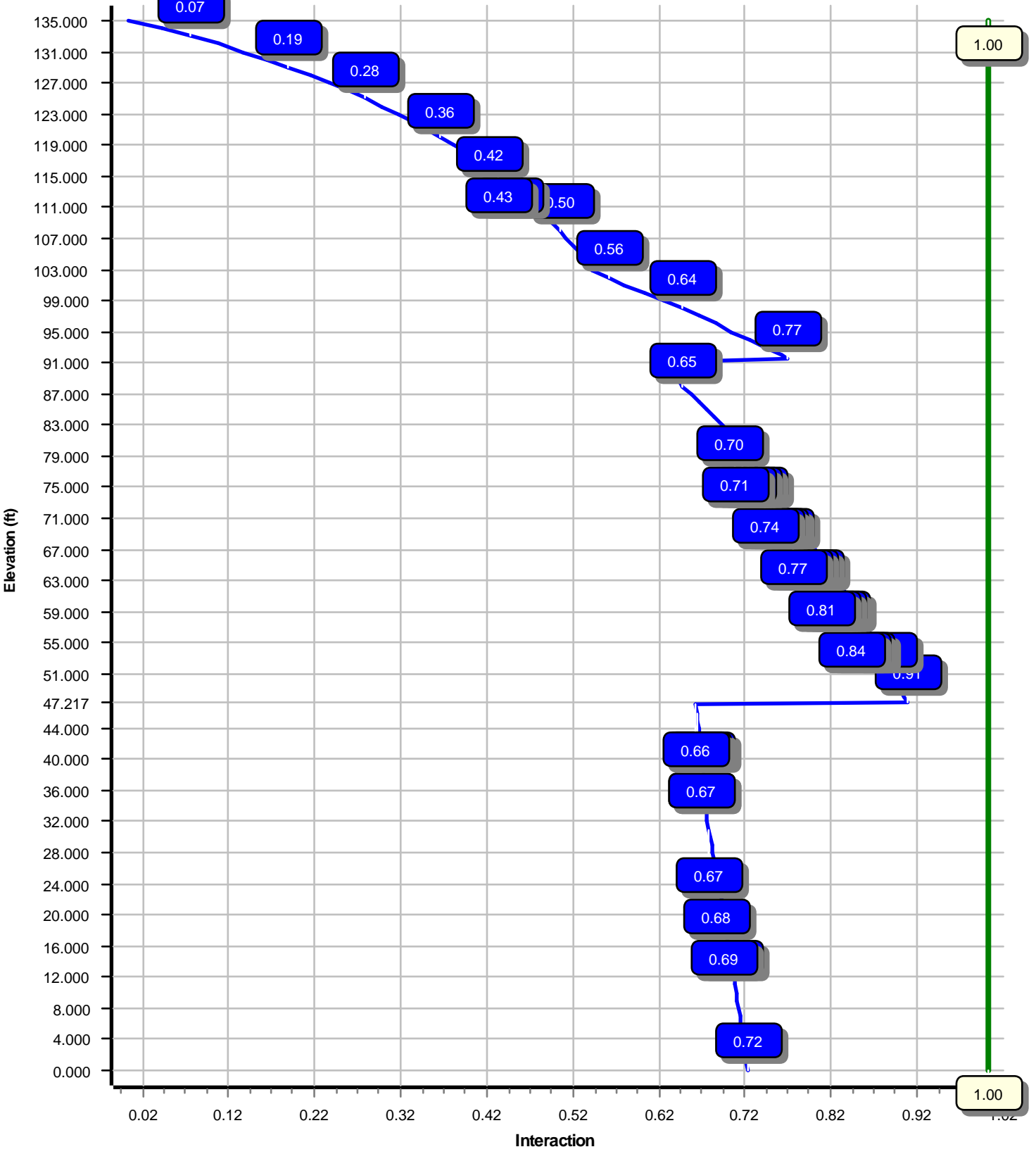
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	1887.93	19.60	29.94
0.9D + 1.0W	1853.88	19.59	22.45
1.2D + 1.0Di + 1.0Wi	347.80	3.49	40.02
1.2D + 1.0Ev + 1.0Eh	86.45	0.75	30.34
0.9D - 1.0Ev + 1.0Eh	84.37	0.75	21.64
1.0D + 1.0W	516.86	5.41	24.96

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	95.00	18.441	2.105



Load Case : 1.2D + 1.0W
Max Ratio 90.53% at 47.2 ft



Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

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Customer: AMERICAN ELECTRIC POWER COMPANY

Analysis Parameters

Location :	Franklin County, OH	Height (ft) :	135
Code :	ANSI/TIA-222-H	Base Diameter (in) :	40.00
Shape :	12 Sides	Top Diameter (in) :	12.00
Pole Type :	Taper	Taper (in/ft) :	0.215
Pole Manufacturer :	EEL	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.97

Ice & Wind Parameters

Exposure Category:	C	Design Wind Speed Without Ice:	108 mph
Risk Category:	II	Design Wind Speed With Ice:	40 mph
Topographic Factor Procedure:	Method 1	Operational Wind Speed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.00 in
Crest Height:	0 ft	HMSL:	825.00 ft

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	2.79		
T _L (sec):	12	p:	1
S _s :	0.121	S ₁ :	0.060
F _a :	1.600	F _v :	2.400
S _{ds} :	0.129	S _{d1} :	0.096
		C _s :	0.030
		C _s Max:	0.030
		C _s Min:	0.030

Load Cases

1.2D + 1.0W	108 mph with No Ice
0.9D + 1.0W	108 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:42:12 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom					Top							
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-12	47.217	0.3750	65		0.00	6,704	40.00	0.00	47.85	9589.2	25.90	106.67	29.85	47.22	35.60	3949.5	18.65	79.62	0.214815
2-12	48.852	0.2813	65	Slip	53.21	3,891	31.37	42.78	28.16	3474.0	27.21	111.55	20.87	91.64	18.65	1010.0	17.21	74.23	0.214815
3-12	46.635	0.2188	65	Slip	39.25	1,877	22.01	88.36	15.35	931.3	24.29	100.65	12.00	135.00	8.30	147.0	12.02	54.86	0.214815
Shaft Weight						12,471													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
135.00	Nokia AHFIC AirScale Dual RRH	3	0.75	0.000	79.40	2.218	0.67	120.67	2.890	0.67
135.00	Nokia AHBCC AirScale Dual RRH	3	0.75	0.000	83.80	2.218	0.67	125.66	2.891	0.67
135.00	Raycap RCMDC-3315-PF-48	1	0.75	0.000	21.40	2.512	1.00	74.04	3.200	1.00
135.00	Commscope RC3DC-3315-PF-48	1	0.75	0.000	32.00	3.781	1.00	104.43	4.655	1.00
135.00	RFS APL866513-42T6-00	3	0.75	0.000	15.70	4.050	0.76	94.36	4.641	0.76
135.00	Andrew SBNHH-1D65C (49.6lb)	9	0.75	0.000	49.60	11.380	0.70	200.62	13.512	0.70
135.00	Flat Platform w/ Handrails	1	1.00	0.000	2,000.00	42.400	1.00	2,939.10	56.258	1.00
103.00	Nokia AirScale RRH 4T4R B5	3	0.75	0.000	35.30	1.286	0.50	60.59	1.770	0.50
103.00	Raycap DC6-48-60-18-8F(32.8	3	0.75	0.000	32.80	1.470	1.00	72.48	1.919	1.00
103.00	Nokia AirScale Dual RRH 4T4R	3	0.75	0.000	66.10	2.218	0.67	103.32	2.872	0.67
103.00	Nokia Airscale Dual RRH 4T4R	3	0.75	0.000	77.20	2.228	0.67	117.08	2.885	0.67
103.00	Alcatel-Lucent RRH4x25-WCS-4R	3	0.75	0.000	70.00	3.165	0.72	128.77	4.000	0.72
103.00	Nokia AEQK AirScale MAA	3	0.75	0.000	99.20	4.351	0.66	173.86	5.252	0.66
103.00	Kathrein Scala 80010798	3	0.75	0.000	81.40	10.687	0.65	218.44	12.631	0.65
103.00	Commscope NNH4-65C-R6	6	0.75	0.000	102.10	17.073	0.64	313.20	19.444	0.64
101.00	Flat Platform w/ Handrails	1	1.00	0.000	2,000.00	42.400	1.00	2,912.13	55.860	1.00
95.00	Generic 12" x 12" Junction Box	3	1.00	0.000	10.00	1.200	0.50	36.57	1.663	0.50
95.00	Generic Radio/ODU	3	1.00	0.000	30.00	1.600	0.50	62.62	2.137	0.50
95.00	Starry Titan A 37C60	4	1.00	0.000	39.70	1.660	1.00	73.63	2.100	1.00
95.00	Generic Masterline Distribution	1	1.00	0.000	10.00	2.169	1.00	46.05	2.787	1.00
Totals	Num Loadings:20				60			7,323.90		13,998.22

Linear Appurtenance Properties

Load Case Azimuth (deg) :

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind Carrier
0.00	135.00	15	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N VERIZON WIRELESS
0.00	135.00	2	1 5/8" Hybriflex	1.98	1.30	N 0	0.00	0.00	0	0.00	N VERIZON WIRELESS
0.00	103.00	2	0.39" (10mm) Fiber	0.39	0.06	N 0	0.00	0.00	0	0.00	N AT&T MOBILITY
0.00	103.00	6	0.92" (23.4mm) Cable	0.92	0.89	N 0	0.00	0.00	0	0.00	N AT&T MOBILITY
0.00	103.00	3	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N AT&T MOBILITY
0.00	103.00	12	7/8" Coax	1.09	0.33	N 0	0.00	0.00	0	0.00	N AT&T MOBILITY
0.00	95.00	1	0.145" (3.7mm)	0.15	0.02	N 0	0.00	0.00	0	0.00	N AMERICAN
0.00	95.00	1	0.26" (6.6mm) Cat 5e	0.26	0.04	N 0	0.00	0.00	0	0.00	N AMERICAN
0.00	95.00	1	0.45" (11.5mm) Fiber	0.45	0.08	N 0	0.00	0.00	0	0.00	N AMERICAN
0.00	95.00	3	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N AMERICAN

Segment Properties (Max Len : 1.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)
0.00		0.3750	40.000	47.847	9,589.2	25.90	106.67	76.5	463.1	0.0	0.0
1.00		0.3750	39.785	47.588	9,434.1	25.75	106.09	76.6	458.1	0.0	162.4
2.00		0.3750	39.570	47.328	9,280.6	25.59	105.52	76.8	453.1	0.0	161.5
3.00		0.3750	39.356	47.069	9,128.9	25.44	104.95	77.0	448.1	0.0	160.6
4.00		0.3750	39.141	46.810	8,978.8	25.29	104.38	77.1	443.2	0.0	159.7
5.00		0.3750	38.926	46.550	8,830.3	25.13	103.80	77.3	438.2	0.0	158.8
6.00		0.3750	38.711	46.291	8,683.5	24.98	103.23	77.5	433.3	0.0	158.0
7.00		0.3750	38.496	46.031	8,538.4	24.83	102.66	77.6	428.5	0.0	157.1
8.00		0.3750	38.281	45.772	8,394.9	24.67	102.08	77.8	423.6	0.0	156.2
9.00		0.3750	38.067	45.513	8,252.9	24.52	101.51	78.0	418.8	0.0	155.3
10.00		0.3750	37.852	45.253	8,112.6	24.37	100.94	78.1	414.0	0.0	154.4
11.00		0.3750	37.637	44.994	7,973.9	24.21	100.37	78.3	409.3	0.0	153.5
12.00		0.3750	37.422	44.735	7,836.8	24.06	99.79	78.5	404.6	0.0	152.7
13.00		0.3750	37.207	44.475	7,701.3	23.91	99.22	78.6	399.9	0.0	151.8
14.00		0.3750	36.993	44.216	7,567.3	23.75	98.65	78.8	395.2	0.0	150.9
15.00		0.3750	36.778	43.956	7,434.9	23.60	98.07	79.0	390.5	0.0	150.0
16.00		0.3750	36.563	43.697	7,304.1	23.45	97.50	79.1	385.9	0.0	149.1
17.00		0.3750	36.348	43.438	7,174.8	23.29	96.93	79.3	381.3	0.0	148.2
18.00		0.3750	36.133	43.178	7,047.0	23.14	96.36	79.5	376.8	0.0	147.4
19.00		0.3750	35.919	42.919	6,920.8	22.99	95.78	79.6	372.2	0.0	146.5
20.00		0.3750	35.704	42.659	6,796.0	22.83	95.21	79.8	367.7	0.0	145.6
21.00		0.3750	35.489	42.400	6,672.8	22.68	94.64	80.0	363.2	0.0	144.7
22.00		0.3750	35.274	42.141	6,551.1	22.52	94.06	80.1	358.8	0.0	143.8
23.00		0.3750	35.059	41.881	6,430.9	22.37	93.49	80.3	354.4	0.0	143.0
24.00		0.3750	34.844	41.622	6,312.1	22.22	92.92	80.5	350.0	0.0	142.1
25.00		0.3750	34.630	41.362	6,194.9	22.06	92.35	80.7	345.6	0.0	141.2
26.00		0.3750	34.415	41.103	6,079.0	21.91	91.77	80.8	341.2	0.0	140.3
27.00		0.3750	34.200	40.844	5,964.7	21.76	91.20	81.0	336.9	0.0	139.4
28.00		0.3750	33.985	40.584	5,851.8	21.60	90.63	81.2	332.6	0.0	138.5
29.00		0.3750	33.770	40.325	5,740.3	21.45	90.05	81.3	328.4	0.0	137.7
30.00		0.3750	33.556	40.066	5,630.2	21.30	89.48	81.5	324.1	0.0	136.8
31.00		0.3750	33.341	39.806	5,521.6	21.14	88.91	81.7	319.9	0.0	135.9
32.00		0.3750	33.126	39.547	5,414.3	20.99	88.34	81.8	315.8	0.0	135.0
33.00		0.3750	32.911	39.287	5,308.5	20.84	87.76	81.9	311.6	0.0	134.1
34.00		0.3750	32.696	39.028	5,204.0	20.68	87.19	81.9	307.5	0.0	133.2
35.00		0.3750	32.481	38.769	5,101.0	20.53	86.62	81.9	303.4	0.0	132.4
36.00		0.3750	32.267	38.509	4,999.2	20.38	86.04	81.9	299.3	0.0	131.5
37.00		0.3750	32.052	38.250	4,898.9	20.22	85.47	81.9	295.3	0.0	130.6
38.00		0.3750	31.837	37.990	4,799.9	20.07	84.90	81.9	291.3	0.0	129.7
39.00		0.3750	31.622	37.731	4,702.3	19.92	84.33	81.9	287.3	0.0	128.8
40.00		0.3750	31.407	37.472	4,606.0	19.76	83.75	81.9	283.3	0.0	127.9
41.00		0.3750	31.193	37.212	4,511.0	19.61	83.18	81.9	279.4	0.0	127.1
42.00		0.3750	30.978	36.953	4,417.3	19.46	82.61	81.9	275.5	0.0	126.2
42.78	Bot - Section 2	0.3750	30.810	36.750	4,344.9	19.33	82.16	81.9	272.4	0.0	98.2
43.00		0.3750	30.763	36.693	4,324.9	19.30	82.03	81.9	271.6	0.0	47.9
44.00		0.3750	30.548	36.434	4,233.8	19.15	81.46	81.9	267.7	0.0	219.8
45.00		0.3750	30.333	36.175	4,144.1	18.99	80.89	81.9	263.9	0.0	218.2
46.00		0.3750	30.119	35.915	4,055.6	18.84	80.32	81.9	260.1	0.0	216.7
47.00		0.3750	29.904	35.656	3,968.3	18.69	79.74	81.9	256.4	0.0	215.1
47.22	Top - Section 1	0.2813	30.420	27.294	3,164.4	26.30	108.16	76.0	201.0	0.0	46.5
48.00		0.2813	30.251	27.142	3,111.7	26.14	107.56	76.2	198.7	0.0	72.5
49.00		0.2813	30.037	26.947	3,045.3	25.94	106.80	76.4	195.9	0.0	92.0
50.00		0.2813	29.822	26.753	2,979.8	25.73	106.03	76.7	193.0	0.0	91.4
51.00		0.2813	29.607	26.558	2,915.3	25.53	105.27	76.9	190.2	0.0	90.7
52.00		0.2813	29.392	26.364	2,851.7	25.32	104.51	77.1	187.4	0.0	90.0
53.00		0.2813	29.177	26.169	2,789.0	25.12	103.74	77.3	184.7	0.0	89.4
54.00		0.2813	28.962	25.974	2,727.3	24.91	102.98	77.5	181.9	0.0	88.7
55.00		0.2813	28.748	25.780	2,666.5	24.71	102.21	77.8	179.2	0.0	88.1

56.00		0.2813	28.533	25.585	2,606.5	24.50	101.45	78.0	176.5	0.0	87.4
57.00		0.2813	28.318	25.391	2,547.5	24.30	100.69	78.2	173.8	0.0	86.7
58.00		0.2813	28.103	25.196	2,489.4	24.09	99.92	78.4	171.1	0.0	86.1
59.00		0.2813	27.888	25.002	2,432.2	23.89	99.16	78.7	168.5	0.0	85.4
60.00		0.2813	27.674	24.807	2,375.9	23.69	98.40	78.9	165.9	0.0	84.7
61.00		0.2813	27.459	24.613	2,320.4	23.48	97.63	79.1	163.3	0.0	84.1
62.00		0.2813	27.244	24.418	2,265.8	23.28	96.87	79.3	160.7	0.0	83.4
63.00		0.2813	27.029	24.224	2,212.1	23.07	96.10	79.6	158.1	0.0	82.8
64.00		0.2813	26.814	24.029	2,159.2	22.87	95.34	79.8	155.6	0.0	82.1
65.00		0.2813	26.600	23.834	2,107.2	22.66	94.58	80.0	153.0	0.0	81.4
66.00		0.2813	26.385	23.640	2,056.0	22.46	93.81	80.2	150.5	0.0	80.8
67.00		0.2813	26.170	23.445	2,005.7	22.25	93.05	80.4	148.1	0.0	80.1
68.00		0.2813	25.955	23.251	1,956.2	22.05	92.28	80.7	145.6	0.0	79.4
69.00		0.2813	25.740	23.056	1,907.5	21.84	91.52	80.9	143.2	0.0	78.8
70.00		0.2813	25.525	22.862	1,859.6	21.64	90.76	81.1	140.7	0.0	78.1
71.00		0.2813	25.311	22.667	1,812.5	21.43	89.99	81.3	138.3	0.0	77.5
72.00		0.2813	25.096	22.473	1,766.3	21.23	89.23	81.6	136.0	0.0	76.8
73.00		0.2813	24.881	22.278	1,720.8	21.02	88.47	81.8	133.6	0.0	76.1
74.00		0.2813	24.666	22.084	1,676.1	20.82	87.70	81.9	131.3	0.0	75.5
75.00		0.2813	24.451	21.889	1,632.2	20.62	86.94	81.9	129.0	0.0	74.8
76.00		0.2813	24.237	21.695	1,589.1	20.41	86.17	81.9	126.7	0.0	74.2
77.00		0.2813	24.022	21.500	1,546.7	20.21	85.41	81.9	124.4	0.0	73.5
78.00		0.2813	23.807	21.305	1,505.1	20.00	84.65	81.9	122.1	0.0	72.8
79.00		0.2813	23.592	21.111	1,464.2	19.80	83.88	81.9	119.9	0.0	72.2
80.00		0.2813	23.377	20.916	1,424.1	19.59	83.12	81.9	117.7	0.0	71.5
81.00		0.2813	23.162	20.722	1,384.8	19.39	82.36	81.9	115.5	0.0	70.8
82.00		0.2813	22.948	20.527	1,346.1	19.18	81.59	81.9	113.3	0.0	70.2
83.00		0.2813	22.733	20.333	1,308.2	18.98	80.83	81.9	111.2	0.0	69.5
84.00		0.2813	22.518	20.138	1,271.0	18.77	80.06	81.9	109.0	0.0	68.9
85.00		0.2813	22.303	19.944	1,234.5	18.57	79.30	81.9	106.9	0.0	68.2
86.00		0.2813	22.088	19.749	1,198.8	18.36	78.54	81.9	104.8	0.0	67.5
87.00		0.2813	21.874	19.555	1,163.7	18.16	77.77	81.9	102.8	0.0	66.9
88.00		0.2813	21.659	19.360	1,129.3	17.96	77.01	81.9	100.7	0.0	66.2
88.36	Bot - Section 3	0.2813	21.580	19.289	1,116.9	17.88	76.73	81.9	100.0	0.0	24.0
89.00		0.2813	21.444	19.165	1,095.6	17.75	76.25	81.9	98.7	0.0	74.7
90.00		0.2813	21.229	18.971	1,062.6	17.55	75.48	81.9	96.7	0.0	116.5
91.00		0.2813	21.014	18.776	1,030.2	17.34	74.72	81.9	94.7	0.0	115.4
91.64	Top - Section 2	0.2188	21.315	14.860	844.2	23.43	97.44	79.2	76.5	0.0	72.7
92.00		0.2188	21.237	14.805	834.8	23.33	97.08	79.3	75.9	0.0	18.4
93.00		0.2188	21.022	14.653	809.5	23.07	96.10	79.6	74.4	0.0	50.1
94.00		0.2188	20.807	14.502	784.6	22.81	95.12	79.8	72.9	0.0	49.6
95.00		0.2188	20.593	14.351	760.3	22.54	94.14	80.1	71.3	0.0	49.1
96.00		0.2188	20.378	14.200	736.5	22.28	93.16	80.4	69.8	0.0	48.6
97.00		0.2188	20.163	14.048	713.2	22.02	92.17	80.7	68.3	0.0	48.1
98.00		0.2188	19.948	13.897	690.4	21.76	91.19	81.0	66.9	0.0	47.5
99.00		0.2188	19.733	13.746	668.1	21.49	90.21	81.3	65.4	0.0	47.0
100.0		0.2188	19.519	13.594	646.3	21.23	89.23	81.6	64.0	0.0	46.5
101.0		0.2188	19.304	13.443	625.0	20.97	88.25	81.8	62.5	0.0	46.0
102.0		0.2188	19.089	13.292	604.1	20.70	87.26	81.9	61.1	0.0	45.5
103.0		0.2188	18.874	13.140	583.7	20.44	86.28	81.9	59.7	0.0	45.0
104.0		0.2188	18.659	12.989	563.8	20.18	85.30	81.9	58.4	0.0	44.5
105.0		0.2188	18.444	12.838	544.3	19.91	84.32	81.9	57.0	0.0	43.9
106.0		0.2188	18.230	12.686	525.3	19.65	83.34	81.9	55.7	0.0	43.4
107.0		0.2188	18.015	12.535	506.7	19.39	82.35	81.9	54.3	0.0	42.9
108.0		0.2188	17.800	12.384	488.6	19.12	81.37	81.9	53.0	0.0	42.4
109.0		0.2188	17.585	12.232	470.9	18.86	80.39	81.9	51.7	0.0	41.9
110.0		0.2188	17.370	12.081	453.6	18.60	79.41	81.9	50.5	0.0	41.4
111.0		0.2188	17.156	11.930	436.8	18.33	78.43	81.9	49.2	0.0	40.9
112.0		0.2188	16.941	11.779	420.4	18.07	77.44	81.9	47.9	0.0	40.3
113.0		0.2188	16.726	11.627	404.4	17.81	76.46	81.9	46.7	0.0	39.8
114.0		0.2188	16.511	11.476	388.8	17.55	75.48	81.9	45.5	0.0	39.3
115.0		0.2188	16.296	11.325	373.6	17.28	74.50	81.9	44.3	0.0	38.8
116.0		0.2188	16.081	11.173	358.9	17.02	73.52	81.9	43.1	0.0	38.3
117.0		0.2188	15.867	11.022	344.5	16.76	72.53	81.9	41.9	0.0	37.8

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:42:12 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

118.0	0.2188	15.652	10.871	330.5	16.49	71.55	81.9	40.8	0.0	37.2
119.0	0.2188	15.437	10.719	316.9	16.23	70.57	81.9	39.7	0.0	36.7
120.0	0.2188	15.222	10.568	303.6	15.97	69.59	81.9	38.5	0.0	36.2
121.0	0.2188	15.007	10.417	290.8	15.70	68.61	81.9	37.4	0.0	35.7
122.0	0.2188	14.793	10.265	278.3	15.44	67.62	81.9	36.3	0.0	35.2
123.0	0.2188	14.578	10.114	266.2	15.18	66.64	81.9	35.3	0.0	34.7
124.0	0.2188	14.363	9.963	254.4	14.91	65.66	81.9	34.2	0.0	34.2
125.0	0.2188	14.148	9.812	243.0	14.65	64.68	81.9	33.2	0.0	33.6
126.0	0.2188	13.933	9.660	231.9	14.39	63.70	81.9	32.2	0.0	33.1
127.0	0.2188	13.719	9.509	221.2	14.12	62.71	81.9	31.1	0.0	32.6
128.0	0.2188	13.504	9.358	210.8	13.86	61.73	81.9	30.2	0.0	32.1
129.0	0.2188	13.289	9.206	200.7	13.60	60.75	81.9	29.2	0.0	31.6
130.0	0.2188	13.074	9.055	191.0	13.34	59.77	81.9	28.2	0.0	31.1
131.0	0.2188	12.859	8.904	181.6	13.07	58.79	81.9	27.3	0.0	30.6
132.0	0.2188	12.644	8.752	172.5	12.81	57.80	81.9	26.4	0.0	30.0
133.0	0.2188	12.430	8.601	163.7	12.55	56.82	81.9	25.4	0.0	29.5
134.0	0.2188	12.215	8.450	155.2	12.28	55.84	81.9	24.5	0.0	29.0
135.0	0.2188	12.000	8.298	147.0	12.02	54.86	81.9	23.7	0.0	28.5
										12,471.1

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:42:12 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0W

108 mph with No Ice

36 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		42.1	0.0					0.0	0.0	42.1	0.0	0.0	0.0
1.00		83.9	194.8					0.0	55.6	83.9	250.5	0.0	0.0
2.00		83.5	193.8					0.0	55.6	83.5	249.4	0.0	0.0
3.00		83.0	192.7					0.0	55.6	83.0	248.4	0.0	0.0
4.00		82.6	191.7					0.0	55.6	82.6	247.3	0.0	0.0
5.00		82.1	190.6					0.0	55.6	82.1	246.2	0.0	0.0
6.00		81.7	189.6					0.0	55.6	81.7	245.2	0.0	0.0
7.00		81.2	188.5					0.0	55.6	81.2	244.1	0.0	0.0
8.00		80.8	187.4					0.0	55.6	80.8	243.1	0.0	0.0
9.00		80.3	186.4					0.0	55.6	80.3	242.0	0.0	0.0
10.00		79.9	185.3					0.0	55.6	79.9	240.9	0.0	0.0
11.00		79.4	184.3					0.0	55.6	79.4	239.9	0.0	0.0
12.00		79.0	183.2					0.0	55.6	79.0	238.8	0.0	0.0
13.00		78.5	182.1					0.0	55.6	78.5	237.8	0.0	0.0
14.00		78.0	181.1					0.0	55.6	78.0	236.7	0.0	0.0
15.00		77.8	180.0					0.0	55.6	77.8	235.7	0.0	0.0
16.00		78.1	179.0					0.0	55.6	78.1	234.6	0.0	0.0
17.00		78.6	177.9					0.0	55.6	78.6	233.5	0.0	0.0
18.00		79.1	176.8					0.0	55.6	79.1	232.5	0.0	0.0
19.00		79.5	175.8					0.0	55.6	79.5	231.4	0.0	0.0
20.00		79.9	174.7					0.0	55.6	79.9	230.4	0.0	0.0
21.00		80.3	173.7					0.0	55.6	80.3	229.3	0.0	0.0
22.00		80.6	172.6					0.0	55.6	80.6	228.2	0.0	0.0
23.00		80.8	171.5					0.0	55.6	80.8	227.2	0.0	0.0
24.00		81.1	170.5					0.0	55.6	81.1	226.1	0.0	0.0
25.00		81.2	169.4					0.0	55.6	81.2	225.1	0.0	0.0
26.00		81.4	168.4					0.0	55.6	81.4	224.0	0.0	0.0
27.00		81.6	167.3					0.0	55.6	81.6	222.9	0.0	0.0
28.00		81.7	166.2					0.0	55.6	81.7	221.9	0.0	0.0
29.00		81.7	165.2					0.0	55.6	81.7	220.8	0.0	0.0
30.00		81.8	164.1					0.0	55.6	81.8	219.8	0.0	0.0
31.00		81.8	163.1					0.0	55.6	81.8	218.7	0.0	0.0
32.00		81.9	162.0					0.0	55.6	81.9	217.6	0.0	0.0
33.00		81.9	161.0					0.0	55.6	81.9	216.6	0.0	0.0
34.00		81.8	159.9					0.0	55.6	81.8	215.5	0.0	0.0
35.00		81.8	158.8					0.0	55.6	81.8	214.5	0.0	0.0
36.00		81.7	157.8					0.0	55.6	81.7	213.4	0.0	0.0
37.00		81.7	156.7					0.0	55.6	81.7	212.3	0.0	0.0
38.00		81.6	155.7					0.0	55.6	81.6	211.3	0.0	0.0
39.00		81.5	154.6					0.0	55.6	81.5	210.2	0.0	0.0
40.00		81.4	153.5					0.0	55.6	81.4	209.2	0.0	0.0
41.00		81.2	152.5					0.0	55.6	81.2	208.1	0.0	0.0
42.00		72.3	151.4					0.0	55.6	72.3	207.1	0.0	0.0
42.78	Bot - Section 2	40.7	117.8					0.0	43.5	40.7	161.3	0.0	0.0
43.00		50.1	57.5					0.0	12.1	50.1	69.6	0.0	0.0
44.00		82.2	263.7					0.0	55.6	82.2	319.3	0.0	0.0
45.00		82.0	261.9					0.0	55.6	82.0	317.5	0.0	0.0
46.00		81.8	260.0					0.0	55.6	81.8	315.6	0.0	0.0

Load Case: 1.2D + 1.0W			108 mph with No Ice				36 Iterations					
Gust Response Factor :1.10												
Dead Load Factor :1.20												
Wind Load Factor :1.00												
47.00		49.7	258.1			0.0	55.6	49.7	313.8	0.0	0.0	
47.22	Top - Section 1	40.8	55.8			0.0	12.1	40.8	67.9	0.0	0.0	
48.00		72.6	87.0			0.0	43.6	72.6	130.6	0.0	0.0	
49.00		81.2	110.4			0.0	55.6	81.2	166.1	0.0	0.0	
50.00		81.0	109.6			0.0	55.6	81.0	165.3	0.0	0.0	
51.00		80.7	108.8			0.0	55.6	80.7	164.5	0.0	0.0	
52.00		80.5	108.0			0.0	55.6	80.5	163.7	0.0	0.0	
53.00		80.2	107.3			0.0	55.6	80.2	162.9	0.0	0.0	
54.00		79.9	106.5			0.0	55.6	79.9	162.1	0.0	0.0	
55.00		79.6	105.7			0.0	55.6	79.6	161.3	0.0	0.0	
56.00		79.3	104.9			0.0	55.6	79.3	160.5	0.0	0.0	
57.00		79.0	104.1			0.0	55.6	79.0	159.7	0.0	0.0	
58.00		78.7	103.3			0.0	55.6	78.7	158.9	0.0	0.0	
59.00		78.4	102.5			0.0	55.6	78.4	158.1	0.0	0.0	
60.00		78.1	101.7			0.0	55.6	78.1	157.3	0.0	0.0	
61.00		77.7	100.9			0.0	55.6	77.7	156.5	0.0	0.0	
62.00		77.4	100.1			0.0	55.6	77.4	155.7	0.0	0.0	
63.00		77.0	99.3			0.0	55.6	77.0	154.9	0.0	0.0	
64.00		76.7	98.5			0.0	55.6	76.7	154.1	0.0	0.0	
65.00		76.3	97.7			0.0	55.6	76.3	153.4	0.0	0.0	
66.00		75.9	96.9			0.0	55.6	75.9	152.6	0.0	0.0	
67.00		75.6	96.1			0.0	55.6	75.6	151.8	0.0	0.0	
68.00		75.2	95.3			0.0	55.6	75.2	151.0	0.0	0.0	
69.00		74.8	94.5			0.0	55.6	74.8	150.2	0.0	0.0	
70.00		74.4	93.7			0.0	55.6	74.4	149.4	0.0	0.0	
71.00		74.0	93.0			0.0	55.6	74.0	148.6	0.0	0.0	
72.00		73.6	92.2			0.0	55.6	73.6	147.8	0.0	0.0	
73.00		73.2	91.4			0.0	55.6	73.2	147.0	0.0	0.0	
74.00		72.7	90.6			0.0	55.6	72.7	146.2	0.0	0.0	
75.00		72.3	89.8			0.0	55.6	72.3	145.4	0.0	0.0	
76.00		71.9	89.0			0.0	55.6	71.9	144.6	0.0	0.0	
77.00		71.4	88.2			0.0	55.6	71.4	143.8	0.0	0.0	
78.00		71.0	87.4			0.0	55.6	71.0	143.0	0.0	0.0	
79.00		70.5	86.6			0.0	55.6	70.5	142.2	0.0	0.0	
80.00		70.1	85.8			0.0	55.6	70.1	141.4	0.0	0.0	
81.00		69.6	85.0			0.0	55.6	69.6	140.6	0.0	0.0	
82.00		69.1	84.2			0.0	55.6	69.1	139.8	0.0	0.0	
83.00		68.7	83.4			0.0	55.6	68.7	139.1	0.0	0.0	
84.00		68.2	82.6			0.0	55.6	68.2	138.3	0.0	0.0	
85.00		67.7	81.8			0.0	55.6	67.7	137.5	0.0	0.0	
86.00		67.2	81.0			0.0	55.6	67.2	136.7	0.0	0.0	
87.00		66.7	80.2			0.0	55.6	66.7	135.9	0.0	0.0	
88.00		45.3	79.5			0.0	55.6	45.3	135.1	0.0	0.0	
88.36	Bot - Section 3	33.4	28.8			0.0	20.3	33.4	49.1	0.0	0.0	
89.00		54.8	89.6			0.0	35.3	54.8	124.9	0.0	0.0	
90.00		66.6	139.9			0.0	55.6	66.6	195.5	0.0	0.0	
91.00		54.1	138.4			0.0	55.6	54.1	194.1	0.0	0.0	
91.64	Top - Section 2	32.9	87.2			0.0	35.3	32.9	122.6	0.0	0.0	
92.00		44.6	22.1			0.0	20.3	44.6	42.4	0.0	0.0	
93.00		65.0	60.1			0.0	55.6	65.0	115.8	0.0	0.0	
94.00		64.5	59.5			0.0	55.6	64.5	115.2	0.0	0.0	
95.00	Appurtenance(s)	64.0	58.9	493.3	0.0	0.0	346.6	0.0	557.3	461.1	0.0	0.0
96.00		63.5	58.3			0.0	42.3	63.5	100.6	0.0	0.0	
97.00		62.9	57.7			0.0	42.3	62.9	100.0	0.0	0.0	
98.00		62.4	57.1			0.0	42.3	62.4	99.4	0.0	0.0	
99.00		61.9	56.4			0.0	42.3	61.9	98.8	0.0	0.0	
100.00		61.3	55.8			0.0	42.3	61.3	98.1	0.0	0.0	

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:23 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0W		108 mph with No Ice							36 Iterations				
Gust Response Factor :1.10													
Dead Load Factor :1.20													
Wind Load Factor :1.00													
101.00	Appurtenance(s)	60.8	55.2	1,628.6	0.0	0.0	2,400.0	0.0	42.3	1,689.4	2,497.5	0.0	0.0
102.00		60.2	54.6					0.0	42.3	60.2	96.9	0.0	0.0
103.00	Appurtenance(s)	59.7	54.0	3,388.1	0.0	0.0	2,398.3	0.0	42.3	3,447.8	2,494.6	0.0	0.0
104.00		59.1	53.3					0.0	17.9	59.1	71.2	0.0	0.0
105.00		58.5	52.7					0.0	17.9	58.5	70.6	0.0	0.0
106.00		58.0	52.1					0.0	17.9	58.0	70.0	0.0	0.0
107.00		57.4	51.5					0.0	17.9	57.4	69.4	0.0	0.0
108.00		56.8	50.9					0.0	17.9	56.8	68.8	0.0	0.0
109.00		56.3	50.3					0.0	17.9	56.3	68.1	0.0	0.0
110.00		55.7	49.6					0.0	17.9	55.7	67.5	0.0	0.0
111.00		55.1	49.0					0.0	17.9	55.1	66.9	0.0	0.0
112.00		54.5	48.4					0.0	17.9	54.5	66.3	0.0	0.0
113.00		53.9	47.8					0.0	17.9	53.9	65.7	0.0	0.0
114.00		53.3	47.2					0.0	17.9	53.3	65.0	0.0	0.0
115.00		52.7	46.6					0.0	17.9	52.7	64.4	0.0	0.0
116.00		52.1	45.9					0.0	17.9	52.1	63.8	0.0	0.0
117.00		51.5	45.3					0.0	17.9	51.5	63.2	0.0	0.0
118.00		50.9	44.7					0.0	17.9	50.9	62.6	0.0	0.0
119.00		50.3	44.1					0.0	17.9	50.3	62.0	0.0	0.0
120.00		49.7	43.5					0.0	17.9	49.7	61.3	0.0	0.0
121.00		49.1	42.8					0.0	17.9	49.1	60.7	0.0	0.0
122.00		48.5	42.2					0.0	17.9	48.5	60.1	0.0	0.0
123.00		47.8	41.6					0.0	17.9	47.8	59.5	0.0	0.0
124.00		47.2	41.0					0.0	17.9	47.2	58.9	0.0	0.0
125.00		46.6	40.4					0.0	17.9	46.6	58.3	0.0	0.0
126.00		46.0	39.8					0.0	17.9	46.0	57.6	0.0	0.0
127.00		45.3	39.1					0.0	17.9	45.3	57.0	0.0	0.0
128.00		44.7	38.5					0.0	17.9	44.7	56.4	0.0	0.0
129.00		44.0	37.9					0.0	17.9	44.0	55.8	0.0	0.0
130.00		43.4	37.3					0.0	17.9	43.4	55.2	0.0	0.0
131.00		42.8	36.7					0.0	17.9	42.8	54.5	0.0	0.0
132.00		42.1	36.0					0.0	17.9	42.1	53.9	0.0	0.0
133.00		41.5	35.4					0.0	17.9	41.5	53.3	0.0	0.0
134.00		40.8	34.8					0.0	17.9	40.8	52.7	0.0	0.0
135.00	Appurtenance(s)	20.2	34.2	4,675.1	0.0	0.0	3,643.8	0.0	17.9	4,695.4	3,695.9	0.0	0.0
Totals:										19,626.0	29,949.8	0.00	0.00

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:23 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0W

108 mph with No Ice

36 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.20

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.96	-5.41	0.00	-516.86	0.00	516.86	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.202
1.00	-24.75	-5.39	0.00	-511.45	0.00	511.45	3,282.09	835.17	3,105.10	2,632.84	0.00	-0.02	0.202
2.00	-24.54	-5.38	0.00	-506.06	0.00	506.06	3,271.33	830.61	3,071.35	2,609.77	0.01	-0.03	0.201
3.00	-24.33	-5.36	0.00	-500.68	0.00	500.68	3,260.49	826.06	3,037.79	2,586.74	0.01	-0.05	0.201
4.00	-24.12	-5.34	0.00	-495.32	0.00	495.32	3,249.58	821.51	3,004.41	2,563.73	0.03	-0.06	0.201
5.00	-23.92	-5.33	0.00	-489.98	0.00	489.98	3,238.59	816.96	2,971.21	2,540.77	0.04	-0.08	0.200
6.00	-23.71	-5.31	0.00	-484.65	0.00	484.65	3,227.51	812.40	2,938.21	2,517.83	0.06	-0.09	0.200
7.00	-23.50	-5.30	0.00	-479.34	0.00	479.34	3,216.36	807.85	2,905.38	2,494.94	0.08	-0.11	0.199
8.00	-23.30	-5.28	0.00	-474.04	0.00	474.04	3,205.14	803.30	2,872.74	2,472.08	0.10	-0.12	0.199
9.00	-23.10	-5.26	0.00	-468.77	0.00	468.77	3,193.83	798.75	2,840.28	2,449.27	0.13	-0.14	0.199
10.00	-22.90	-5.25	0.00	-463.50	0.00	463.50	3,182.45	794.20	2,808.01	2,426.49	0.16	-0.16	0.198
11.00	-22.69	-5.23	0.00	-458.26	0.00	458.26	3,170.98	789.64	2,775.92	2,403.75	0.20	-0.17	0.198
12.00	-22.49	-5.21	0.00	-453.03	0.00	453.03	3,159.44	785.09	2,744.02	2,381.06	0.24	-0.19	0.197
13.00	-22.29	-5.20	0.00	-447.81	0.00	447.81	3,147.82	780.54	2,712.30	2,358.41	0.28	-0.21	0.197
14.00	-22.10	-5.18	0.00	-442.61	0.00	442.61	3,136.13	775.99	2,680.77	2,335.81	0.32	-0.22	0.197
15.00	-21.90	-5.17	0.00	-437.43	0.00	437.43	3,124.35	771.43	2,649.42	2,313.25	0.37	-0.24	0.196
16.00	-21.70	-5.15	0.00	-432.26	0.00	432.26	3,112.50	766.88	2,618.25	2,290.73	0.42	-0.25	0.196
17.00	-21.50	-5.13	0.00	-427.11	0.00	427.11	3,100.57	762.33	2,587.27	2,268.27	0.48	-0.27	0.195
18.00	-21.31	-5.12	0.00	-421.98	0.00	421.98	3,088.56	757.78	2,556.47	2,245.85	0.54	-0.29	0.195
19.00	-21.12	-5.10	0.00	-416.86	0.00	416.86	3,076.47	753.22	2,525.86	2,223.48	0.60	-0.31	0.194
20.00	-20.92	-5.08	0.00	-411.76	0.00	411.76	3,064.30	748.67	2,495.43	2,201.16	0.66	-0.32	0.194
21.00	-20.73	-5.07	0.00	-406.68	0.00	406.68	3,052.06	744.12	2,465.19	2,178.90	0.73	-0.34	0.193
22.00	-20.54	-5.05	0.00	-401.61	0.00	401.61	3,039.74	739.57	2,435.13	2,156.68	0.81	-0.36	0.193
23.00	-20.35	-5.03	0.00	-396.56	0.00	396.56	3,027.34	735.02	2,405.26	2,134.53	0.88	-0.37	0.193
24.00	-20.16	-5.02	0.00	-391.53	0.00	391.53	3,014.86	730.46	2,375.57	2,112.42	0.96	-0.39	0.192
25.00	-19.97	-5.00	0.00	-386.51	0.00	386.51	3,002.30	725.91	2,346.06	2,090.37	1.05	-0.41	0.192
26.00	-19.78	-4.98	0.00	-381.52	0.00	381.52	2,989.67	721.36	2,316.74	2,068.38	1.14	-0.43	0.191
27.00	-19.59	-4.96	0.00	-376.54	0.00	376.54	2,976.95	716.81	2,287.60	2,046.44	1.23	-0.44	0.191
28.00	-19.41	-4.94	0.00	-371.57	0.00	371.57	2,964.16	712.25	2,258.65	2,024.57	1.32	-0.46	0.190
29.00	-19.22	-4.93	0.00	-366.63	0.00	366.63	2,951.29	707.70	2,229.88	2,002.75	1.42	-0.48	0.190
30.00	-19.04	-4.91	0.00	-361.70	0.00	361.70	2,938.34	703.15	2,201.30	1,981.00	1.52	-0.50	0.189
31.00	-18.85	-4.89	0.00	-356.80	0.00	356.80	2,925.32	698.60	2,172.90	1,959.31	1.63	-0.52	0.189
32.00	-18.67	-4.87	0.00	-351.91	0.00	351.91	2,912.22	694.05	2,144.68	1,937.68	1.74	-0.53	0.188
33.00	-18.49	-4.85	0.00	-347.04	0.00	347.04	2,899.17	689.49	2,116.65	1,916.02	1.85	-0.55	0.188
34.00	-18.31	-4.83	0.00	-342.18	0.00	342.18	2,886.07	684.94	2,088.80	1,894.36	1.97	-0.57	0.188
35.00	-18.13	-4.82	0.00	-337.35	0.00	337.35	2,872.93	680.39	2,061.14	1,872.70	2.09	-0.59	0.187
36.00	-17.95	-4.80	0.00	-332.53	0.00	332.53	2,859.76	675.84	2,033.66	1,851.04	2.22	-0.61	0.187
37.00	-17.77	-4.78	0.00	-327.74	0.00	327.74	2,846.56	671.28	2,006.37	1,829.38	2.35	-0.63	0.187
38.00	-17.59	-4.76	0.00	-322.96	0.00	322.96	2,833.33	666.73	1,979.26	1,807.72	2.48	-0.65	0.187
39.00	-17.42	-4.74	0.00	-318.20	0.00	318.20	2,820.07	662.18	1,952.34	1,786.06	2.62	-0.67	0.187
40.00	-17.24	-4.72	0.00	-313.46	0.00	313.46	2,806.78	657.63	1,925.60	1,764.40	2.76	-0.68	0.186
41.00	-17.07	-4.70	0.00	-308.73	0.00	308.73	2,793.46	653.07	1,899.04	1,742.74	2.91	-0.70	0.186
42.00	-16.89	-4.69	0.00	-304.03	0.00	304.03	2,780.11	648.52	1,872.67	1,721.08	3.06	-0.72	0.186

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:23 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0W				108 mph with No Ice				36 Iterations					
Gust Response Factor :1.10													
Dead Load Factor :1.20													
Wind Load Factor :1.00													
42.78	-16.76	-4.68	0.00	-300.36	0.00	300.36	2,708.83	644.96	1,852.15	1,673.44	3.18	-0.74	0.186
43.00	-16.70	-4.67	0.00	-299.34	0.00	299.34	2,704.68	643.97	1,846.48	1,668.28	3.21	-0.74	0.186
44.00	-16.43	-4.65	0.00	-294.68	0.00	294.68	2,685.56	639.42	1,820.48	1,644.63	3.37	-0.76	0.185
45.00	-16.17	-4.62	0.00	-290.03	0.00	290.03	2,666.44	634.87	1,794.66	1,621.16	3.53	-0.78	0.185
46.00	-15.90	-4.60	0.00	-285.41	0.00	285.41	2,647.32	630.31	1,769.03	1,597.85	3.70	-0.80	0.185
47.00	-15.64	-4.59	0.00	-280.81	0.00	280.81	2,628.20	625.76	1,743.58	1,574.71	3.87	-0.82	0.184
47.22	-15.58	-4.58	0.00	-279.81	0.00	279.81	1,867.62	479.01	1,361.92	1,145.92	3.90	-0.83	0.253
48.00	-15.47	-4.56	0.00	-276.22	0.00	276.22	1,861.47	476.34	1,346.77	1,135.71	4.04	-0.84	0.252
49.00	-15.33	-4.55	0.00	-271.66	0.00	271.66	1,853.54	472.92	1,327.54	1,122.69	4.22	-0.87	0.250
50.00	-15.19	-4.53	0.00	-267.11	0.00	267.11	1,845.53	469.51	1,308.45	1,109.69	4.40	-0.89	0.249
51.00	-15.05	-4.51	0.00	-262.59	0.00	262.59	1,837.45	466.09	1,289.49	1,096.72	4.59	-0.92	0.248
52.00	-14.92	-4.49	0.00	-258.08	0.00	258.08	1,829.29	462.68	1,270.67	1,083.78	4.79	-0.94	0.246
53.00	-14.78	-4.48	0.00	-253.58	0.00	253.58	1,821.04	459.27	1,252.00	1,070.86	4.99	-0.97	0.245
54.00	-14.64	-4.46	0.00	-249.11	0.00	249.11	1,812.72	455.85	1,233.46	1,057.96	5.19	-0.99	0.244
55.00	-14.51	-4.44	0.00	-244.65	0.00	244.65	1,804.33	452.44	1,215.06	1,045.10	5.40	-1.02	0.242
56.00	-14.37	-4.42	0.00	-240.21	0.00	240.21	1,795.85	449.02	1,196.79	1,032.26	5.62	-1.05	0.241
57.00	-14.24	-4.40	0.00	-235.79	0.00	235.79	1,787.30	445.61	1,178.67	1,019.46	5.84	-1.07	0.239
58.00	-14.10	-4.39	0.00	-231.39	0.00	231.39	1,778.66	442.19	1,160.68	1,006.68	6.07	-1.10	0.238
59.00	-13.97	-4.37	0.00	-227.00	0.00	227.00	1,769.95	438.78	1,142.83	993.94	6.30	-1.12	0.236
60.00	-13.84	-4.35	0.00	-222.63	0.00	222.63	1,761.16	435.37	1,125.12	981.23	6.54	-1.15	0.235
61.00	-13.70	-4.33	0.00	-218.28	0.00	218.28	1,752.30	431.95	1,107.55	968.56	6.78	-1.18	0.233
62.00	-13.57	-4.32	0.00	-213.95	0.00	213.95	1,743.35	428.54	1,090.12	955.92	7.03	-1.20	0.232
63.00	-13.44	-4.30	0.00	-209.63	0.00	209.63	1,734.33	425.12	1,072.82	943.32	7.29	-1.23	0.230
64.00	-13.31	-4.28	0.00	-205.34	0.00	205.34	1,725.23	421.71	1,055.67	930.75	7.55	-1.26	0.228
65.00	-13.18	-4.26	0.00	-201.06	0.00	201.06	1,716.05	418.30	1,038.65	918.23	7.81	-1.28	0.227
66.00	-13.05	-4.24	0.00	-196.79	0.00	196.79	1,706.79	414.88	1,021.77	905.74	8.09	-1.31	0.225
67.00	-12.93	-4.23	0.00	-192.55	0.00	192.55	1,697.46	411.47	1,005.03	893.29	8.36	-1.34	0.223
68.00	-12.80	-4.21	0.00	-188.32	0.00	188.32	1,688.04	408.05	988.42	880.89	8.65	-1.36	0.221
69.00	-12.67	-4.19	0.00	-184.12	0.00	184.12	1,678.55	404.64	971.96	868.53	8.93	-1.39	0.220
70.00	-12.55	-4.17	0.00	-179.92	0.00	179.92	1,668.98	401.22	955.63	856.21	9.23	-1.42	0.218
71.00	-12.42	-4.16	0.00	-175.75	0.00	175.75	1,659.33	397.81	939.44	843.93	9.53	-1.45	0.216
72.00	-12.30	-4.14	0.00	-171.60	0.00	171.60	1,649.60	394.40	923.39	831.71	9.83	-1.47	0.214
73.00	-12.17	-4.12	0.00	-167.46	0.00	167.46	1,639.80	390.98	907.48	819.53	10.15	-1.50	0.212
74.00	-12.05	-4.10	0.00	-163.34	0.00	163.34	1,627.78	387.57	891.71	806.34	10.46	-1.53	0.210
75.00	-11.93	-4.09	0.00	-159.23	0.00	159.23	1,613.44	384.15	876.07	792.11	10.79	-1.55	0.209
76.00	-11.80	-4.07	0.00	-155.15	0.00	155.15	1,599.10	380.74	860.58	778.02	11.11	-1.58	0.207
77.00	-11.68	-4.05	0.00	-151.08	0.00	151.08	1,584.76	377.32	845.22	764.04	11.45	-1.61	0.205
78.00	-11.56	-4.03	0.00	-147.03	0.00	147.03	1,570.43	373.91	830.00	750.20	11.79	-1.64	0.203
79.00	-11.44	-4.02	0.00	-143.00	0.00	143.00	1,556.09	370.50	814.91	736.48	12.13	-1.66	0.202
80.00	-11.32	-4.00	0.00	-138.98	0.00	138.98	1,541.75	367.08	799.97	722.89	12.49	-1.69	0.200
81.00	-11.21	-3.98	0.00	-134.98	0.00	134.98	1,527.41	363.67	785.17	709.43	12.84	-1.72	0.198
82.00	-11.09	-3.96	0.00	-131.00	0.00	131.00	1,513.07	360.25	770.50	696.09	13.21	-1.75	0.196
83.00	-10.97	-3.95	0.00	-127.04	0.00	127.04	1,498.73	356.84	755.97	682.88	13.57	-1.77	0.193
84.00	-10.85	-3.93	0.00	-123.09	0.00	123.09	1,484.39	353.43	741.58	669.79	13.95	-1.80	0.191
85.00	-10.74	-3.91	0.00	-119.16	0.00	119.16	1,470.05	350.01	727.33	656.83	14.33	-1.83	0.189
86.00	-10.62	-3.90	0.00	-115.25	0.00	115.25	1,455.71	346.60	713.21	644.00	14.71	-1.85	0.186
87.00	-10.51	-3.88	0.00	-111.35	0.00	111.35	1,441.37	343.18	699.24	631.30	15.11	-1.88	0.184
88.00	-10.40	-3.87	0.00	-107.47	0.00	107.47	1,427.03	339.77	685.40	618.72	15.50	-1.91	0.181
88.36	-10.35	-3.86	0.00	-106.07	0.00	106.07	1,421.80	338.52	680.39	614.16	15.65	-1.92	0.180

Load Case: 1.2D + 1.0W				108 mph with No Ice						36 Iterations			
Gust Response Factor :1.10													
Dead Load Factor :1.20													
Wind Load Factor :1.00													

89.00	-10.25	-3.84	0.00	-103.62	0.00	103.62	1,412.69	336.35	671.70	606.27	15.91	-1.94	0.178
90.00	-10.09	-3.82	0.00	-99.77	0.00	99.77	1,398.35	332.94	658.14	593.94	16.31	-1.96	0.175
91.00	-9.92	-3.81	0.00	-95.95	0.00	95.95	1,384.01	329.53	644.71	581.74	16.73	-1.99	0.172
91.64	-9.82	-3.80	0.00	-93.53	0.00	93.53	1,058.69	260.79	519.07	454.24	16.99	-2.00	0.215
92.00	-9.78	-3.79	0.00	-92.15	0.00	92.15	1,056.16	259.82	515.22	451.45	17.15	-2.01	0.214
93.00	-9.69	-3.77	0.00	-88.36	0.00	88.36	1,049.15	257.17	504.75	443.82	17.57	-2.04	0.209
94.00	-9.59	-3.75	0.00	-84.59	0.00	84.59	1,042.06	254.51	494.38	436.22	18.00	-2.07	0.203
95.00	-9.21	-3.59	0.00	-80.84	0.00	80.84	1,034.89	251.86	484.12	428.66	18.44	-2.10	0.198
96.00	-9.12	-3.57	0.00	-77.25	0.00	77.25	1,027.65	249.20	473.97	421.12	18.89	-2.13	0.193
97.00	-9.04	-3.56	0.00	-73.68	0.00	73.68	1,020.33	246.55	463.93	413.62	19.34	-2.16	0.187
98.00	-8.96	-3.54	0.00	-70.12	0.00	70.12	1,012.93	243.89	453.99	406.15	19.79	-2.19	0.182
99.00	-8.87	-3.53	0.00	-66.57	0.00	66.57	1,005.45	241.23	444.16	398.71	20.25	-2.22	0.176
100.00	-8.79	-3.51	0.00	-63.05	0.00	63.05	997.89	238.58	434.44	391.31	20.72	-2.25	0.170
101.00	-6.73	-2.97	0.00	-59.54	0.00	59.54	990.26	235.92	424.83	383.94	21.20	-2.28	0.162
102.00	-6.65	-2.95	0.00	-56.57	0.00	56.57	979.73	233.27	415.32	375.54	21.67	-2.30	0.158
103.00	-4.61	-1.92	0.00	-53.62	0.00	53.62	968.57	230.61	405.93	366.99	22.16	-2.33	0.151
104.00	-4.55	-1.90	0.00	-51.71	0.00	51.71	957.42	227.96	396.63	358.54	22.65	-2.35	0.149
105.00	-4.49	-1.88	0.00	-49.81	0.00	49.81	946.27	225.30	387.45	350.18	23.15	-2.38	0.147
106.00	-4.43	-1.87	0.00	-47.93	0.00	47.93	935.12	222.65	378.38	341.93	23.65	-2.40	0.145
107.00	-4.37	-1.85	0.00	-46.06	0.00	46.06	923.96	219.99	369.41	333.77	24.15	-2.43	0.143
108.00	-4.31	-1.83	0.00	-44.21	0.00	44.21	912.81	217.34	360.55	325.72	24.66	-2.46	0.141
109.00	-4.26	-1.82	0.00	-42.38	0.00	42.38	901.66	214.68	351.79	317.76	25.18	-2.48	0.138
110.00	-4.20	-1.80	0.00	-40.56	0.00	40.56	890.50	212.02	343.15	309.90	25.70	-2.51	0.136
111.00	-4.14	-1.79	0.00	-38.76	0.00	38.76	879.35	209.37	334.61	302.13	26.23	-2.53	0.133
112.00	-4.09	-1.77	0.00	-36.97	0.00	36.97	868.20	206.71	326.18	294.47	26.76	-2.55	0.130
113.00	-4.03	-1.75	0.00	-35.20	0.00	35.20	857.04	204.06	317.86	286.90	27.30	-2.58	0.127
114.00	-3.98	-1.74	0.00	-33.45	0.00	33.45	845.89	201.40	309.64	279.44	27.84	-2.60	0.124
115.00	-3.93	-1.72	0.00	-31.71	0.00	31.71	834.74	198.75	301.53	272.07	28.39	-2.63	0.121
116.00	-3.87	-1.71	0.00	-29.99	0.00	29.99	823.58	196.09	293.53	264.80	28.94	-2.65	0.118
117.00	-3.82	-1.69	0.00	-28.28	0.00	28.28	812.43	193.44	285.64	257.63	29.50	-2.67	0.115
118.00	-3.77	-1.68	0.00	-26.58	0.00	26.58	801.28	190.78	277.86	250.55	30.06	-2.70	0.111
119.00	-3.72	-1.66	0.00	-24.91	0.00	24.91	790.13	188.13	270.18	243.58	30.63	-2.72	0.107
120.00	-3.67	-1.65	0.00	-23.24	0.00	23.24	778.97	185.47	262.61	236.70	31.20	-2.74	0.103
121.00	-3.62	-1.63	0.00	-21.59	0.00	21.59	767.82	182.81	255.15	229.93	31.78	-2.76	0.099
122.00	-3.57	-1.62	0.00	-19.96	0.00	19.96	756.67	180.16	247.79	223.25	32.36	-2.78	0.094
123.00	-3.52	-1.61	0.00	-18.34	0.00	18.34	745.51	177.50	240.54	216.67	32.94	-2.80	0.089
124.00	-3.47	-1.59	0.00	-16.74	0.00	16.74	734.36	174.85	233.40	210.18	33.53	-2.82	0.084
125.00	-3.42	-1.58	0.00	-15.14	0.00	15.14	723.21	172.19	226.37	203.80	34.12	-2.84	0.079
126.00	-3.37	-1.56	0.00	-13.57	0.00	13.57	712.05	169.54	219.45	197.52	34.72	-2.85	0.074
127.00	-3.32	-1.55	0.00	-12.01	0.00	12.01	700.90	166.88	212.63	191.33	35.32	-2.87	0.068
128.00	-3.28	-1.53	0.00	-10.46	0.00	10.46	689.75	164.23	205.92	185.24	35.92	-2.88	0.061
129.00	-3.23	-1.52	0.00	-8.92	0.00	8.92	678.59	161.57	199.32	179.25	36.53	-2.90	0.055
130.00	-3.19	-1.51	0.00	-7.40	0.00	7.40	667.44	158.91	192.82	173.36	37.14	-2.91	0.048
131.00	-3.14	-1.49	0.00	-5.89	0.00	5.89	656.29	156.26	186.44	167.57	37.75	-2.92	0.040
132.00	-3.10	-1.48	0.00	-4.40	0.00	4.40	645.14	153.60	180.16	161.87	38.36	-2.93	0.032
133.00	-3.05	-1.47	0.00	-2.92	0.00	2.92	633.98	150.95	173.99	156.28	38.97	-2.93	0.024
134.00	-3.01	-1.45	0.00	-1.45	0.00	1.45	622.83	148.29	167.92	150.78	39.59	-2.94	0.015
135.00	0.00	-1.30	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	40.20	-2.94	0.000

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:24 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 0.9D + 1.0W	108 mph with No Ice (Reduced DL)	36 Iterations
Gust Response Factor :1.10		
Dead Load Factor :0.90		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		42.1	0.0					0.0	0.0	42.1	0.0	0.0	0.0
1.00		83.9	146.1					0.0	41.7	83.9	187.9	0.0	0.0
2.00		83.5	145.3					0.0	41.7	83.5	187.1	0.0	0.0
3.00		83.0	144.5					0.0	41.7	83.0	186.3	0.0	0.0
4.00		82.6	143.8					0.0	41.7	82.6	185.5	0.0	0.0
5.00		82.1	143.0					0.0	41.7	82.1	184.7	0.0	0.0
6.00		81.7	142.2					0.0	41.7	81.7	183.9	0.0	0.0
7.00		81.2	141.4					0.0	41.7	81.2	183.1	0.0	0.0
8.00		80.8	140.6					0.0	41.7	80.8	182.3	0.0	0.0
9.00		80.3	139.8					0.0	41.7	80.3	181.5	0.0	0.0
10.00		79.9	139.0					0.0	41.7	79.9	180.7	0.0	0.0
11.00		79.4	138.2					0.0	41.7	79.4	179.9	0.0	0.0
12.00		79.0	137.4					0.0	41.7	79.0	179.1	0.0	0.0
13.00		78.5	136.6					0.0	41.7	78.5	178.3	0.0	0.0
14.00		78.0	135.8					0.0	41.7	78.0	177.5	0.0	0.0
15.00		77.8	135.0					0.0	41.7	77.8	176.7	0.0	0.0
16.00		78.1	134.2					0.0	41.7	78.1	175.9	0.0	0.0
17.00		78.6	133.4					0.0	41.7	78.6	175.1	0.0	0.0
18.00		79.1	132.6					0.0	41.7	79.1	174.4	0.0	0.0
19.00		79.5	131.8					0.0	41.7	79.5	173.6	0.0	0.0
20.00		79.9	131.0					0.0	41.7	79.9	172.8	0.0	0.0
21.00		80.3	130.2					0.0	41.7	80.3	172.0	0.0	0.0
22.00		80.6	129.5					0.0	41.7	80.6	171.2	0.0	0.0
23.00		80.8	128.7					0.0	41.7	80.8	170.4	0.0	0.0
24.00		81.1	127.9					0.0	41.7	81.1	169.6	0.0	0.0
25.00		81.2	127.1					0.0	41.7	81.2	168.8	0.0	0.0
26.00		81.4	126.3					0.0	41.7	81.4	168.0	0.0	0.0
27.00		81.6	125.5					0.0	41.7	81.6	167.2	0.0	0.0
28.00		81.7	124.7					0.0	41.7	81.7	166.4	0.0	0.0
29.00		81.7	123.9					0.0	41.7	81.7	165.6	0.0	0.0
30.00		81.8	123.1					0.0	41.7	81.8	164.8	0.0	0.0
31.00		81.8	122.3					0.0	41.7	81.8	164.0	0.0	0.0
32.00		81.9	121.5					0.0	41.7	81.9	163.2	0.0	0.0
33.00		81.9	120.7					0.0	41.7	81.9	162.4	0.0	0.0
34.00		81.8	119.9					0.0	41.7	81.8	161.6	0.0	0.0
35.00		81.8	119.1					0.0	41.7	81.8	160.8	0.0	0.0
36.00		81.7	118.3					0.0	41.7	81.7	160.1	0.0	0.0
37.00		81.7	117.5					0.0	41.7	81.7	159.3	0.0	0.0
38.00		81.6	116.7					0.0	41.7	81.6	158.5	0.0	0.0
39.00		81.5	115.9					0.0	41.7	81.5	157.7	0.0	0.0
40.00		81.4	115.2					0.0	41.7	81.4	156.9	0.0	0.0
41.00		81.2	114.4					0.0	41.7	81.2	156.1	0.0	0.0
42.00		72.3	113.6					0.0	41.7	72.3	155.3	0.0	0.0
42.78	Bot - Section 2	40.7	88.3					0.0	32.7	40.7	121.0	0.0	0.0
43.00		50.1	43.1					0.0	9.1	50.1	52.2	0.0	0.0
44.00		82.2	197.8					0.0	41.7	82.2	239.5	0.0	0.0
45.00		82.0	196.4					0.0	41.7	82.0	238.1	0.0	0.0
46.00		81.8	195.0					0.0	41.7	81.8	236.7	0.0	0.0

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:44 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 0.9D + 1.0W		108 mph with No Ice (Reduced DL)						36 Iterations	
Gust Response Factor :1.10									
Dead Load Factor :0.90									
Wind Load Factor :1.00									

47.00		49.7	193.6				0.0	41.7	49.7	235.3	0.0	0.0	
47.22	Top - Section 1	40.8	41.9				0.0	9.1	40.8	50.9	0.0	0.0	
48.00		72.6	65.3				0.0	32.7	72.6	97.9	0.0	0.0	
49.00		81.2	82.8				0.0	41.7	81.2	124.5	0.0	0.0	
50.00		81.0	82.2				0.0	41.7	81.0	124.0	0.0	0.0	
51.00		80.7	81.6				0.0	41.7	80.7	123.4	0.0	0.0	
52.00		80.5	81.0				0.0	41.7	80.5	122.8	0.0	0.0	
53.00		80.2	80.4				0.0	41.7	80.2	122.2	0.0	0.0	
54.00		79.9	79.8				0.0	41.7	79.9	121.6	0.0	0.0	
55.00		79.6	79.2				0.0	41.7	79.6	121.0	0.0	0.0	
56.00		79.3	78.7				0.0	41.7	79.3	120.4	0.0	0.0	
57.00		79.0	78.1				0.0	41.7	79.0	119.8	0.0	0.0	
58.00		78.7	77.5				0.0	41.7	78.7	119.2	0.0	0.0	
59.00		78.4	76.9				0.0	41.7	78.4	118.6	0.0	0.0	
60.00		78.1	76.3				0.0	41.7	78.1	118.0	0.0	0.0	
61.00		77.7	75.7				0.0	41.7	77.7	117.4	0.0	0.0	
62.00		77.4	75.1				0.0	41.7	77.4	116.8	0.0	0.0	
63.00		77.0	74.5				0.0	41.7	77.0	116.2	0.0	0.0	
64.00		76.7	73.9				0.0	41.7	76.7	115.6	0.0	0.0	
65.00		76.3	73.3				0.0	41.7	76.3	115.0	0.0	0.0	
66.00		75.9	72.7				0.0	41.7	75.9	114.4	0.0	0.0	
67.00		75.6	72.1				0.0	41.7	75.6	113.8	0.0	0.0	
68.00		75.2	71.5				0.0	41.7	75.2	113.2	0.0	0.0	
69.00		74.8	70.9				0.0	41.7	74.8	112.6	0.0	0.0	
70.00		74.4	70.3				0.0	41.7	74.4	112.0	0.0	0.0	
71.00		74.0	69.7				0.0	41.7	74.0	111.4	0.0	0.0	
72.00		73.6	69.1				0.0	41.7	73.6	110.8	0.0	0.0	
73.00		73.2	68.5				0.0	41.7	73.2	110.2	0.0	0.0	
74.00		72.7	67.9				0.0	41.7	72.7	109.7	0.0	0.0	
75.00		72.3	67.3				0.0	41.7	72.3	109.1	0.0	0.0	
76.00		71.9	66.7				0.0	41.7	71.9	108.5	0.0	0.0	
77.00		71.4	66.1				0.0	41.7	71.4	107.9	0.0	0.0	
78.00		71.0	65.5				0.0	41.7	71.0	107.3	0.0	0.0	
79.00		70.5	65.0				0.0	41.7	70.5	106.7	0.0	0.0	
80.00		70.1	64.4				0.0	41.7	70.1	106.1	0.0	0.0	
81.00		69.6	63.8				0.0	41.7	69.6	105.5	0.0	0.0	
82.00		69.1	63.2				0.0	41.7	69.1	104.9	0.0	0.0	
83.00		68.7	62.6				0.0	41.7	68.7	104.3	0.0	0.0	
84.00		68.2	62.0				0.0	41.7	68.2	103.7	0.0	0.0	
85.00		67.7	61.4				0.0	41.7	67.7	103.1	0.0	0.0	
86.00		67.2	60.8				0.0	41.7	67.2	102.5	0.0	0.0	
87.00		66.7	60.2				0.0	41.7	66.7	101.9	0.0	0.0	
88.00		45.3	59.6				0.0	41.7	45.3	101.3	0.0	0.0	
88.36	Bot - Section 3	33.4	21.6				0.0	15.2	33.4	36.8	0.0	0.0	
89.00		54.8	67.2				0.0	26.5	54.8	93.7	0.0	0.0	
90.00		66.6	104.9				0.0	41.7	66.6	146.6	0.0	0.0	
91.00		54.1	103.8				0.0	41.7	54.1	145.6	0.0	0.0	
91.64	Top - Section 2	32.9	65.4				0.0	26.5	32.9	91.9	0.0	0.0	
92.00		44.6	16.6				0.0	15.2	44.6	31.8	0.0	0.0	
93.00		65.0	45.1				0.0	41.7	65.0	86.8	0.0	0.0	
94.00		64.5	44.6				0.0	41.7	64.5	86.4	0.0	0.0	
95.00	Appurtenance(s)	64.0	44.2	493.3	0.0	0.0	259.9	0.0	41.7	557.3	345.8	0.0	0.0
96.00		63.5	43.7				0.0	31.7	63.5	75.5	0.0	0.0	
97.00		62.9	43.3				0.0	31.7	62.9	75.0	0.0	0.0	
98.00		62.4	42.8				0.0	31.7	62.4	74.5	0.0	0.0	
99.00		61.9	42.3				0.0	31.7	61.9	74.1	0.0	0.0	
100.00		61.3	41.9				0.0	31.7	61.3	73.6	0.0	0.0	

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:44 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 0.9D + 1.0W		108 mph with No Ice (Reduced DL)										36 Iterations	
Gust Response Factor :1.10													
Dead Load Factor :0.90													
Wind Load Factor :1.00													
101.00	Appurtenance(s)	60.8	41.4	1,628.6	0.0	0.0	1,800.0	0.0	31.7	1,689.4	1,873.1	0.0	0.0
102.00		60.2	40.9					0.0	31.7	60.2	72.7	0.0	0.0
103.00	Appurtenance(s)	59.7	40.5	3,388.1	0.0	0.0	1,798.7	0.0	31.7	3,447.8	1,871.0	0.0	0.0
104.00		59.1	40.0					0.0	13.4	59.1	53.4	0.0	0.0
105.00		58.5	39.5					0.0	13.4	58.5	53.0	0.0	0.0
106.00		58.0	39.1					0.0	13.4	58.0	52.5	0.0	0.0
107.00		57.4	38.6					0.0	13.4	57.4	52.0	0.0	0.0
108.00		56.8	38.2					0.0	13.4	56.8	51.6	0.0	0.0
109.00		56.3	37.7					0.0	13.4	56.3	51.1	0.0	0.0
110.00		55.7	37.2					0.0	13.4	55.7	50.6	0.0	0.0
111.00		55.1	36.8					0.0	13.4	55.1	50.2	0.0	0.0
112.00		54.5	36.3					0.0	13.4	54.5	49.7	0.0	0.0
113.00		53.9	35.8					0.0	13.4	53.9	49.3	0.0	0.0
114.00		53.3	35.4					0.0	13.4	53.3	48.8	0.0	0.0
115.00		52.7	34.9					0.0	13.4	52.7	48.3	0.0	0.0
116.00		52.1	34.4					0.0	13.4	52.1	47.9	0.0	0.0
117.00		51.5	34.0					0.0	13.4	51.5	47.4	0.0	0.0
118.00		50.9	33.5					0.0	13.4	50.9	46.9	0.0	0.0
119.00		50.3	33.1					0.0	13.4	50.3	46.5	0.0	0.0
120.00		49.7	32.6					0.0	13.4	49.7	46.0	0.0	0.0
121.00		49.1	32.1					0.0	13.4	49.1	45.5	0.0	0.0
122.00		48.5	31.7					0.0	13.4	48.5	45.1	0.0	0.0
123.00		47.8	31.2					0.0	13.4	47.8	44.6	0.0	0.0
124.00		47.2	30.7					0.0	13.4	47.2	44.2	0.0	0.0
125.00		46.6	30.3					0.0	13.4	46.6	43.7	0.0	0.0
126.00		46.0	29.8					0.0	13.4	46.0	43.2	0.0	0.0
127.00		45.3	29.4					0.0	13.4	45.3	42.8	0.0	0.0
128.00		44.7	28.9					0.0	13.4	44.7	42.3	0.0	0.0
129.00		44.0	28.4					0.0	13.4	44.0	41.8	0.0	0.0
130.00		43.4	28.0					0.0	13.4	43.4	41.4	0.0	0.0
131.00		42.8	27.5					0.0	13.4	42.8	40.9	0.0	0.0
132.00		42.1	27.0					0.0	13.4	42.1	40.4	0.0	0.0
133.00		41.5	26.6					0.0	13.4	41.5	40.0	0.0	0.0
134.00		40.8	26.1					0.0	13.4	40.8	39.5	0.0	0.0
135.00	Appurtenance(s)	20.2	25.6	4,675.1	0.0	0.0	2,732.8	0.0	13.4	4,695.4	2,771.9	0.0	0.0
Totals:										19,626.0	22,462.3	0.00	0.00

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:44 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 0.9D + 1.0W

108 mph with No Ice (Reduced DL)

36 Iterations

Gust Response Factor :1.10

Dead Load Factor :0.90

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-22.45	-19.59	0.00	-1,853.88	0.00	1,853.88	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.705
1.00	-22.25	-19.53	0.00	-1,834.29	0.00	1,834.29	3,282.09	835.17	3,105.10	2,632.84	0.01	-0.05	0.704
2.00	-22.04	-19.47	0.00	-1,814.76	0.00	1,814.76	3,271.33	830.61	3,071.35	2,609.77	0.02	-0.11	0.703
3.00	-21.84	-19.41	0.00	-1,795.29	0.00	1,795.29	3,260.49	826.06	3,037.79	2,586.74	0.05	-0.17	0.701
4.00	-21.63	-19.34	0.00	-1,775.88	0.00	1,775.88	3,249.58	821.51	3,004.41	2,563.73	0.09	-0.22	0.700
5.00	-21.43	-19.28	0.00	-1,756.54	0.00	1,756.54	3,238.59	816.96	2,971.21	2,540.77	0.15	-0.28	0.699
6.00	-21.23	-19.22	0.00	-1,737.26	0.00	1,737.26	3,227.51	812.40	2,938.21	2,517.83	0.21	-0.33	0.697
7.00	-21.02	-19.16	0.00	-1,718.04	0.00	1,718.04	3,216.36	807.85	2,905.38	2,494.94	0.29	-0.39	0.696
8.00	-20.82	-19.10	0.00	-1,698.88	0.00	1,698.88	3,205.14	803.30	2,872.74	2,472.08	0.37	-0.45	0.694
9.00	-20.62	-19.04	0.00	-1,679.78	0.00	1,679.78	3,193.83	798.75	2,840.28	2,449.27	0.47	-0.50	0.693
10.00	-20.42	-18.98	0.00	-1,660.74	0.00	1,660.74	3,182.45	794.20	2,808.01	2,426.49	0.59	-0.56	0.691
11.00	-20.23	-18.91	0.00	-1,641.77	0.00	1,641.77	3,170.98	789.64	2,775.92	2,403.75	0.71	-0.62	0.690
12.00	-20.03	-18.85	0.00	-1,622.85	0.00	1,622.85	3,159.44	785.09	2,744.02	2,381.06	0.85	-0.68	0.688
13.00	-19.83	-18.79	0.00	-1,604.00	0.00	1,604.00	3,147.82	780.54	2,712.30	2,358.41	0.99	-0.74	0.687
14.00	-19.64	-18.73	0.00	-1,585.21	0.00	1,585.21	3,136.13	775.99	2,680.77	2,335.81	1.16	-0.79	0.685
15.00	-19.44	-18.67	0.00	-1,566.47	0.00	1,566.47	3,124.35	771.43	2,649.42	2,313.25	1.33	-0.85	0.684
16.00	-19.25	-18.61	0.00	-1,547.80	0.00	1,547.80	3,112.50	766.88	2,618.25	2,290.73	1.51	-0.91	0.682
17.00	-19.05	-18.55	0.00	-1,529.19	0.00	1,529.19	3,100.57	762.33	2,587.27	2,268.27	1.71	-0.97	0.681
18.00	-18.86	-18.49	0.00	-1,510.64	0.00	1,510.64	3,088.56	757.78	2,556.47	2,245.85	1.92	-1.03	0.679
19.00	-18.67	-18.43	0.00	-1,492.15	0.00	1,492.15	3,076.47	753.22	2,525.86	2,223.48	2.15	-1.09	0.678
20.00	-18.48	-18.36	0.00	-1,473.72	0.00	1,473.72	3,064.30	748.67	2,495.43	2,201.16	2.38	-1.16	0.676
21.00	-18.29	-18.30	0.00	-1,455.36	0.00	1,455.36	3,052.06	744.12	2,465.19	2,178.90	2.63	-1.22	0.675
22.00	-18.10	-18.23	0.00	-1,437.06	0.00	1,437.06	3,039.74	739.57	2,435.13	2,156.68	2.89	-1.28	0.673
23.00	-17.91	-18.17	0.00	-1,418.83	0.00	1,418.83	3,027.34	735.02	2,405.26	2,134.53	3.17	-1.34	0.671
24.00	-17.72	-18.10	0.00	-1,400.66	0.00	1,400.66	3,014.86	730.46	2,375.57	2,112.42	3.45	-1.40	0.670
25.00	-17.54	-18.04	0.00	-1,382.56	0.00	1,382.56	3,002.30	725.91	2,346.06	2,090.37	3.75	-1.47	0.668
26.00	-17.35	-17.97	0.00	-1,364.52	0.00	1,364.52	2,989.67	721.36	2,316.74	2,068.38	4.07	-1.53	0.666
27.00	-17.17	-17.90	0.00	-1,346.55	0.00	1,346.55	2,976.95	716.81	2,287.60	2,046.44	4.40	-1.59	0.664
28.00	-16.98	-17.84	0.00	-1,328.65	0.00	1,328.65	2,964.16	712.25	2,258.65	2,024.57	4.74	-1.66	0.663
29.00	-16.80	-17.77	0.00	-1,310.82	0.00	1,310.82	2,951.29	707.70	2,229.88	2,002.75	5.09	-1.72	0.661
30.00	-16.62	-17.70	0.00	-1,293.05	0.00	1,293.05	2,938.34	703.15	2,201.30	1,981.00	5.46	-1.78	0.659
31.00	-16.44	-17.63	0.00	-1,275.35	0.00	1,275.35	2,925.32	698.60	2,172.90	1,959.31	5.84	-1.85	0.657
32.00	-16.26	-17.56	0.00	-1,257.72	0.00	1,257.72	2,912.22	694.05	2,144.68	1,937.68	6.23	-1.91	0.655
33.00	-16.08	-17.49	0.00	-1,240.16	0.00	1,240.16	2,899.87	689.49	2,116.65	1,914.02	6.64	-1.98	0.654
34.00	-15.90	-17.42	0.00	-1,222.66	0.00	1,222.66	2,887.75	684.94	2,088.80	1,888.69	7.06	-2.05	0.654
35.00	-15.72	-17.36	0.00	-1,205.24	0.00	1,205.24	2,875.63	680.39	2,061.14	1,863.52	7.50	-2.11	0.653
36.00	-15.54	-17.29	0.00	-1,187.88	0.00	1,187.88	2,863.51	675.84	2,033.66	1,838.53	7.95	-2.18	0.652
37.00	-15.37	-17.22	0.00	-1,170.60	0.00	1,170.60	2,851.39	671.28	2,006.37	1,813.70	8.41	-2.25	0.652
38.00	-15.19	-17.15	0.00	-1,153.38	0.00	1,153.38	2,839.27	666.73	1,979.26	1,789.04	8.89	-2.31	0.651
39.00	-15.02	-17.08	0.00	-1,136.23	0.00	1,136.23	2,827.15	662.18	1,952.34	1,764.55	9.38	-2.38	0.650
40.00	-14.84	-17.01	0.00	-1,119.16	0.00	1,119.16	2,815.03	657.63	1,925.60	1,740.23	9.89	-2.45	0.649
41.00	-14.67	-16.94	0.00	-1,102.15	0.00	1,102.15	2,802.91	653.07	1,899.04	1,716.08	10.41	-2.52	0.648
42.00	-14.50	-16.87	0.00	-1,085.22	0.00	1,085.22	2,790.79	648.52	1,872.67	1,692.09	10.94	-2.59	0.647

Load Case: 0.9D + 1.0W				108 mph with No Ice (Reduced DL)								36 Iterations	
Gust Response Factor :1.10													
Dead Load Factor :0.90													
Wind Load Factor :1.00													
42.78	-14.37	-16.83	0.00	-1,072.01	0.00	1,072.01	2,708.83	644.96	1,852.15	1,673.44	11.37	-2.64	0.647
43.00	-14.31	-16.79	0.00	-1,068.35	0.00	1,068.35	2,704.68	643.97	1,846.48	1,668.28	11.49	-2.66	0.646
44.00	-14.05	-16.72	0.00	-1,051.56	0.00	1,051.56	2,685.56	639.42	1,820.48	1,644.63	12.06	-2.73	0.645
45.00	-13.80	-16.64	0.00	-1,034.84	0.00	1,034.84	2,666.44	634.87	1,794.66	1,621.16	12.64	-2.80	0.644
46.00	-13.55	-16.56	0.00	-1,018.20	0.00	1,018.20	2,647.32	630.31	1,769.03	1,597.85	13.23	-2.87	0.643
47.00	-13.30	-16.51	0.00	-1,001.64	0.00	1,001.64	2,628.20	625.76	1,743.58	1,574.71	13.84	-2.94	0.642
47.22	-13.24	-16.48	0.00	-998.05	0.00	998.05	1,867.62	479.01	1,361.92	1,145.92	13.97	-2.95	0.879
48.00	-13.13	-16.42	0.00	-985.16	0.00	985.16	1,861.47	476.34	1,346.77	1,135.71	14.46	-3.01	0.876
49.00	-12.98	-16.35	0.00	-968.74	0.00	968.74	1,853.54	472.92	1,327.54	1,122.69	15.10	-3.10	0.871
50.00	-12.84	-16.28	0.00	-952.39	0.00	952.39	1,845.53	469.51	1,308.45	1,109.69	15.76	-3.19	0.866
51.00	-12.69	-16.21	0.00	-936.11	0.00	936.11	1,837.45	466.09	1,289.49	1,096.72	16.44	-3.28	0.862
52.00	-12.55	-16.15	0.00	-919.90	0.00	919.90	1,829.29	462.68	1,270.67	1,083.78	17.13	-3.37	0.857
53.00	-12.41	-16.08	0.00	-903.75	0.00	903.75	1,821.04	459.27	1,252.00	1,070.86	17.85	-3.46	0.852
54.00	-12.26	-16.01	0.00	-887.67	0.00	887.67	1,812.72	455.85	1,233.46	1,057.96	18.58	-3.55	0.847
55.00	-12.12	-15.94	0.00	-871.66	0.00	871.66	1,804.33	452.44	1,215.06	1,045.10	19.34	-3.64	0.842
56.00	-11.98	-15.88	0.00	-855.72	0.00	855.72	1,795.85	449.02	1,196.79	1,032.26	20.11	-3.74	0.837
57.00	-11.84	-15.81	0.00	-839.84	0.00	839.84	1,787.30	445.61	1,178.67	1,019.46	20.90	-3.83	0.832
58.00	-11.70	-15.74	0.00	-824.03	0.00	824.03	1,778.66	442.19	1,160.68	1,006.68	21.71	-3.92	0.826
59.00	-11.57	-15.67	0.00	-808.29	0.00	808.29	1,769.95	438.78	1,142.83	993.94	22.54	-4.01	0.821
60.00	-11.43	-15.61	0.00	-792.62	0.00	792.62	1,761.16	435.37	1,125.12	981.23	23.39	-4.11	0.816
61.00	-11.29	-15.54	0.00	-777.01	0.00	777.01	1,752.30	431.95	1,107.55	968.56	24.26	-4.20	0.810
62.00	-11.15	-15.47	0.00	-761.48	0.00	761.48	1,743.35	428.54	1,090.12	955.92	25.15	-4.30	0.804
63.00	-11.02	-15.40	0.00	-746.01	0.00	746.01	1,734.33	425.12	1,072.82	943.32	26.06	-4.39	0.798
64.00	-10.88	-15.34	0.00	-730.60	0.00	730.60	1,725.23	421.71	1,055.67	930.75	26.99	-4.49	0.793
65.00	-10.75	-15.27	0.00	-715.27	0.00	715.27	1,716.05	418.30	1,038.65	918.23	27.94	-4.58	0.787
66.00	-10.62	-15.20	0.00	-700.00	0.00	700.00	1,706.79	414.88	1,021.77	905.74	28.91	-4.68	0.780
67.00	-10.48	-15.13	0.00	-684.80	0.00	684.80	1,697.46	411.47	1,005.03	893.29	29.90	-4.77	0.774
68.00	-10.35	-15.07	0.00	-669.66	0.00	669.66	1,688.04	408.05	988.42	880.89	30.91	-4.87	0.768
69.00	-10.22	-15.00	0.00	-654.59	0.00	654.59	1,678.55	404.64	971.96	868.53	31.94	-4.97	0.761
70.00	-10.09	-14.93	0.00	-639.59	0.00	639.59	1,668.98	401.22	955.63	856.21	32.99	-5.06	0.754
71.00	-9.96	-14.87	0.00	-624.66	0.00	624.66	1,659.33	397.81	939.44	843.93	34.06	-5.16	0.748
72.00	-9.83	-14.80	0.00	-609.79	0.00	609.79	1,649.60	394.40	923.39	831.71	35.15	-5.26	0.741
73.00	-9.71	-14.73	0.00	-594.99	0.00	594.99	1,639.80	390.98	907.48	819.53	36.26	-5.35	0.733
74.00	-9.58	-14.67	0.00	-580.26	0.00	580.26	1,627.78	387.57	891.71	806.34	37.39	-5.45	0.727
75.00	-9.45	-14.60	0.00	-565.59	0.00	565.59	1,613.44	384.15	876.07	792.11	38.54	-5.55	0.721
76.00	-9.33	-14.54	0.00	-550.99	0.00	550.99	1,599.10	380.74	860.58	778.02	39.71	-5.64	0.715
77.00	-9.20	-14.47	0.00	-536.45	0.00	536.45	1,584.76	377.32	845.22	764.04	40.90	-5.74	0.709
78.00	-9.08	-14.40	0.00	-521.99	0.00	521.99	1,570.43	373.91	830.00	750.20	42.11	-5.84	0.703
79.00	-8.95	-14.34	0.00	-507.58	0.00	507.58	1,556.09	370.50	814.91	736.48	43.34	-5.94	0.696
80.00	-8.83	-14.27	0.00	-493.25	0.00	493.25	1,541.75	367.08	799.97	722.89	44.59	-6.03	0.690
81.00	-8.71	-14.21	0.00	-478.97	0.00	478.97	1,527.41	363.67	785.17	709.43	45.87	-6.13	0.682
82.00	-8.59	-14.14	0.00	-464.77	0.00	464.77	1,513.07	360.25	770.50	696.09	47.16	-6.23	0.675
83.00	-8.47	-14.07	0.00	-450.63	0.00	450.63	1,498.73	356.84	755.97	682.88	48.47	-6.32	0.667
84.00	-8.35	-14.01	0.00	-436.55	0.00	436.55	1,484.39	353.43	741.58	669.79	49.80	-6.42	0.659
85.00	-8.23	-13.94	0.00	-422.55	0.00	422.55	1,470.05	350.01	727.33	656.83	51.15	-6.52	0.650
86.00	-8.11	-13.88	0.00	-408.60	0.00	408.60	1,455.71	346.60	713.21	644.00	52.53	-6.61	0.642
87.00	-8.00	-13.81	0.00	-394.72	0.00	394.72	1,441.37	343.18	699.24	631.30	53.92	-6.71	0.632
88.00	-7.89	-13.77	0.00	-380.91	0.00	380.91	1,427.03	339.77	685.40	618.72	55.33	-6.80	0.623
88.36	-7.84	-13.74	0.00	-375.89	0.00	375.89	1,421.80	338.52	680.39	614.16	55.85	-6.84	0.619

Load Case: 0.9D + 1.0W				108 mph with No Ice (Reduced DL)						36 Iterations			
Gust Response Factor :1.10													
Dead Load Factor :0.90													
Wind Load Factor :1.00													

89.00	-7.74	-13.68	0.00	-367.16	0.00	367.16	1,412.69	336.35	671.70	606.27	56.76	-6.90	0.613
90.00	-7.58	-13.61	0.00	-353.48	0.00	353.48	1,398.35	332.94	658.14	593.94	58.22	-6.99	0.602
91.00	-7.42	-13.55	0.00	-339.87	0.00	339.87	1,384.01	329.53	644.71	581.74	59.69	-7.08	0.591
91.64	-7.33	-13.51	0.00	-331.26	0.00	331.26	1,058.69	260.79	519.07	454.24	60.63	-7.14	0.739
92.00	-7.28	-13.47	0.00	-326.34	0.00	326.34	1,056.16	259.82	515.22	451.45	61.18	-7.18	0.732
93.00	-7.18	-13.41	0.00	-312.87	0.00	312.87	1,049.15	257.17	504.75	443.82	62.69	-7.29	0.715
94.00	-7.08	-13.35	0.00	-299.46	0.00	299.46	1,042.06	254.51	494.38	436.22	64.22	-7.39	0.696
95.00	-6.78	-12.76	0.00	-286.11	0.00	286.11	1,034.89	251.86	484.12	428.66	65.78	-7.50	0.677
96.00	-6.69	-12.70	0.00	-273.35	0.00	273.35	1,027.65	249.20	473.97	421.12	67.36	-7.60	0.658
97.00	-6.60	-12.64	0.00	-260.65	0.00	260.65	1,020.33	246.55	463.93	413.62	68.95	-7.71	0.639
98.00	-6.52	-12.58	0.00	-248.01	0.00	248.01	1,012.93	243.89	453.99	406.15	70.58	-7.81	0.620
99.00	-6.43	-12.52	0.00	-235.43	0.00	235.43	1,005.45	241.23	444.16	398.71	72.22	-7.91	0.600
100.00	-6.35	-12.46	0.00	-222.91	0.00	222.91	997.89	238.58	434.44	391.31	73.88	-8.01	0.579
101.00	-4.71	-10.53	0.00	-210.45	0.00	210.45	990.26	235.92	424.83	383.94	75.56	-8.10	0.555
102.00	-4.63	-10.47	0.00	-199.92	0.00	199.92	979.73	233.27	415.32	375.54	77.26	-8.19	0.539
103.00	-3.26	-6.79	0.00	-189.45	0.00	189.45	968.57	230.61	405.93	366.99	78.98	-8.29	0.520
104.00	-3.21	-6.73	0.00	-182.65	0.00	182.65	957.42	227.96	396.63	358.54	80.72	-8.38	0.514
105.00	-3.15	-6.67	0.00	-175.92	0.00	175.92	946.27	225.30	387.45	350.18	82.48	-8.47	0.507
106.00	-3.10	-6.61	0.00	-169.25	0.00	169.25	935.12	222.65	378.38	341.93	84.26	-8.56	0.499
107.00	-3.05	-6.55	0.00	-162.63	0.00	162.63	923.96	219.99	369.41	333.77	86.05	-8.65	0.491
108.00	-2.99	-6.49	0.00	-156.08	0.00	156.08	912.81	217.34	360.55	325.72	87.87	-8.74	0.483
109.00	-2.94	-6.43	0.00	-149.59	0.00	149.59	901.66	214.68	351.79	317.76	89.70	-8.83	0.475
110.00	-2.89	-6.38	0.00	-143.15	0.00	143.15	890.50	212.02	343.15	309.90	91.55	-8.91	0.466
111.00	-2.84	-6.32	0.00	-136.78	0.00	136.78	879.35	209.37	334.61	302.13	93.42	-9.00	0.457
112.00	-2.79	-6.26	0.00	-130.46	0.00	130.46	868.20	206.71	326.18	294.47	95.31	-9.09	0.447
113.00	-2.74	-6.20	0.00	-124.20	0.00	124.20	857.04	204.06	317.86	286.90	97.21	-9.18	0.437
114.00	-2.69	-6.15	0.00	-117.99	0.00	117.99	845.89	201.40	309.64	279.44	99.13	-9.26	0.426
115.00	-2.64	-6.09	0.00	-111.85	0.00	111.85	834.74	198.75	301.53	272.07	101.07	-9.34	0.415
116.00	-2.60	-6.04	0.00	-105.75	0.00	105.75	823.58	196.09	293.53	264.80	103.03	-9.43	0.403
117.00	-2.55	-5.98	0.00	-99.72	0.00	99.72	812.43	193.44	285.64	257.63	105.01	-9.51	0.391
118.00	-2.50	-5.93	0.00	-93.74	0.00	93.74	801.28	190.78	277.86	250.55	107.00	-9.59	0.378
119.00	-2.46	-5.87	0.00	-87.81	0.00	87.81	790.13	188.13	270.18	243.58	109.00	-9.67	0.365
120.00	-2.41	-5.82	0.00	-81.94	0.00	81.94	778.97	185.47	262.61	236.70	111.03	-9.74	0.350
121.00	-2.37	-5.77	0.00	-76.12	0.00	76.12	767.82	182.81	255.15	229.93	113.07	-9.82	0.335
122.00	-2.33	-5.71	0.00	-70.35	0.00	70.35	756.67	180.16	247.79	223.25	115.12	-9.89	0.319
123.00	-2.28	-5.66	0.00	-64.64	0.00	64.64	745.51	177.50	240.54	216.67	117.19	-9.96	0.302
124.00	-2.24	-5.61	0.00	-58.98	0.00	58.98	734.36	174.85	233.40	210.18	119.27	-10.02	0.285
125.00	-2.20	-5.56	0.00	-53.37	0.00	53.37	723.21	172.19	226.37	203.80	121.37	-10.09	0.266
126.00	-2.16	-5.51	0.00	-47.81	0.00	47.81	712.05	169.54	219.45	197.52	123.48	-10.15	0.246
127.00	-2.12	-5.46	0.00	-42.30	0.00	42.30	700.90	166.88	212.63	191.33	125.60	-10.20	0.225
128.00	-2.08	-5.41	0.00	-36.84	0.00	36.84	689.75	164.23	205.92	185.24	127.73	-10.25	0.203
129.00	-2.05	-5.36	0.00	-31.43	0.00	31.43	678.59	161.57	199.32	179.25	129.87	-10.30	0.179
130.00	-2.01	-5.31	0.00	-26.07	0.00	26.07	667.44	158.91	192.82	173.36	132.02	-10.34	0.155
131.00	-1.98	-5.26	0.00	-20.76	0.00	20.76	656.29	156.26	186.44	167.57	134.18	-10.37	0.128
132.00	-1.94	-5.21	0.00	-15.50	0.00	15.50	645.14	153.60	180.16	161.87	136.34	-10.40	0.100
133.00	-1.91	-5.17	0.00	-10.29	0.00	10.29	633.98	150.95	173.99	156.28	138.51	-10.42	0.070
134.00	-1.88	-5.12	0.00	-5.12	0.00	5.12	622.83	148.29	167.92	150.78	140.68	-10.44	0.038
135.00	0.00	-4.70	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	142.86	-10.44	0.001

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:45:46 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0Di + 1.0Wi	40 mph with 1.00 in Radial Ice	34 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces			Sum of Forces			
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		7.5	0.0					0.0	0.0	7.5	0.0	0.0	0.0
1.00		15.0	229.3					0.0	55.6	15.0	284.9	0.0	0.0
2.00		15.0	232.1					0.0	55.6	15.0	287.8	0.0	0.0
3.00		14.9	232.9					0.0	55.6	14.9	288.5	0.0	0.0
4.00		14.9	233.0					0.0	55.6	14.9	288.6	0.0	0.0
5.00		14.8	232.8					0.0	55.6	14.8	288.4	0.0	0.0
6.00		14.7	232.4					0.0	55.6	14.7	288.0	0.0	0.0
7.00		14.7	231.8					0.0	55.6	14.7	287.5	0.0	0.0
8.00		14.6	231.2					0.0	55.6	14.6	286.8	0.0	0.0
9.00		14.5	230.4					0.0	55.6	14.5	286.0	0.0	0.0
10.00		14.5	229.6					0.0	55.6	14.5	285.2	0.0	0.0
11.00		14.4	228.8					0.0	55.6	14.4	284.4	0.0	0.0
12.00		14.3	227.9					0.0	55.6	14.3	283.5	0.0	0.0
13.00		14.2	226.9					0.0	55.6	14.2	282.6	0.0	0.0
14.00		14.2	226.0					0.0	55.6	14.2	281.6	0.0	0.0
15.00		14.1	225.0					0.0	55.6	14.1	280.6	0.0	0.0
16.00		14.2	224.0					0.0	55.6	14.2	279.6	0.0	0.0
17.00		14.3	223.0					0.0	55.6	14.3	278.6	0.0	0.0
18.00		14.4	221.9					0.0	55.6	14.4	277.5	0.0	0.0
19.00		14.5	220.8					0.0	55.6	14.5	276.5	0.0	0.0
20.00		14.6	219.8					0.0	55.6	14.6	275.4	0.0	0.0
21.00		14.6	218.7					0.0	55.6	14.6	274.3	0.0	0.0
22.00		14.7	217.6					0.0	55.6	14.7	273.2	0.0	0.0
23.00		14.7	216.4					0.0	55.6	14.7	272.1	0.0	0.0
24.00		14.8	215.3					0.0	55.6	14.8	271.0	0.0	0.0
25.00		14.8	214.2					0.0	55.6	14.8	269.8	0.0	0.0
26.00		14.9	213.0					0.0	55.6	14.9	268.7	0.0	0.0
27.00		14.9	211.9					0.0	55.6	14.9	267.5	0.0	0.0
28.00		14.9	210.7					0.0	55.6	14.9	266.4	0.0	0.0
29.00		15.0	209.5					0.0	55.6	15.0	265.2	0.0	0.0
30.00		15.0	208.4					0.0	55.6	15.0	264.0	0.0	0.0
31.00		15.0	207.2					0.0	55.6	15.0	262.8	0.0	0.0
32.00		15.0	206.0					0.0	55.6	15.0	261.6	0.0	0.0
33.00		15.0	204.8					0.0	55.6	15.0	260.4	0.0	0.0
34.00		15.0	203.6					0.0	55.6	15.0	259.2	0.0	0.0
35.00		15.0	202.4					0.0	55.6	15.0	258.0	0.0	0.0
36.00		15.0	201.2					0.0	55.6	15.0	256.8	0.0	0.0
37.00		15.0	200.0					0.0	55.6	15.0	255.6	0.0	0.0
38.00		15.0	198.7					0.0	55.6	15.0	254.4	0.0	0.0
39.00		15.0	197.5					0.0	55.6	15.0	253.2	0.0	0.0
40.00		15.0	196.3					0.0	55.6	15.0	251.9	0.0	0.0
41.00		15.0	195.1					0.0	55.6	15.0	250.7	0.0	0.0
42.00		13.3	193.8					0.0	55.6	13.3	249.5	0.0	0.0
42.78	Bot - Section 2	7.5	150.9					0.0	43.5	7.5	194.4	0.0	0.0
43.00		9.2	66.9					0.0	12.1	9.2	78.9	0.0	0.0
44.00		15.2	306.5					0.0	55.6	15.2	362.1	0.0	0.0
45.00		15.1	304.5					0.0	55.6	15.1	360.1	0.0	0.0
46.00		15.1	302.4					0.0	55.6	15.1	358.0	0.0	0.0

Load Case: 1.2D + 1.0Di + 1.0Wi			40 mph with 1.00 in Radial Ice				34 Iterations			
Gust Response Factor :1.10		Ice Dead Load Factor :1.00						Ice Importance Factor :1.00		
Dead Load Factor :1.20										
Wind Load Factor :1.00										
47.00		9.2	300.4	0.0	55.6	9.2	356.0	0.0	0.0	
47.22	Top - Section 1	7.5	65.0	0.0	12.1	7.5	77.1	0.0	0.0	
48.00		13.4	119.9	0.0	43.6	13.4	163.5	0.0	0.0	
49.00		15.0	152.3	0.0	55.6	15.0	207.9	0.0	0.0	
50.00		15.0	151.3	0.0	55.6	15.0	206.9	0.0	0.0	
51.00		14.9	150.3	0.0	55.6	14.9	205.9	0.0	0.0	
52.00		14.9	149.3	0.0	55.6	14.9	204.9	0.0	0.0	
53.00		14.9	148.3	0.0	55.6	14.9	203.9	0.0	0.0	
54.00		14.8	147.2	0.0	55.6	14.8	202.9	0.0	0.0	
55.00		14.8	146.2	0.0	55.6	14.8	201.9	0.0	0.0	
56.00		14.7	145.2	0.0	55.6	14.7	200.9	0.0	0.0	
57.00		14.7	144.2	0.0	55.6	14.7	199.8	0.0	0.0	
58.00		14.6	143.2	0.0	55.6	14.6	198.8	0.0	0.0	
59.00		14.6	142.2	0.0	55.6	14.6	197.8	0.0	0.0	
60.00		14.5	141.2	0.0	55.6	14.5	196.8	0.0	0.0	
61.00		14.5	140.1	0.0	55.6	14.5	195.8	0.0	0.0	
62.00		14.4	139.1	0.0	55.6	14.4	194.7	0.0	0.0	
63.00		14.4	138.1	0.0	55.6	14.4	193.7	0.0	0.0	
64.00		14.3	137.1	0.0	55.6	14.3	192.7	0.0	0.0	
65.00		14.3	136.0	0.0	55.6	14.3	191.7	0.0	0.0	
66.00		14.2	135.0	0.0	55.6	14.2	190.6	0.0	0.0	
67.00		14.1	134.0	0.0	55.6	14.1	189.6	0.0	0.0	
68.00		14.1	132.9	0.0	55.6	14.1	188.6	0.0	0.0	
69.00		14.0	131.9	0.0	55.6	14.0	187.5	0.0	0.0	
70.00		13.9	130.9	0.0	55.6	13.9	186.5	0.0	0.0	
71.00		13.9	129.8	0.0	55.6	13.9	185.4	0.0	0.0	
72.00		13.8	128.8	0.0	55.6	13.8	184.4	0.0	0.0	
73.00		13.7	127.7	0.0	55.6	13.7	183.4	0.0	0.0	
74.00		13.7	126.7	0.0	55.6	13.7	182.3	0.0	0.0	
75.00		13.6	125.6	0.0	55.6	13.6	181.3	0.0	0.0	
76.00		13.5	124.6	0.0	55.6	13.5	180.2	0.0	0.0	
77.00		13.5	123.5	0.0	55.6	13.5	179.2	0.0	0.0	
78.00		13.4	122.5	0.0	55.6	13.4	178.1	0.0	0.0	
79.00		13.3	121.4	0.0	55.6	13.3	177.1	0.0	0.0	
80.00		13.2	120.4	0.0	55.6	13.2	176.0	0.0	0.0	
81.00		13.2	119.3	0.0	55.6	13.2	175.0	0.0	0.0	
82.00		13.1	118.3	0.0	55.6	13.1	173.9	0.0	0.0	
83.00		13.0	117.2	0.0	55.6	13.0	172.9	0.0	0.0	
84.00		12.9	116.2	0.0	55.6	12.9	171.8	0.0	0.0	
85.00		12.8	115.1	0.0	55.6	12.8	170.7	0.0	0.0	
86.00		12.8	114.0	0.0	55.6	12.8	169.7	0.0	0.0	
87.00		12.7	113.0	0.0	55.6	12.7	168.6	0.0	0.0	
88.00		8.6	111.9	0.0	55.6	8.6	167.6	0.0	0.0	
88.36	Bot - Section 3	6.4	40.6	0.0	20.3	6.4	60.9	0.0	0.0	
89.00		10.4	110.4	0.0	35.3	10.4	145.8	0.0	0.0	
90.00		12.7	172.4	0.0	55.6	12.7	228.1	0.0	0.0	
91.00		10.3	170.7	0.0	55.6	10.3	226.4	0.0	0.0	
91.64	Top - Section 2	6.3	107.6	0.0	35.3	6.3	143.0	0.0	0.0	
92.00		8.5	33.8	0.0	20.3	8.5	54.1	0.0	0.0	
93.00		12.4	91.9	0.0	55.6	12.4	147.5	0.0	0.0	
94.00		12.3	91.0	0.0	55.6	12.3	146.6	0.0	0.0	
95.00	Appurtenance(s)	12.2	90.1	87.8	0.0	0.0	617.3	0.0	0.0	
96.00		12.2	89.2	0.0	42.3	12.2	131.5	0.0	0.0	
97.00		12.1	88.3	0.0	42.3	12.1	130.6	0.0	0.0	
98.00		12.0	87.4	0.0	42.3	12.0	129.8	0.0	0.0	
99.00		11.9	86.5	0.0	42.3	11.9	128.9	0.0	0.0	
100.00		11.8	85.6	0.0	42.3	11.8	128.0	0.0	0.0	

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:06 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0Di + 1.0Wi		40 mph with 1.00 in Radial Ice							34 Iterations				
Gust Response Factor :1.10		Ice Dead Load Factor :1.00							Ice Importance Factor :1.00				
Dead Load Factor :1.20													
Wind Load Factor :1.00													
101.00	Appurtenance(s)	11.7	84.7	294.3	0.0	0.0	3,108.1	0.0	42.3	306.0	3,235.2	0.0	0.0
102.00		11.6	83.8					0.0	42.3	11.6	126.2	0.0	0.0
103.00	Appurtenance(s)	11.5	82.9	548.8	0.0	0.0	4,343.5	0.0	42.3	560.4	4,468.8	0.0	0.0
104.00		11.4	82.0					0.0	17.9	11.4	99.9	0.0	0.0
105.00		11.3	81.1					0.0	17.9	11.3	99.0	0.0	0.0
106.00		11.2	80.2					0.0	17.9	11.2	98.1	0.0	0.0
107.00		11.1	79.3					0.0	17.9	11.1	97.2	0.0	0.0
108.00		11.1	78.4					0.0	17.9	11.1	96.3	0.0	0.0
109.00		11.0	77.5					0.0	17.9	11.0	95.4	0.0	0.0
110.00		10.9	76.6					0.0	17.9	10.9	94.5	0.0	0.0
111.00		10.8	75.7					0.0	17.9	10.8	93.6	0.0	0.0
112.00		10.7	74.8					0.0	17.9	10.7	92.7	0.0	0.0
113.00		10.6	73.9					0.0	17.9	10.6	91.8	0.0	0.0
114.00		10.5	73.0					0.0	17.9	10.5	90.9	0.0	0.0
115.00		10.4	72.1					0.0	17.9	10.4	90.0	0.0	0.0
116.00		10.3	71.2					0.0	17.9	10.3	89.1	0.0	0.0
117.00		10.2	70.3					0.0	17.9	10.2	88.1	0.0	0.0
118.00		10.1	69.4					0.0	17.9	10.1	87.2	0.0	0.0
119.00		10.0	68.4					0.0	17.9	10.0	86.3	0.0	0.0
120.00		9.9	67.5					0.0	17.9	9.9	85.4	0.0	0.0
121.00		9.7	66.6					0.0	17.9	9.7	84.5	0.0	0.0
122.00		9.6	65.7					0.0	17.9	9.6	83.6	0.0	0.0
123.00		9.5	64.8					0.0	17.9	9.5	82.7	0.0	0.0
124.00		9.4	63.9					0.0	17.9	9.4	81.7	0.0	0.0
125.00		9.3	63.0					0.0	17.9	9.3	80.8	0.0	0.0
126.00		9.2	62.0					0.0	17.9	9.2	79.9	0.0	0.0
127.00		9.1	61.1					0.0	17.9	9.1	79.0	0.0	0.0
128.00		9.0	60.2					0.0	17.9	9.0	78.1	0.0	0.0
129.00		8.9	59.3					0.0	17.9	8.9	77.2	0.0	0.0
130.00		8.8	58.4					0.0	17.9	8.8	76.2	0.0	0.0
131.00		8.7	57.4					0.0	17.9	8.7	75.3	0.0	0.0
132.00		8.6	56.5					0.0	17.9	8.6	74.4	0.0	0.0
133.00		8.5	55.6					0.0	17.9	8.5	73.5	0.0	0.0
134.00		8.4	54.7					0.0	17.9	8.4	72.6	0.0	0.0
135.00	Appurtenance(s)	4.2	53.8	798.9	0.0	0.0	5,971.9	0.0	17.9	803.1	6,043.5	0.0	0.0
									Totals:	3,500.06	40,018.5	0.00	0.00

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:06 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0Di + 1.0Wi

40 mph with 1.00 in Radial Ice

34 Iterations

Gust Response Factor :1.10

Ice Dead Load Factor :1.00

Dead Load Factor :1.20

Ice Importance Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-40.02	-3.49	0.00	-347.80	0.00	347.80	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.143
1.00	-39.73	-3.49	0.00	-344.30	0.00	344.30	3,282.09	835.17	3,105.10	2,632.84	0.00	-0.01	0.143
2.00	-39.44	-3.48	0.00	-340.81	0.00	340.81	3,271.33	830.61	3,071.35	2,609.77	0.00	-0.02	0.143
3.00	-39.16	-3.47	0.00	-337.34	0.00	337.34	3,260.49	826.06	3,037.79	2,586.74	0.01	-0.03	0.142
4.00	-38.87	-3.46	0.00	-333.87	0.00	333.87	3,249.58	821.51	3,004.41	2,563.73	0.02	-0.04	0.142
5.00	-38.58	-3.45	0.00	-330.40	0.00	330.40	3,238.59	816.96	2,971.21	2,540.77	0.03	-0.05	0.142
6.00	-38.29	-3.45	0.00	-326.95	0.00	326.95	3,227.51	812.40	2,938.21	2,517.83	0.04	-0.06	0.142
7.00	-38.00	-3.44	0.00	-323.50	0.00	323.50	3,216.36	807.85	2,905.38	2,494.94	0.05	-0.07	0.141
8.00	-37.71	-3.43	0.00	-320.07	0.00	320.07	3,205.14	803.30	2,872.74	2,472.08	0.07	-0.08	0.141
9.00	-37.43	-3.42	0.00	-316.63	0.00	316.63	3,193.83	798.75	2,840.28	2,449.27	0.09	-0.09	0.141
10.00	-37.14	-3.41	0.00	-313.21	0.00	313.21	3,182.45	794.20	2,808.01	2,426.49	0.11	-0.11	0.141
11.00	-36.86	-3.41	0.00	-309.80	0.00	309.80	3,170.98	789.64	2,775.92	2,403.75	0.13	-0.12	0.141
12.00	-36.57	-3.40	0.00	-306.39	0.00	306.39	3,159.44	785.09	2,744.02	2,381.06	0.16	-0.13	0.140
13.00	-36.29	-3.39	0.00	-302.99	0.00	302.99	3,147.82	780.54	2,712.30	2,358.41	0.19	-0.14	0.140
14.00	-36.01	-3.38	0.00	-299.60	0.00	299.60	3,136.13	775.99	2,680.77	2,335.81	0.22	-0.15	0.140
15.00	-35.72	-3.38	0.00	-296.22	0.00	296.22	3,124.35	771.43	2,649.42	2,313.25	0.25	-0.16	0.140
16.00	-35.44	-3.37	0.00	-292.84	0.00	292.84	3,112.50	766.88	2,618.25	2,290.73	0.28	-0.17	0.139
17.00	-35.16	-3.36	0.00	-289.47	0.00	289.47	3,100.57	762.33	2,587.27	2,268.27	0.32	-0.18	0.139
18.00	-34.89	-3.35	0.00	-286.12	0.00	286.12	3,088.56	757.78	2,556.47	2,245.85	0.36	-0.19	0.139
19.00	-34.61	-3.34	0.00	-282.77	0.00	282.77	3,076.47	753.22	2,525.86	2,223.48	0.40	-0.21	0.138
20.00	-34.33	-3.33	0.00	-279.42	0.00	279.42	3,064.30	748.67	2,495.43	2,201.16	0.45	-0.22	0.138
21.00	-34.06	-3.32	0.00	-276.09	0.00	276.09	3,052.06	744.12	2,465.19	2,178.90	0.50	-0.23	0.138
22.00	-33.78	-3.32	0.00	-272.76	0.00	272.76	3,039.74	739.57	2,435.13	2,156.68	0.54	-0.24	0.138
23.00	-33.51	-3.31	0.00	-269.45	0.00	269.45	3,027.34	735.02	2,405.26	2,134.53	0.60	-0.25	0.137
24.00	-33.24	-3.30	0.00	-266.14	0.00	266.14	3,014.86	730.46	2,375.57	2,112.42	0.65	-0.26	0.137
25.00	-32.97	-3.29	0.00	-262.84	0.00	262.84	3,002.30	725.91	2,346.06	2,090.37	0.71	-0.28	0.137
26.00	-32.70	-3.28	0.00	-259.56	0.00	259.56	2,989.67	721.36	2,316.74	2,068.38	0.77	-0.29	0.136
27.00	-32.43	-3.27	0.00	-256.28	0.00	256.28	2,976.95	716.81	2,287.60	2,046.44	0.83	-0.30	0.136
28.00	-32.17	-3.26	0.00	-253.01	0.00	253.01	2,964.16	712.25	2,258.65	2,024.57	0.89	-0.31	0.136
29.00	-31.90	-3.25	0.00	-249.75	0.00	249.75	2,951.29	707.70	2,229.88	2,002.75	0.96	-0.33	0.136
30.00	-31.64	-3.24	0.00	-246.49	0.00	246.49	2,938.34	703.15	2,201.30	1,981.00	1.03	-0.34	0.135
31.00	-31.37	-3.23	0.00	-243.25	0.00	243.25	2,925.32	698.60	2,172.90	1,959.31	1.10	-0.35	0.135
32.00	-31.11	-3.22	0.00	-240.02	0.00	240.02	2,912.22	694.05	2,144.68	1,937.68	1.18	-0.36	0.135
33.00	-30.85	-3.21	0.00	-236.80	0.00	236.80	2,899.14	689.49	2,116.65	1,916.02	1.25	-0.37	0.134
34.00	-30.59	-3.20	0.00	-233.59	0.00	233.59	2,886.07	684.94	2,088.80	1,894.36	1.33	-0.39	0.134
35.00	-30.33	-3.19	0.00	-230.39	0.00	230.39	2,872.99	680.39	2,061.14	1,872.70	1.42	-0.40	0.134
36.00	-30.07	-3.18	0.00	-227.20	0.00	227.20	2,859.92	675.84	2,033.66	1,851.04	1.50	-0.41	0.134
37.00	-29.82	-3.17	0.00	-224.02	0.00	224.02	2,846.84	671.28	2,006.37	1,829.38	1.59	-0.43	0.134
38.00	-29.56	-3.16	0.00	-220.84	0.00	220.84	2,833.77	666.73	1,979.26	1,807.72	1.68	-0.44	0.134
39.00	-29.31	-3.15	0.00	-217.68	0.00	217.68	2,820.69	662.18	1,952.34	1,786.06	1.77	-0.45	0.134
40.00	-29.06	-3.14	0.00	-214.53	0.00	214.53	2,807.62	657.63	1,925.60	1,764.40	1.87	-0.46	0.134
41.00	-28.80	-3.13	0.00	-211.39	0.00	211.39	2,794.54	653.07	1,899.04	1,742.74	1.97	-0.48	0.134
42.00	-28.55	-3.12	0.00	-208.26	0.00	208.26	2,781.47	648.52	1,872.67	1,721.08	2.07	-0.49	0.134

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:06 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.2D + 1.0Di + 1.0Wi				40 mph with 1.00 in Radial Ice				34 Iterations				
Gust Response Factor :1.10				Ice Dead Load Factor :1.00				Ice Importance Factor :1.00				
Dead Load Factor :1.20												
Wind Load Factor :1.00												

42.78	-28.36	-3.11	0.00	-205.82	0.00	205.82	2,708.83	644.96	1,852.15	1,673.44	2.15	-0.50	0.133
43.00	-28.28	-3.11	0.00	-205.14	0.00	205.14	2,704.68	643.97	1,846.48	1,668.28	2.17	-0.50	0.133
44.00	-27.92	-3.10	0.00	-202.04	0.00	202.04	2,685.56	639.42	1,820.48	1,644.63	2.28	-0.52	0.133
45.00	-27.56	-3.08	0.00	-198.94	0.00	198.94	2,666.44	634.87	1,794.66	1,621.16	2.39	-0.53	0.133
46.00	-27.20	-3.07	0.00	-195.85	0.00	195.85	2,647.32	630.31	1,769.03	1,597.85	2.50	-0.54	0.133
47.00	-26.84	-3.06	0.00	-192.78	0.00	192.78	2,628.20	625.76	1,743.58	1,574.71	2.62	-0.56	0.133
47.22	-26.76	-3.06	0.00	-192.12	0.00	192.12	1,867.62	479.01	1,361.92	1,145.92	2.64	-0.56	0.182
48.00	-26.60	-3.05	0.00	-189.72	0.00	189.72	1,861.47	476.34	1,346.77	1,135.71	2.74	-0.57	0.181
49.00	-26.39	-3.04	0.00	-186.67	0.00	186.67	1,853.54	472.92	1,327.54	1,122.69	2.86	-0.59	0.181
50.00	-26.18	-3.03	0.00	-183.63	0.00	183.63	1,845.53	469.51	1,308.45	1,109.69	2.98	-0.61	0.180
51.00	-25.98	-3.02	0.00	-180.60	0.00	180.60	1,837.45	466.09	1,289.49	1,096.72	3.11	-0.62	0.179
52.00	-25.77	-3.01	0.00	-177.57	0.00	177.57	1,829.29	462.68	1,270.67	1,083.78	3.25	-0.64	0.178
53.00	-25.57	-3.00	0.00	-174.56	0.00	174.56	1,821.04	459.27	1,252.00	1,070.86	3.38	-0.66	0.177
54.00	-25.36	-3.00	0.00	-171.56	0.00	171.56	1,812.72	455.85	1,233.46	1,057.96	3.52	-0.68	0.176
55.00	-25.16	-2.99	0.00	-168.56	0.00	168.56	1,804.33	452.44	1,215.06	1,045.10	3.67	-0.69	0.175
56.00	-24.96	-2.98	0.00	-165.58	0.00	165.58	1,795.85	449.02	1,196.79	1,032.26	3.81	-0.71	0.174
57.00	-24.76	-2.97	0.00	-162.60	0.00	162.60	1,787.30	445.61	1,178.67	1,019.46	3.97	-0.73	0.173
58.00	-24.56	-2.96	0.00	-159.63	0.00	159.63	1,778.66	442.19	1,160.68	1,006.68	4.12	-0.75	0.172
59.00	-24.36	-2.95	0.00	-156.68	0.00	156.68	1,769.95	438.78	1,142.83	993.94	4.28	-0.77	0.171
60.00	-24.16	-2.94	0.00	-153.73	0.00	153.73	1,761.16	435.37	1,125.12	981.23	4.44	-0.78	0.170
61.00	-23.97	-2.93	0.00	-150.79	0.00	150.79	1,752.30	431.95	1,107.55	968.56	4.61	-0.80	0.169
62.00	-23.77	-2.92	0.00	-147.86	0.00	147.86	1,743.35	428.54	1,090.12	955.92	4.78	-0.82	0.168
63.00	-23.58	-2.91	0.00	-144.94	0.00	144.94	1,734.33	425.12	1,072.82	943.32	4.95	-0.84	0.167
64.00	-23.38	-2.90	0.00	-142.03	0.00	142.03	1,725.23	421.71	1,055.67	930.75	5.13	-0.86	0.166
65.00	-23.19	-2.89	0.00	-139.13	0.00	139.13	1,716.05	418.30	1,038.65	918.23	5.31	-0.88	0.165
66.00	-23.00	-2.88	0.00	-136.24	0.00	136.24	1,706.79	414.88	1,021.77	905.74	5.50	-0.90	0.164
67.00	-22.81	-2.87	0.00	-133.36	0.00	133.36	1,697.46	411.47	1,005.03	893.29	5.69	-0.91	0.163
68.00	-22.62	-2.86	0.00	-130.49	0.00	130.49	1,688.04	408.05	988.42	880.89	5.88	-0.93	0.162
69.00	-22.43	-2.85	0.00	-127.63	0.00	127.63	1,678.55	404.64	971.96	868.53	6.08	-0.95	0.160
70.00	-22.24	-2.84	0.00	-124.78	0.00	124.78	1,668.98	401.22	955.63	856.21	6.28	-0.97	0.159
71.00	-22.06	-2.83	0.00	-121.94	0.00	121.94	1,659.33	397.81	939.44	843.93	6.48	-0.99	0.158
72.00	-21.87	-2.82	0.00	-119.10	0.00	119.10	1,649.60	394.40	923.39	831.71	6.69	-1.01	0.157
73.00	-21.69	-2.81	0.00	-116.28	0.00	116.28	1,639.80	390.98	907.48	819.53	6.91	-1.03	0.155
74.00	-21.51	-2.80	0.00	-113.47	0.00	113.47	1,627.78	387.57	891.71	806.34	7.12	-1.05	0.154
75.00	-21.32	-2.79	0.00	-110.67	0.00	110.67	1,613.44	384.15	876.07	792.11	7.34	-1.06	0.153
76.00	-21.14	-2.78	0.00	-107.87	0.00	107.87	1,599.10	380.74	860.58	778.02	7.57	-1.08	0.152
77.00	-20.96	-2.77	0.00	-105.09	0.00	105.09	1,584.76	377.32	845.22	764.04	7.80	-1.10	0.151
78.00	-20.79	-2.76	0.00	-102.32	0.00	102.32	1,570.43	373.91	830.00	750.20	8.03	-1.12	0.150
79.00	-20.61	-2.75	0.00	-99.55	0.00	99.55	1,556.09	370.50	814.91	736.48	8.27	-1.14	0.148
80.00	-20.43	-2.74	0.00	-96.80	0.00	96.80	1,541.75	367.08	799.97	722.89	8.51	-1.16	0.147
81.00	-20.26	-2.73	0.00	-94.06	0.00	94.06	1,527.41	363.67	785.17	709.43	8.76	-1.18	0.146
82.00	-20.08	-2.72	0.00	-91.32	0.00	91.32	1,513.07	360.25	770.50	696.09	9.00	-1.20	0.145
83.00	-19.91	-2.71	0.00	-88.60	0.00	88.60	1,498.73	356.84	755.97	682.88	9.26	-1.22	0.143
84.00	-19.74	-2.70	0.00	-85.89	0.00	85.89	1,484.39	353.43	741.58	669.79	9.51	-1.24	0.142
85.00	-19.56	-2.69	0.00	-83.18	0.00	83.18	1,470.05	350.01	727.33	656.83	9.78	-1.26	0.140
86.00	-19.39	-2.68	0.00	-80.49	0.00	80.49	1,455.71	346.60	713.21	644.00	10.04	-1.27	0.138
87.00	-19.22	-2.67	0.00	-77.81	0.00	77.81	1,441.37	343.18	699.24	631.30	10.31	-1.29	0.137
88.00	-19.06	-2.67	0.00	-75.13	0.00	75.13	1,427.03	339.77	685.40	618.72	10.58	-1.31	0.135
88.36	-19.00	-2.66	0.00	-74.16	0.00	74.16	1,421.80	338.52	680.39	614.16	10.68	-1.32	0.134

Load Case: 1.2D + 1.0Di + 1.0Wi				40 mph with 1.00 in Radial Ice				34 Iterations			
Gust Response Factor :1.10				Ice Dead Load Factor :1.00				Ice Importance Factor :1.00			
Dead Load Factor :1.20											
Wind Load Factor :1.00											

89.00	-18.85	-2.65	0.00	-72.47	0.00	72.47	1,412.69	336.35	671.70	606.27	10.86	-1.33	0.133
90.00	-18.62	-2.64	0.00	-69.82	0.00	69.82	1,398.35	332.94	658.14	593.94	11.14	-1.35	0.131
91.00	-18.39	-2.63	0.00	-67.18	0.00	67.18	1,384.01	329.53	644.71	581.74	11.42	-1.37	0.129
91.64	-18.25	-2.62	0.00	-65.51	0.00	65.51	1,058.69	260.79	519.07	454.24	11.61	-1.38	0.162
92.00	-18.20	-2.62	0.00	-64.56	0.00	64.56	1,056.16	259.82	515.22	451.45	11.71	-1.39	0.160
93.00	-18.05	-2.61	0.00	-61.94	0.00	61.94	1,049.15	257.17	504.75	443.82	12.00	-1.41	0.157
94.00	-17.90	-2.60	0.00	-59.33	0.00	59.33	1,042.06	254.51	494.38	436.22	12.30	-1.43	0.153
95.00	-17.14	-2.49	0.00	-56.73	0.00	56.73	1,034.89	251.86	484.12	428.66	12.60	-1.45	0.149
96.00	-17.01	-2.48	0.00	-54.25	0.00	54.25	1,027.65	249.20	473.97	421.12	12.91	-1.47	0.145
97.00	-16.88	-2.47	0.00	-51.77	0.00	51.77	1,020.33	246.55	463.93	413.62	13.22	-1.49	0.142
98.00	-16.75	-2.46	0.00	-49.31	0.00	49.31	1,012.93	243.89	453.99	406.15	13.53	-1.51	0.138
99.00	-16.62	-2.45	0.00	-46.85	0.00	46.85	1,005.45	241.23	444.16	398.71	13.85	-1.53	0.134
100.00	-16.49	-2.44	0.00	-44.40	0.00	44.40	997.89	238.58	434.44	391.31	14.17	-1.55	0.130
101.00	-13.26	-2.05	0.00	-41.97	0.00	41.97	990.26	235.92	424.83	383.94	14.50	-1.57	0.123
102.00	-13.14	-2.04	0.00	-39.92	0.00	39.92	979.73	233.27	415.32	375.54	14.83	-1.59	0.120
103.00	-8.68	-1.36	0.00	-37.88	0.00	37.88	968.57	230.61	405.93	366.99	15.17	-1.61	0.112
104.00	-8.58	-1.34	0.00	-36.53	0.00	36.53	957.42	227.96	396.63	358.54	15.51	-1.62	0.111
105.00	-8.48	-1.33	0.00	-35.18	0.00	35.18	946.27	225.30	387.45	350.18	15.85	-1.64	0.109
106.00	-8.39	-1.32	0.00	-33.85	0.00	33.85	935.12	222.65	378.38	341.93	16.19	-1.66	0.108
107.00	-8.29	-1.31	0.00	-32.53	0.00	32.53	923.96	219.99	369.41	333.77	16.54	-1.68	0.106
108.00	-8.19	-1.30	0.00	-31.22	0.00	31.22	912.81	217.34	360.55	325.72	16.90	-1.70	0.105
109.00	-8.10	-1.29	0.00	-29.92	0.00	29.92	901.66	214.68	351.79	317.76	17.25	-1.71	0.103
110.00	-8.00	-1.28	0.00	-28.64	0.00	28.64	890.50	212.02	343.15	309.90	17.61	-1.73	0.101
111.00	-7.91	-1.26	0.00	-27.36	0.00	27.36	879.35	209.37	334.61	302.13	17.98	-1.75	0.100
112.00	-7.82	-1.25	0.00	-26.09	0.00	26.09	868.20	206.71	326.18	294.47	18.35	-1.77	0.098
113.00	-7.72	-1.24	0.00	-24.84	0.00	24.84	857.04	204.06	317.86	286.90	18.72	-1.78	0.096
114.00	-7.63	-1.23	0.00	-23.60	0.00	23.60	845.89	201.40	309.64	279.44	19.09	-1.80	0.094
115.00	-7.54	-1.22	0.00	-22.37	0.00	22.37	834.74	198.75	301.53	272.07	19.47	-1.82	0.091
116.00	-7.45	-1.21	0.00	-21.15	0.00	21.15	823.58	196.09	293.53	264.80	19.86	-1.83	0.089
117.00	-7.37	-1.20	0.00	-19.94	0.00	19.94	812.43	193.44	285.64	257.63	20.24	-1.85	0.086
118.00	-7.28	-1.19	0.00	-18.74	0.00	18.74	801.28	190.78	277.86	250.55	20.63	-1.87	0.084
119.00	-7.19	-1.18	0.00	-17.55	0.00	17.55	790.13	188.13	270.18	243.58	21.02	-1.88	0.081
120.00	-7.11	-1.17	0.00	-16.37	0.00	16.37	778.97	185.47	262.61	236.70	21.42	-1.90	0.078
121.00	-7.02	-1.16	0.00	-15.21	0.00	15.21	767.82	182.81	255.15	229.93	21.82	-1.91	0.075
122.00	-6.94	-1.14	0.00	-14.05	0.00	14.05	756.67	180.16	247.79	223.25	22.22	-1.93	0.072
123.00	-6.86	-1.13	0.00	-12.91	0.00	12.91	745.51	177.50	240.54	216.67	22.62	-1.94	0.069
124.00	-6.78	-1.12	0.00	-11.77	0.00	11.77	734.36	174.85	233.40	210.18	23.03	-1.95	0.065
125.00	-6.70	-1.11	0.00	-10.65	0.00	10.65	723.21	172.19	226.37	203.80	23.44	-1.97	0.062
126.00	-6.62	-1.10	0.00	-9.54	0.00	9.54	712.05	169.54	219.45	197.52	23.86	-1.98	0.058
127.00	-6.54	-1.09	0.00	-8.44	0.00	8.44	700.90	166.88	212.63	191.33	24.27	-1.99	0.053
128.00	-6.46	-1.08	0.00	-7.34	0.00	7.34	689.75	164.23	205.92	185.24	24.69	-2.00	0.049
129.00	-6.38	-1.07	0.00	-6.26	0.00	6.26	678.59	161.57	199.32	179.25	25.11	-2.01	0.044
130.00	-6.31	-1.06	0.00	-5.19	0.00	5.19	667.44	158.91	192.82	173.36	25.53	-2.02	0.039
131.00	-6.23	-1.05	0.00	-4.13	0.00	4.13	656.29	156.26	186.44	167.57	25.95	-2.02	0.034
132.00	-6.16	-1.04	0.00	-3.08	0.00	3.08	645.14	153.60	180.16	161.87	26.38	-2.03	0.029
133.00	-6.08	-1.03	0.00	-2.05	0.00	2.05	633.98	150.95	173.99	156.28	26.80	-2.03	0.023
134.00	-6.01	-1.02	0.00	-1.02	0.00	1.02	622.83	148.29	167.92	150.78	27.23	-2.04	0.016
135.00	0.00	-0.80	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	27.66	-2.04	0.000

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:07 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.0D + 1.0W	Serviceability 60 mph	34 Iterations
Gust Response Factor :1.10		
Dead Load Factor :1.00		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		11.6	0.0					0.0	0.0	11.6	0.0	0.0	0.0
1.00		23.2	162.4					0.0	46.4	23.2	208.7	0.0	0.0
2.00		23.1	161.5					0.0	46.4	23.1	207.8	0.0	0.0
3.00		22.9	160.6					0.0	46.4	22.9	207.0	0.0	0.0
4.00		22.8	159.7					0.0	46.4	22.8	206.1	0.0	0.0
5.00		22.7	158.8					0.0	46.4	22.7	205.2	0.0	0.0
6.00		22.6	158.0					0.0	46.4	22.6	204.3	0.0	0.0
7.00		22.4	157.1					0.0	46.4	22.4	203.4	0.0	0.0
8.00		22.3	156.2					0.0	46.4	22.3	202.6	0.0	0.0
9.00		22.2	155.3					0.0	46.4	22.2	201.7	0.0	0.0
10.00		22.1	154.4					0.0	46.4	22.1	200.8	0.0	0.0
11.00		21.9	153.5					0.0	46.4	21.9	199.9	0.0	0.0
12.00		21.8	152.7					0.0	46.4	21.8	199.0	0.0	0.0
13.00		21.7	151.8					0.0	46.4	21.7	198.1	0.0	0.0
14.00		21.6	150.9					0.0	46.4	21.6	197.3	0.0	0.0
15.00		21.5	150.0					0.0	46.4	21.5	196.4	0.0	0.0
16.00		21.6	149.1					0.0	46.4	21.6	195.5	0.0	0.0
17.00		21.7	148.2					0.0	46.4	21.7	194.6	0.0	0.0
18.00		21.8	147.4					0.0	46.4	21.8	193.7	0.0	0.0
19.00		22.0	146.5					0.0	46.4	22.0	192.8	0.0	0.0
20.00		22.1	145.6					0.0	46.4	22.1	192.0	0.0	0.0
21.00		22.2	144.7					0.0	46.4	22.2	191.1	0.0	0.0
22.00		22.2	143.8					0.0	46.4	22.2	190.2	0.0	0.0
23.00		22.3	143.0					0.0	46.4	22.3	189.3	0.0	0.0
24.00		22.4	142.1					0.0	46.4	22.4	188.4	0.0	0.0
25.00		22.4	141.2					0.0	46.4	22.4	187.5	0.0	0.0
26.00		22.5	140.3					0.0	46.4	22.5	186.7	0.0	0.0
27.00		22.5	139.4					0.0	46.4	22.5	185.8	0.0	0.0
28.00		22.6	138.5					0.0	46.4	22.6	184.9	0.0	0.0
29.00		22.6	137.7					0.0	46.4	22.6	184.0	0.0	0.0
30.00		22.6	136.8					0.0	46.4	22.6	183.1	0.0	0.0
31.00		22.6	135.9					0.0	46.4	22.6	182.3	0.0	0.0
32.00		22.6	135.0					0.0	46.4	22.6	181.4	0.0	0.0
33.00		22.6	134.1					0.0	46.4	22.6	180.5	0.0	0.0
34.00		22.6	133.2					0.0	46.4	22.6	179.6	0.0	0.0
35.00		22.6	132.4					0.0	46.4	22.6	178.7	0.0	0.0
36.00		22.6	131.5					0.0	46.4	22.6	177.8	0.0	0.0
37.00		22.6	130.6					0.0	46.4	22.6	177.0	0.0	0.0
38.00		22.5	129.7					0.0	46.4	22.5	176.1	0.0	0.0
39.00		22.5	128.8					0.0	46.4	22.5	175.2	0.0	0.0
40.00		22.5	127.9					0.0	46.4	22.5	174.3	0.0	0.0
41.00		22.4	127.1					0.0	46.4	22.4	173.4	0.0	0.0
42.00		20.0	126.2					0.0	46.4	20.0	172.5	0.0	0.0
42.78	Bot - Section 2	11.2	98.2					0.0	36.3	11.2	134.5	0.0	0.0
43.00		13.8	47.9					0.0	10.1	13.8	58.0	0.0	0.0
44.00		22.7	219.8					0.0	46.4	22.7	266.1	0.0	0.0
45.00		22.7	218.2					0.0	46.4	22.7	264.6	0.0	0.0
46.00		22.6	216.7					0.0	46.4	22.6	263.0	0.0	0.0

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:26 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.0D + 1.0W		Serviceability 60 mph						34 Iterations	
Gust Response Factor :1.10									
Dead Load Factor :1.00									
Wind Load Factor :1.00									

47.00		13.7	215.1				0.0	46.4	13.7	261.5	0.0	0.0	
47.22	Top - Section 1	11.3	46.5				0.0	10.1	11.3	56.6	0.0	0.0	
48.00		20.0	72.5				0.0	36.3	20.0	108.8	0.0	0.0	
49.00		22.4	92.0				0.0	46.4	22.4	138.4	0.0	0.0	
50.00		22.4	91.4				0.0	46.4	22.4	137.7	0.0	0.0	
51.00		22.3	90.7				0.0	46.4	22.3	137.1	0.0	0.0	
52.00		22.2	90.0				0.0	46.4	22.2	136.4	0.0	0.0	
53.00		22.1	89.4				0.0	46.4	22.1	135.7	0.0	0.0	
54.00		22.1	88.7				0.0	46.4	22.1	135.1	0.0	0.0	
55.00		22.0	88.1				0.0	46.4	22.0	134.4	0.0	0.0	
56.00		21.9	87.4				0.0	46.4	21.9	133.8	0.0	0.0	
57.00		21.8	86.7				0.0	46.4	21.8	133.1	0.0	0.0	
58.00		21.7	86.1				0.0	46.4	21.7	132.4	0.0	0.0	
59.00		21.7	85.4				0.0	46.4	21.7	131.8	0.0	0.0	
60.00		21.6	84.7				0.0	46.4	21.6	131.1	0.0	0.0	
61.00		21.5	84.1				0.0	46.4	21.5	130.4	0.0	0.0	
62.00		21.4	83.4				0.0	46.4	21.4	129.8	0.0	0.0	
63.00		21.3	82.8				0.0	46.4	21.3	129.1	0.0	0.0	
64.00		21.2	82.1				0.0	46.4	21.2	128.5	0.0	0.0	
65.00		21.1	81.4				0.0	46.4	21.1	127.8	0.0	0.0	
66.00		21.0	80.8				0.0	46.4	21.0	127.1	0.0	0.0	
67.00		20.9	80.1				0.0	46.4	20.9	126.5	0.0	0.0	
68.00		20.8	79.4				0.0	46.4	20.8	125.8	0.0	0.0	
69.00		20.7	78.8				0.0	46.4	20.7	125.1	0.0	0.0	
70.00		20.5	78.1				0.0	46.4	20.5	124.5	0.0	0.0	
71.00		20.4	77.5				0.0	46.4	20.4	123.8	0.0	0.0	
72.00		20.3	76.8				0.0	46.4	20.3	123.2	0.0	0.0	
73.00		20.2	76.1				0.0	46.4	20.2	122.5	0.0	0.0	
74.00		20.1	75.5				0.0	46.4	20.1	121.8	0.0	0.0	
75.00		20.0	74.8				0.0	46.4	20.0	121.2	0.0	0.0	
76.00		19.8	74.2				0.0	46.4	19.8	120.5	0.0	0.0	
77.00		19.7	73.5				0.0	46.4	19.7	119.9	0.0	0.0	
78.00		19.6	72.8				0.0	46.4	19.6	119.2	0.0	0.0	
79.00		19.5	72.2				0.0	46.4	19.5	118.5	0.0	0.0	
80.00		19.3	71.5				0.0	46.4	19.3	117.9	0.0	0.0	
81.00		19.2	70.8				0.0	46.4	19.2	117.2	0.0	0.0	
82.00		19.1	70.2				0.0	46.4	19.1	116.5	0.0	0.0	
83.00		19.0	69.5				0.0	46.4	19.0	115.9	0.0	0.0	
84.00		18.8	68.9				0.0	46.4	18.8	115.2	0.0	0.0	
85.00		18.7	68.2				0.0	46.4	18.7	114.6	0.0	0.0	
86.00		18.6	67.5				0.0	46.4	18.6	113.9	0.0	0.0	
87.00		18.4	66.9				0.0	46.4	18.4	113.2	0.0	0.0	
88.00		12.5	66.2				0.0	46.4	12.5	112.6	0.0	0.0	
88.36	Bot - Section 3	9.2	24.0				0.0	16.9	9.2	40.9	0.0	0.0	
89.00		15.1	74.7				0.0	29.5	15.1	104.1	0.0	0.0	
90.00		18.4	116.5				0.0	46.4	18.4	162.9	0.0	0.0	
91.00		14.9	115.4				0.0	46.4	14.9	161.7	0.0	0.0	
91.64	Top - Section 2	9.1	72.7				0.0	29.5	9.1	102.1	0.0	0.0	
92.00		12.3	18.4				0.0	16.9	12.3	35.3	0.0	0.0	
93.00		18.0	50.1				0.0	46.4	18.0	96.5	0.0	0.0	
94.00		17.8	49.6				0.0	46.4	17.8	96.0	0.0	0.0	
95.00	Appurtenance(s)	17.7	49.1	136.2	0.0	0.0	288.8	0.0	46.4	153.9	384.3	0.0	0.0
96.00		17.5	48.6					0.0	35.3	17.5	83.8	0.0	0.0
97.00		17.4	48.1					0.0	35.3	17.4	83.3	0.0	0.0
98.00		17.2	47.5					0.0	35.3	17.2	82.8	0.0	0.0
99.00		17.1	47.0					0.0	35.3	17.1	82.3	0.0	0.0
100.00		16.9	46.5					0.0	35.3	16.9	81.8	0.0	0.0

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:27 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.0D + 1.0W		Serviceability 60 mph							34 Iterations				
Gust Response Factor :1.10													
Dead Load Factor :1.00													
Wind Load Factor :1.00													
101.00	Appurtenance(s)	16.8	46.0	449.7	0.0	0.0	2,000.0	0.0	35.3	466.5	2,081.3	0.0	0.0
102.00		16.6	45.5					0.0	35.3	16.6	80.8	0.0	0.0
103.00	Appurtenance(s)	16.5	45.0	935.6	0.0	0.0	1,998.6	0.0	35.3	952.1	2,078.8	0.0	0.0
104.00		16.3	44.5					0.0	14.9	16.3	59.4	0.0	0.0
105.00		16.2	43.9					0.0	14.9	16.2	58.8	0.0	0.0
106.00		16.0	43.4					0.0	14.9	16.0	58.3	0.0	0.0
107.00		15.9	42.9					0.0	14.9	15.9	57.8	0.0	0.0
108.00		15.7	42.4					0.0	14.9	15.7	57.3	0.0	0.0
109.00		15.5	41.9					0.0	14.9	15.5	56.8	0.0	0.0
110.00		15.4	41.4					0.0	14.9	15.4	56.3	0.0	0.0
111.00		15.2	40.9					0.0	14.9	15.2	55.8	0.0	0.0
112.00		15.1	40.3					0.0	14.9	15.1	55.2	0.0	0.0
113.00		14.9	39.8					0.0	14.9	14.9	54.7	0.0	0.0
114.00		14.7	39.3					0.0	14.9	14.7	54.2	0.0	0.0
115.00		14.6	38.8					0.0	14.9	14.6	53.7	0.0	0.0
116.00		14.4	38.3					0.0	14.9	14.4	53.2	0.0	0.0
117.00		14.2	37.8					0.0	14.9	14.2	52.7	0.0	0.0
118.00		14.1	37.2					0.0	14.9	14.1	52.1	0.0	0.0
119.00		13.9	36.7					0.0	14.9	13.9	51.6	0.0	0.0
120.00		13.7	36.2					0.0	14.9	13.7	51.1	0.0	0.0
121.00		13.6	35.7					0.0	14.9	13.6	50.6	0.0	0.0
122.00		13.4	35.2					0.0	14.9	13.4	50.1	0.0	0.0
123.00		13.2	34.7					0.0	14.9	13.2	49.6	0.0	0.0
124.00		13.0	34.2					0.0	14.9	13.0	49.1	0.0	0.0
125.00		12.9	33.6					0.0	14.9	12.9	48.5	0.0	0.0
126.00		12.7	33.1					0.0	14.9	12.7	48.0	0.0	0.0
127.00		12.5	32.6					0.0	14.9	12.5	47.5	0.0	0.0
128.00		12.3	32.1					0.0	14.9	12.3	47.0	0.0	0.0
129.00		12.2	31.6					0.0	14.9	12.2	46.5	0.0	0.0
130.00		12.0	31.1					0.0	14.9	12.0	46.0	0.0	0.0
131.00		11.9	30.6					0.0	14.9	11.9	45.5	0.0	0.0
132.00		11.8	30.0					0.0	14.9	11.8	44.9	0.0	0.0
133.00		11.7	29.5					0.0	14.9	11.7	44.4	0.0	0.0
134.00		11.6	29.0					0.0	14.9	11.6	43.9	0.0	0.0
135.00	Appurtenance(s)	5.7	28.5	1,291.0	0.0	0.0	3,036.5	0.0	14.9	1,296.8	3,079.9	0.0	0.0
Totals:										5,420.74	24,958.1	0.00	0.00

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:27 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

34 Iterations

Gust Response Factor :1.10

Dead Load Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.96	-5.41	0.00	-516.86	0.00	516.86	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.202
1.00	-24.75	-5.39	0.00	-511.45	0.00	511.45	3,282.09	835.17	3,105.10	2,632.84	0.00	-0.02	0.202
2.00	-24.54	-5.38	0.00	-506.06	0.00	506.06	3,271.33	830.61	3,071.35	2,609.77	0.01	-0.03	0.201
3.00	-24.33	-5.36	0.00	-500.68	0.00	500.68	3,260.49	826.06	3,037.79	2,586.74	0.01	-0.05	0.201
4.00	-24.12	-5.34	0.00	-495.32	0.00	495.32	3,249.58	821.51	3,004.41	2,563.73	0.03	-0.06	0.201
5.00	-23.92	-5.33	0.00	-489.98	0.00	489.98	3,238.59	816.96	2,971.21	2,540.77	0.04	-0.08	0.200
6.00	-23.71	-5.31	0.00	-484.65	0.00	484.65	3,227.51	812.40	2,938.21	2,517.83	0.06	-0.09	0.200
7.00	-23.50	-5.30	0.00	-479.34	0.00	479.34	3,216.36	807.85	2,905.38	2,494.94	0.08	-0.11	0.199
8.00	-23.30	-5.28	0.00	-474.04	0.00	474.04	3,205.14	803.30	2,872.74	2,472.08	0.10	-0.12	0.199
9.00	-23.10	-5.26	0.00	-468.77	0.00	468.77	3,193.83	798.75	2,840.28	2,449.27	0.13	-0.14	0.199
10.00	-22.90	-5.25	0.00	-463.50	0.00	463.50	3,182.45	794.20	2,808.01	2,426.49	0.16	-0.16	0.198
11.00	-22.69	-5.23	0.00	-458.26	0.00	458.26	3,170.98	789.64	2,775.92	2,403.75	0.20	-0.17	0.198
12.00	-22.49	-5.21	0.00	-453.03	0.00	453.03	3,159.44	785.09	2,744.02	2,381.06	0.24	-0.19	0.197
13.00	-22.29	-5.20	0.00	-447.81	0.00	447.81	3,147.82	780.54	2,712.30	2,358.41	0.28	-0.21	0.197
14.00	-22.10	-5.18	0.00	-442.61	0.00	442.61	3,136.13	775.99	2,680.77	2,335.81	0.32	-0.22	0.197
15.00	-21.90	-5.17	0.00	-437.43	0.00	437.43	3,124.35	771.43	2,649.42	2,313.25	0.37	-0.24	0.196
16.00	-21.70	-5.15	0.00	-432.26	0.00	432.26	3,112.50	766.88	2,618.25	2,290.73	0.42	-0.25	0.196
17.00	-21.50	-5.13	0.00	-427.11	0.00	427.11	3,100.57	762.33	2,587.27	2,268.27	0.48	-0.27	0.195
18.00	-21.31	-5.12	0.00	-421.98	0.00	421.98	3,088.56	757.78	2,556.47	2,245.85	0.54	-0.29	0.195
19.00	-21.12	-5.10	0.00	-416.86	0.00	416.86	3,076.47	753.22	2,525.86	2,223.48	0.60	-0.31	0.194
20.00	-20.92	-5.08	0.00	-411.76	0.00	411.76	3,064.30	748.67	2,495.43	2,201.16	0.66	-0.32	0.194
21.00	-20.73	-5.07	0.00	-406.68	0.00	406.68	3,052.06	744.12	2,465.19	2,178.90	0.73	-0.34	0.193
22.00	-20.54	-5.05	0.00	-401.61	0.00	401.61	3,039.74	739.57	2,435.13	2,156.68	0.81	-0.36	0.193
23.00	-20.35	-5.03	0.00	-396.56	0.00	396.56	3,027.34	735.02	2,405.26	2,134.53	0.88	-0.37	0.193
24.00	-20.16	-5.02	0.00	-391.53	0.00	391.53	3,014.86	730.46	2,375.57	2,112.42	0.96	-0.39	0.192
25.00	-19.97	-5.00	0.00	-386.51	0.00	386.51	3,002.30	725.91	2,346.06	2,090.37	1.05	-0.41	0.192
26.00	-19.78	-4.98	0.00	-381.52	0.00	381.52	2,989.67	721.36	2,316.74	2,068.38	1.14	-0.43	0.191
27.00	-19.59	-4.96	0.00	-376.54	0.00	376.54	2,976.95	716.81	2,287.60	2,046.44	1.23	-0.44	0.191
28.00	-19.41	-4.94	0.00	-371.57	0.00	371.57	2,964.16	712.25	2,258.65	2,024.57	1.32	-0.46	0.190
29.00	-19.22	-4.93	0.00	-366.63	0.00	366.63	2,951.29	707.70	2,229.88	2,002.75	1.42	-0.48	0.190
30.00	-19.04	-4.91	0.00	-361.70	0.00	361.70	2,938.34	703.15	2,201.30	1,981.00	1.52	-0.50	0.189
31.00	-18.85	-4.89	0.00	-356.80	0.00	356.80	2,925.32	698.60	2,172.90	1,959.31	1.63	-0.52	0.189
32.00	-18.67	-4.87	0.00	-351.91	0.00	351.91	2,912.22	694.05	2,144.68	1,937.68	1.74	-0.53	0.188
33.00	-18.49	-4.85	0.00	-347.04	0.00	347.04	2,899.17	689.49	2,116.65	1,916.02	1.85	-0.55	0.188
34.00	-18.31	-4.83	0.00	-342.18	0.00	342.18	2,886.17	684.94	2,088.80	1,894.36	1.97	-0.57	0.188
35.00	-18.13	-4.82	0.00	-337.35	0.00	337.35	2,873.22	680.39	2,061.14	1,872.70	2.09	-0.59	0.187
36.00	-17.95	-4.80	0.00	-332.53	0.00	332.53	2,860.32	675.84	2,033.66	1,851.04	2.22	-0.61	0.187
37.00	-17.77	-4.78	0.00	-327.74	0.00	327.74	2,847.46	671.28	2,006.37	1,829.38	2.35	-0.63	0.187
38.00	-17.59	-4.76	0.00	-322.96	0.00	322.96	2,834.64	666.73	1,979.26	1,807.72	2.48	-0.65	0.187
39.00	-17.42	-4.74	0.00	-318.20	0.00	318.20	2,821.86	662.18	1,952.34	1,786.06	2.62	-0.67	0.187
40.00	-17.24	-4.72	0.00	-313.46	0.00	313.46	2,809.12	657.63	1,925.60	1,764.40	2.76	-0.68	0.186
41.00	-17.07	-4.70	0.00	-308.73	0.00	308.73	2,796.42	653.07	1,899.04	1,742.74	2.91	-0.70	0.186
42.00	-16.89	-4.69	0.00	-304.03	0.00	304.03	2,783.76	648.52	1,872.67	1,721.08	3.06	-0.72	0.186

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:27 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Load Case: 1.0D + 1.0W				Serviceability 60 mph				34 Iterations					
Gust Response Factor :1.10													
Dead Load Factor :1.00													
Wind Load Factor :1.00													
42.78	-16.76	-4.68	0.00	-300.36	0.00	300.36	2,708.83	644.96	1,852.15	1,673.44	3.18	-0.74	0.186
43.00	-16.70	-4.67	0.00	-299.34	0.00	299.34	2,704.68	643.97	1,846.48	1,668.28	3.21	-0.74	0.186
44.00	-16.43	-4.65	0.00	-294.68	0.00	294.68	2,685.56	639.42	1,820.48	1,644.63	3.37	-0.76	0.185
45.00	-16.17	-4.62	0.00	-290.03	0.00	290.03	2,666.44	634.87	1,794.66	1,621.16	3.53	-0.78	0.185
46.00	-15.90	-4.60	0.00	-285.41	0.00	285.41	2,647.32	630.31	1,769.03	1,597.85	3.70	-0.80	0.185
47.00	-15.64	-4.59	0.00	-280.81	0.00	280.81	2,628.20	625.76	1,743.58	1,574.71	3.87	-0.82	0.184
47.22	-15.58	-4.58	0.00	-279.81	0.00	279.81	1,867.62	479.01	1,361.92	1,145.92	3.90	-0.83	0.253
48.00	-15.47	-4.56	0.00	-276.22	0.00	276.22	1,861.47	476.34	1,346.77	1,135.71	4.04	-0.84	0.252
49.00	-15.33	-4.55	0.00	-271.66	0.00	271.66	1,853.54	472.92	1,327.54	1,122.69	4.22	-0.87	0.250
50.00	-15.19	-4.53	0.00	-267.11	0.00	267.11	1,845.53	469.51	1,308.45	1,109.69	4.40	-0.89	0.249
51.00	-15.05	-4.51	0.00	-262.59	0.00	262.59	1,837.45	466.09	1,289.49	1,096.72	4.59	-0.92	0.248
52.00	-14.92	-4.49	0.00	-258.08	0.00	258.08	1,829.29	462.68	1,270.67	1,083.78	4.79	-0.94	0.246
53.00	-14.78	-4.48	0.00	-253.58	0.00	253.58	1,821.04	459.27	1,252.00	1,070.86	4.99	-0.97	0.245
54.00	-14.64	-4.46	0.00	-249.11	0.00	249.11	1,812.72	455.85	1,233.46	1,057.96	5.19	-0.99	0.244
55.00	-14.51	-4.44	0.00	-244.65	0.00	244.65	1,804.33	452.44	1,215.06	1,045.10	5.40	-1.02	0.242
56.00	-14.37	-4.42	0.00	-240.21	0.00	240.21	1,795.85	449.02	1,196.79	1,032.26	5.62	-1.05	0.241
57.00	-14.24	-4.40	0.00	-235.79	0.00	235.79	1,787.30	445.61	1,178.67	1,019.46	5.84	-1.07	0.239
58.00	-14.10	-4.39	0.00	-231.39	0.00	231.39	1,778.66	442.19	1,160.68	1,006.68	6.07	-1.10	0.238
59.00	-13.97	-4.37	0.00	-227.00	0.00	227.00	1,769.95	438.78	1,142.83	993.94	6.30	-1.12	0.236
60.00	-13.84	-4.35	0.00	-222.63	0.00	222.63	1,761.16	435.37	1,125.12	981.23	6.54	-1.15	0.235
61.00	-13.70	-4.33	0.00	-218.28	0.00	218.28	1,752.30	431.95	1,107.55	968.56	6.78	-1.18	0.233
62.00	-13.57	-4.32	0.00	-213.95	0.00	213.95	1,743.35	428.54	1,090.12	955.92	7.03	-1.20	0.232
63.00	-13.44	-4.30	0.00	-209.63	0.00	209.63	1,734.33	425.12	1,072.82	943.32	7.29	-1.23	0.230
64.00	-13.31	-4.28	0.00	-205.34	0.00	205.34	1,725.23	421.71	1,055.67	930.75	7.55	-1.26	0.228
65.00	-13.18	-4.26	0.00	-201.06	0.00	201.06	1,716.05	418.30	1,038.65	918.23	7.81	-1.28	0.227
66.00	-13.05	-4.24	0.00	-196.79	0.00	196.79	1,706.79	414.88	1,021.77	905.74	8.09	-1.31	0.225
67.00	-12.93	-4.23	0.00	-192.55	0.00	192.55	1,697.46	411.47	1,005.03	893.29	8.36	-1.34	0.223
68.00	-12.80	-4.21	0.00	-188.32	0.00	188.32	1,688.04	408.05	988.42	880.89	8.65	-1.36	0.221
69.00	-12.67	-4.19	0.00	-184.12	0.00	184.12	1,678.55	404.64	971.96	868.53	8.93	-1.39	0.220
70.00	-12.55	-4.17	0.00	-179.92	0.00	179.92	1,668.98	401.22	955.63	856.21	9.23	-1.42	0.218
71.00	-12.42	-4.16	0.00	-175.75	0.00	175.75	1,659.33	397.81	939.44	843.93	9.53	-1.45	0.216
72.00	-12.30	-4.14	0.00	-171.60	0.00	171.60	1,649.60	394.40	923.39	831.71	9.83	-1.47	0.214
73.00	-12.17	-4.12	0.00	-167.46	0.00	167.46	1,639.80	390.98	907.48	819.53	10.15	-1.50	0.212
74.00	-12.05	-4.10	0.00	-163.34	0.00	163.34	1,627.78	387.57	891.71	806.34	10.46	-1.53	0.210
75.00	-11.93	-4.09	0.00	-159.23	0.00	159.23	1,613.44	384.15	876.07	792.11	10.79	-1.55	0.209
76.00	-11.80	-4.07	0.00	-155.15	0.00	155.15	1,599.10	380.74	860.58	778.02	11.11	-1.58	0.207
77.00	-11.68	-4.05	0.00	-151.08	0.00	151.08	1,584.76	377.32	845.22	764.04	11.45	-1.61	0.205
78.00	-11.56	-4.03	0.00	-147.03	0.00	147.03	1,570.43	373.91	830.00	750.20	11.79	-1.64	0.203
79.00	-11.44	-4.02	0.00	-143.00	0.00	143.00	1,556.09	370.50	814.91	736.48	12.13	-1.66	0.202
80.00	-11.32	-4.00	0.00	-138.98	0.00	138.98	1,541.75	367.08	799.97	722.89	12.49	-1.69	0.200
81.00	-11.21	-3.98	0.00	-134.98	0.00	134.98	1,527.41	363.67	785.17	709.43	12.84	-1.72	0.198
82.00	-11.09	-3.96	0.00	-131.00	0.00	131.00	1,513.07	360.25	770.50	696.09	13.21	-1.75	0.196
83.00	-10.97	-3.95	0.00	-127.04	0.00	127.04	1,498.73	356.84	755.97	682.88	13.57	-1.77	0.193
84.00	-10.85	-3.93	0.00	-123.09	0.00	123.09	1,484.39	353.43	741.58	669.79	13.95	-1.80	0.191
85.00	-10.74	-3.91	0.00	-119.16	0.00	119.16	1,470.05	350.01	727.33	656.83	14.33	-1.83	0.189
86.00	-10.62	-3.90	0.00	-115.25	0.00	115.25	1,455.71	346.60	713.21	644.00	14.71	-1.85	0.186
87.00	-10.51	-3.88	0.00	-111.35	0.00	111.35	1,441.37	343.18	699.24	631.30	15.11	-1.88	0.184
88.00	-10.40	-3.87	0.00	-107.47	0.00	107.47	1,427.03	339.77	685.40	618.72	15.50	-1.91	0.181
88.36	-10.35	-3.86	0.00	-106.07	0.00	106.07	1,421.80	338.52	680.39	614.16	15.65	-1.92	0.180

Load Case: 1.0D + 1.0W				Serviceability 60 mph						34 Iterations			
Gust Response Factor :1.10													
Dead Load Factor :1.00													
Wind Load Factor :1.00													

89.00	-10.25	-3.84	0.00	-103.62	0.00	103.62	1,412.69	336.35	671.70	606.27	15.91	-1.94	0.178
90.00	-10.09	-3.82	0.00	-99.77	0.00	99.77	1,398.35	332.94	658.14	593.94	16.31	-1.96	0.175
91.00	-9.92	-3.81	0.00	-95.95	0.00	95.95	1,384.01	329.53	644.71	581.74	16.73	-1.99	0.172
91.64	-9.82	-3.80	0.00	-93.53	0.00	93.53	1,058.69	260.79	519.07	454.24	16.99	-2.00	0.215
92.00	-9.78	-3.79	0.00	-92.15	0.00	92.15	1,056.16	259.82	515.22	451.45	17.15	-2.01	0.214
93.00	-9.69	-3.77	0.00	-88.36	0.00	88.36	1,049.15	257.17	504.75	443.82	17.57	-2.04	0.209
94.00	-9.59	-3.75	0.00	-84.59	0.00	84.59	1,042.06	254.51	494.38	436.22	18.00	-2.07	0.203
95.00	-9.21	-3.59	0.00	-80.84	0.00	80.84	1,034.89	251.86	484.12	428.66	18.44	-2.10	0.198
96.00	-9.12	-3.57	0.00	-77.25	0.00	77.25	1,027.65	249.20	473.97	421.12	18.89	-2.13	0.193
97.00	-9.04	-3.56	0.00	-73.68	0.00	73.68	1,020.33	246.55	463.93	413.62	19.34	-2.16	0.187
98.00	-8.96	-3.54	0.00	-70.12	0.00	70.12	1,012.93	243.89	453.99	406.15	19.79	-2.19	0.182
99.00	-8.87	-3.53	0.00	-66.57	0.00	66.57	1,005.45	241.23	444.16	398.71	20.25	-2.22	0.176
100.00	-8.79	-3.51	0.00	-63.05	0.00	63.05	997.89	238.58	434.44	391.31	20.72	-2.25	0.170
101.00	-6.73	-2.97	0.00	-59.54	0.00	59.54	990.26	235.92	424.83	383.94	21.20	-2.28	0.162
102.00	-6.65	-2.95	0.00	-56.57	0.00	56.57	979.73	233.27	415.32	375.54	21.67	-2.30	0.158
103.00	-4.61	-1.92	0.00	-53.62	0.00	53.62	968.57	230.61	405.93	366.99	22.16	-2.33	0.151
104.00	-4.55	-1.90	0.00	-51.71	0.00	51.71	957.42	227.96	396.63	358.54	22.65	-2.35	0.149
105.00	-4.49	-1.88	0.00	-49.81	0.00	49.81	946.27	225.30	387.45	350.18	23.15	-2.38	0.147
106.00	-4.43	-1.87	0.00	-47.93	0.00	47.93	935.12	222.65	378.38	341.93	23.65	-2.40	0.145
107.00	-4.37	-1.85	0.00	-46.06	0.00	46.06	923.96	219.99	369.41	333.77	24.15	-2.43	0.143
108.00	-4.31	-1.83	0.00	-44.21	0.00	44.21	912.81	217.34	360.55	325.72	24.66	-2.46	0.141
109.00	-4.26	-1.82	0.00	-42.38	0.00	42.38	901.66	214.68	351.79	317.76	25.18	-2.48	0.138
110.00	-4.20	-1.80	0.00	-40.56	0.00	40.56	890.50	212.02	343.15	309.90	25.70	-2.51	0.136
111.00	-4.14	-1.79	0.00	-38.76	0.00	38.76	879.35	209.37	334.61	302.13	26.23	-2.53	0.133
112.00	-4.09	-1.77	0.00	-36.97	0.00	36.97	868.20	206.71	326.18	294.47	26.76	-2.55	0.130
113.00	-4.03	-1.75	0.00	-35.20	0.00	35.20	857.04	204.06	317.86	286.90	27.30	-2.58	0.127
114.00	-3.98	-1.74	0.00	-33.45	0.00	33.45	845.89	201.40	309.64	279.44	27.84	-2.60	0.124
115.00	-3.93	-1.72	0.00	-31.71	0.00	31.71	834.74	198.75	301.53	272.07	28.39	-2.63	0.121
116.00	-3.87	-1.71	0.00	-29.99	0.00	29.99	823.58	196.09	293.53	264.80	28.94	-2.65	0.118
117.00	-3.82	-1.69	0.00	-28.28	0.00	28.28	812.43	193.44	285.64	257.63	29.50	-2.67	0.115
118.00	-3.77	-1.68	0.00	-26.58	0.00	26.58	801.28	190.78	277.86	250.55	30.06	-2.70	0.111
119.00	-3.72	-1.66	0.00	-24.91	0.00	24.91	790.13	188.13	270.18	243.58	30.63	-2.72	0.107
120.00	-3.67	-1.65	0.00	-23.24	0.00	23.24	778.97	185.47	262.61	236.70	31.20	-2.74	0.103
121.00	-3.62	-1.63	0.00	-21.59	0.00	21.59	767.82	182.81	255.15	229.93	31.78	-2.76	0.099
122.00	-3.57	-1.62	0.00	-19.96	0.00	19.96	756.67	180.16	247.79	223.25	32.36	-2.78	0.094
123.00	-3.52	-1.61	0.00	-18.34	0.00	18.34	745.51	177.50	240.54	216.67	32.94	-2.80	0.089
124.00	-3.47	-1.59	0.00	-16.74	0.00	16.74	734.36	174.85	233.40	210.18	33.53	-2.82	0.084
125.00	-3.42	-1.58	0.00	-15.14	0.00	15.14	723.21	172.19	226.37	203.80	34.12	-2.84	0.079
126.00	-3.37	-1.56	0.00	-13.57	0.00	13.57	712.05	169.54	219.45	197.52	34.72	-2.85	0.074
127.00	-3.32	-1.55	0.00	-12.01	0.00	12.01	700.90	166.88	212.63	191.33	35.32	-2.87	0.068
128.00	-3.28	-1.53	0.00	-10.46	0.00	10.46	689.75	164.23	205.92	185.24	35.92	-2.88	0.061
129.00	-3.23	-1.52	0.00	-8.92	0.00	8.92	678.59	161.57	199.32	179.25	36.53	-2.90	0.055
130.00	-3.19	-1.51	0.00	-7.40	0.00	7.40	667.44	158.91	192.82	173.36	37.14	-2.91	0.048
131.00	-3.14	-1.49	0.00	-5.89	0.00	5.89	656.29	156.26	186.44	167.57	37.75	-2.92	0.040
132.00	-3.10	-1.48	0.00	-4.40	0.00	4.40	645.14	153.60	180.16	161.87	38.36	-2.93	0.032
133.00	-3.05	-1.47	0.00	-2.92	0.00	2.92	633.98	150.95	173.99	156.28	38.97	-2.93	0.024
134.00	-3.01	-1.45	0.00	-1.45	0.00	1.45	622.83	148.29	167.92	150.78	39.59	-2.94	0.015
135.00	0.00	-1.30	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	40.20	-2.94	0.000

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:28 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.12
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.06
Long-Period Transition Period (T_L):	12
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.13
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.79
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	24.96 k
Seismic Base Shear (E):	0.75 k

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
139	134.50	43	785	0.005	4	53
138	133.50	44	783	0.005	4	54
137	132.50	44	780	0.005	3	54
136	131.50	45	777	0.005	3	55
135	130.50	45	774	0.005	3	56
134	129.50	46	771	0.005	3	56
133	128.50	46	768	0.005	3	57
132	127.50	47	764	0.005	3	58
131	126.50	48	760	0.005	3	58
130	125.50	48	756	0.005	3	59
129	124.50	49	752	0.004	3	60
128	123.50	49	748	0.004	3	60
127	122.50	50	744	0.004	3	61
126	121.50	50	739	0.004	3	61
125	120.50	51	735	0.004	3	62
124	119.50	51	730	0.004	3	63
123	118.50	52	725	0.004	3	63
122	117.50	52	720	0.004	3	64
121	116.50	53	715	0.004	3	65
120	115.50	53	709	0.004	3	65
119	114.50	54	704	0.004	3	66
118	113.50	54	698	0.004	3	66
117	112.50	55	693	0.004	3	67
116	111.50	55	687	0.004	3	68
115	110.50	56	681	0.004	3	68

Site Number: 81552

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:28 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

114	109.50	56	675	0.004	3	69
113	108.50	57	668	0.004	3	70
112	107.50	57	662	0.004	3	70
111	106.50	58	656	0.004	3	71
110	105.50	58	649	0.004	3	71
109	104.50	59	643	0.004	3	72
108	103.50	59	636	0.004	3	73
107	102.50	80	843	0.005	4	98
106	101.50	81	832	0.005	4	99
105	100.50	81	821	0.005	4	100
104	99.50	82	810	0.005	4	100
103	98.50	82	799	0.005	4	101
102	97.50	83	787	0.005	4	102
101	96.50	83	776	0.005	3	102
100	95.50	84	765	0.005	3	103
99	94.50	95	852	0.005	4	117
98	93.50	96	839	0.005	4	118
97	92.50	96	826	0.005	4	118
96	91.82	35	298	0.002	1	43
95	91.32	102	852	0.005	4	125
94	90.50	162	1,325	0.008	6	198
93	89.50	163	1,305	0.008	6	200
92	88.68	104	819	0.005	4	128
91	88.18	41	318	0.002	1	50
90	87.50	113	862	0.005	4	138
89	86.50	113	847	0.005	4	139
88	85.50	114	833	0.005	4	140
87	84.50	115	818	0.005	4	140
86	83.50	115	803	0.005	4	141
85	82.50	116	789	0.005	4	142
84	81.50	117	774	0.005	3	143
83	80.50	117	760	0.005	3	144
82	79.50	118	745	0.004	3	144
81	78.50	119	730	0.004	3	145
80	77.50	119	716	0.004	3	146
79	76.50	120	701	0.004	3	147
78	75.50	121	687	0.004	3	148
77	74.50	121	673	0.004	3	149
76	73.50	122	658	0.004	3	149
75	72.50	122	644	0.004	3	150
74	71.50	123	630	0.004	3	151
73	70.50	124	615	0.004	3	152
72	69.50	124	601	0.004	3	153
71	68.50	125	587	0.004	3	153
70	67.50	126	573	0.003	3	154
69	66.50	126	559	0.003	3	155
68	65.50	127	545	0.003	2	156
67	64.50	128	532	0.003	2	157
66	63.50	128	518	0.003	2	157
65	62.50	129	504	0.003	2	158
64	61.50	130	491	0.003	2	159
63	60.50	130	477	0.003	2	160
62	59.50	131	464	0.003	2	161
61	58.50	132	451	0.003	2	162
60	57.50	132	438	0.003	2	162
59	56.50	133	425	0.003	2	163
58	55.50	134	412	0.002	2	164
57	54.50	134	399	0.002	2	165
56	53.50	135	387	0.002	2	166
55	52.50	136	374	0.002	2	166
54	51.50	136	362	0.002	2	167
53	50.50	137	350	0.002	2	168
52	49.50	138	337	0.002	2	169
51	48.50	138	326	0.002	1	170

Site Number: 81552

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:28 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

50	47.61	109	247	0.001	1	133
49	47.11	57	126	0.001	1	69
48	46.50	261	565	0.003	3	321
47	45.50	263	545	0.003	2	322
46	44.50	265	524	0.003	2	324
45	43.50	266	504	0.003	2	326
44	42.89	58	107	0.001	0	71
43	42.39	134	242	0.001	1	165
42	41.50	173	297	0.002	1	212
41	40.50	173	284	0.002	1	213
40	39.50	174	272	0.002	1	214
39	38.50	175	260	0.002	1	215
38	37.50	176	248	0.001	1	216
37	36.50	177	236	0.001	1	217
36	35.50	178	224	0.001	1	218
35	34.50	179	213	0.001	1	219
34	33.50	180	202	0.001	1	220
33	32.50	180	191	0.001	1	221
32	31.50	181	180	0.001	1	222
31	30.50	182	170	0.001	1	223
30	29.50	183	159	0.001	1	224
29	28.50	184	149	0.001	1	226
28	27.50	185	140	0.001	1	227
27	26.50	186	130	0.001	1	228
26	25.50	187	121	0.001	1	229
25	24.50	188	113	0.001	1	230
24	23.50	188	104	0.001	0	231
23	22.50	189	96	0.001	0	232
22	21.50	190	88	0.001	0	233
21	20.50	191	80	0.000	0	234
20	19.50	192	73	0.000	0	235
19	18.50	193	66	0.000	0	236
18	17.50	194	59	0.000	0	237
17	16.50	195	53	0.000	0	239
16	15.50	195	47	0.000	0	240
15	14.50	196	41	0.000	0	241
14	13.50	197	36	0.000	0	242
13	12.50	198	31	0.000	0	243
12	11.50	199	26	0.000	0	244
11	10.50	200	22	0.000	0	245
10	9.50	201	18	0.000	0	246
9	8.50	202	15	0.000	0	247
8	7.50	203	11	0.000	0	248
7	6.50	203	9	0.000	0	249
6	5.50	204	6	0.000	0	250
5	4.50	205	4	0.000	0	252
4	3.50	206	3	0.000	0	253
3	2.50	207	1	0.000	0	254
2	1.50	208	0	0.000	0	255
1	0.50	209	0	0.000	0	256
Nokia AHFIC AirScale	135.00	238	4,341	0.026	19	292
Nokia AHBCC AirScale	135.00	251	4,582	0.027	21	308
Raycap RCMD-3315-PF	135.00	21	390	0.002	2	26
Commscope RC3DC-3315	135.00	32	583	0.003	3	39
RFS APL866513-42T6-0	135.00	47	858	0.005	4	58
Andrew SBNHH-1D65C (135.00	446	8,136	0.049	36	547
Flat Platform w/ Han	135.00	2,000	36,450	0.218	163	2,452
Nokia AirScale RRH 4	103.00	106	1,123	0.007	5	130
Raycap DC6-48-60-18-	103.00	98	1,044	0.006	5	121
Nokia AirScale Dual	103.00	198	2,104	0.013	9	243
Nokia Airscale Dual	103.00	232	2,457	0.015	11	284
Alcatel-Lucent RRH4x	103.00	210	2,228	0.013	10	257
Nokia AEQK AirScale	103.00	298	3,157	0.019	14	365
Kathrein Scala 80010	103.00	244	2,591	0.015	12	299

Site Number: 81552

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:28 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Commscope NNH4-65C-R	103.00	613	6,499	0.039	29	751
Flat Platform w/ Han	101.00	2,000	20,402	0.122	91	2,452
Generic 12" x 12" Ju	95.00	30	271	0.002	1	37
Generic Radio/ODU	95.00	90	812	0.005	4	110
Starry Titan A 37C60	95.00	159	1,433	0.009	6	195
Generic Masterline D	95.00	10	90	0.001	0	12
		24,958	167,237	1.000	749	30,594

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
139	134.50	43	785	0.005	4	38
138	133.50	44	783	0.005	4	38
137	132.50	44	780	0.005	3	39
136	131.50	45	777	0.005	3	39
135	130.50	45	774	0.005	3	40
134	129.50	46	771	0.005	3	40
133	128.50	46	768	0.005	3	41
132	127.50	47	764	0.005	3	41
131	126.50	48	760	0.005	3	42
130	125.50	48	756	0.005	3	42
129	124.50	49	752	0.004	3	42
128	123.50	49	748	0.004	3	43
127	122.50	50	744	0.004	3	43
126	121.50	50	739	0.004	3	44
125	120.50	51	735	0.004	3	44
124	119.50	51	730	0.004	3	45
123	118.50	52	725	0.004	3	45
122	117.50	52	720	0.004	3	46
121	116.50	53	715	0.004	3	46
120	115.50	53	709	0.004	3	46
119	114.50	54	704	0.004	3	47
118	113.50	54	698	0.004	3	47
117	112.50	55	693	0.004	3	48
116	111.50	55	687	0.004	3	48
115	110.50	56	681	0.004	3	49
114	109.50	56	675	0.004	3	49
113	108.50	57	668	0.004	3	50
112	107.50	57	662	0.004	3	50
111	106.50	58	656	0.004	3	51
110	105.50	58	649	0.004	3	51
109	104.50	59	643	0.004	3	51
108	103.50	59	636	0.004	3	52
107	102.50	80	843	0.005	4	70
106	101.50	81	832	0.005	4	71
105	100.50	81	821	0.005	4	71
104	99.50	82	810	0.005	4	71
103	98.50	82	799	0.005	4	72
102	97.50	83	787	0.005	4	72
101	96.50	83	776	0.005	3	73
100	95.50	84	765	0.005	3	73
99	94.50	95	852	0.005	4	83
98	93.50	96	839	0.005	4	84
97	92.50	96	826	0.005	4	84
96	91.82	35	298	0.002	1	31
95	91.32	102	852	0.005	4	89
94	90.50	162	1,325	0.008	6	141
93	89.50	163	1,305	0.008	6	142
92	88.68	104	819	0.005	4	91
91	88.18	41	318	0.002	1	36

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:28 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

90	87.50	113	862	0.005	4	98
89	86.50	113	847	0.005	4	99
88	85.50	114	833	0.005	4	100
87	84.50	115	818	0.005	4	100
86	83.50	115	803	0.005	4	101
85	82.50	116	789	0.005	4	101
84	81.50	117	774	0.005	3	102
83	80.50	117	760	0.005	3	102
82	79.50	118	745	0.004	3	103
81	78.50	119	730	0.004	3	104
80	77.50	119	716	0.004	3	104
79	76.50	120	701	0.004	3	105
78	75.50	121	687	0.004	3	105
77	74.50	121	673	0.004	3	106
76	73.50	122	658	0.004	3	107
75	72.50	122	644	0.004	3	107
74	71.50	123	630	0.004	3	108
73	70.50	124	615	0.004	3	108
72	69.50	124	601	0.004	3	109
71	68.50	125	587	0.004	3	109
70	67.50	126	573	0.003	3	110
69	66.50	126	559	0.003	3	111
68	65.50	127	545	0.003	2	111
67	64.50	128	532	0.003	2	112
66	63.50	128	518	0.003	2	112
65	62.50	129	504	0.003	2	113
64	61.50	130	491	0.003	2	113
63	60.50	130	477	0.003	2	114
62	59.50	131	464	0.003	2	115
61	58.50	132	451	0.003	2	115
60	57.50	132	438	0.003	2	116
59	56.50	133	425	0.003	2	116
58	55.50	134	412	0.002	2	117
57	54.50	134	399	0.002	2	118
56	53.50	135	387	0.002	2	118
55	52.50	136	374	0.002	2	119
54	51.50	136	362	0.002	2	119
53	50.50	137	350	0.002	2	120
52	49.50	138	337	0.002	2	120
51	48.50	138	326	0.002	1	121
50	47.61	109	247	0.001	1	95
49	47.11	57	126	0.001	1	49
48	46.50	261	565	0.003	3	229
47	45.50	263	545	0.003	2	230
46	44.50	265	524	0.003	2	231
45	43.50	266	504	0.003	2	233
44	42.89	58	107	0.001	0	51
43	42.39	134	242	0.001	1	118
42	41.50	173	297	0.002	1	151
41	40.50	173	284	0.002	1	152
40	39.50	174	272	0.002	1	152
39	38.50	175	260	0.002	1	153
38	37.50	176	248	0.001	1	154
37	36.50	177	236	0.001	1	155
36	35.50	178	224	0.001	1	155
35	34.50	179	213	0.001	1	156
34	33.50	180	202	0.001	1	157
33	32.50	180	191	0.001	1	158
32	31.50	181	180	0.001	1	159
31	30.50	182	170	0.001	1	159
30	29.50	183	159	0.001	1	160
29	28.50	184	149	0.001	1	161
28	27.50	185	140	0.001	1	162
27	26.50	186	130	0.001	1	162

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:29 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

26	25.50	187	121	0.001	1	163
25	24.50	188	113	0.001	1	164
24	23.50	188	104	0.001	0	165
23	22.50	189	96	0.001	0	165
22	21.50	190	88	0.001	0	166
21	20.50	191	80	0.000	0	167
20	19.50	192	73	0.000	0	168
19	18.50	193	66	0.000	0	169
18	17.50	194	59	0.000	0	169
17	16.50	195	53	0.000	0	170
16	15.50	195	47	0.000	0	171
15	14.50	196	41	0.000	0	172
14	13.50	197	36	0.000	0	172
13	12.50	198	31	0.000	0	173
12	11.50	199	26	0.000	0	174
11	10.50	200	22	0.000	0	175
10	9.50	201	18	0.000	0	176
9	8.50	202	15	0.000	0	176
8	7.50	203	11	0.000	0	177
7	6.50	203	9	0.000	0	178
6	5.50	204	6	0.000	0	179
5	4.50	205	4	0.000	0	179
4	3.50	206	3	0.000	0	180
3	2.50	207	1	0.000	0	181
2	1.50	208	0	0.000	0	182
1	0.50	209	0	0.000	0	182
Nokia AHFIC AirScale	135.00	238	4,341	0.026	19	208
Nokia AHBCC AirScale	135.00	251	4,582	0.027	21	220
Raycap RCMD-3315-PF	135.00	21	390	0.002	2	19
Commscope RC3DC-3315	135.00	32	583	0.003	3	28
RFS APL866513-42T6-0	135.00	47	858	0.005	4	41
Andrew SBNHH-1D65C (135.00	446	8,136	0.049	36	390
Flat Platform w/ Han	135.00	2,000	36,450	0.218	163	1,748
Nokia AirScale RRH 4	103.00	106	1,123	0.007	5	93
Raycap DC6-48-60-18-	103.00	98	1,044	0.006	5	86
Nokia AirScale Dual	103.00	198	2,104	0.013	9	173
Nokia Airscale Dual	103.00	232	2,457	0.015	11	202
Alcatel-Lucent RRH4x	103.00	210	2,228	0.013	10	184
Nokia AEQK AirScale	103.00	298	3,157	0.019	14	260
Kathrein Scala 80010	103.00	244	2,591	0.015	12	213
Commscope NNH4-65C-R	103.00	613	6,499	0.039	29	536
Flat Platform w/ Han	101.00	2,000	20,402	0.122	91	1,748
Generic 12" x 12" Ju	95.00	30	271	0.002	1	26
Generic Radio/ODU	95.00	90	812	0.005	4	79
Starry Titan A 37C60	95.00	159	1,433	0.009	6	139
Generic Masterline D	95.00	10	90	0.001	0	9
		24,958	167,237	1.000	749	21,818

Load Case 1.2D + 1.0Ev + 1.0Eh

Seismic

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-30.34	-0.75	0.00	-86.45	0.00	86.45	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.042
1.00	-30.08	-0.75	0.00	-85.70	0.00	85.70	3,282.09	835.17	3,105.10	2,632.84	0.00	0.00	0.042
2.00	-29.83	-0.75	0.00	-84.95	0.00	84.95	3,271.33	830.61	3,071.35	2,609.77	0.00	-0.01	0.042
3.00	-29.58	-0.75	0.00	-84.20	0.00	84.20	3,260.49	826.06	3,037.79	2,586.74	0.00	-0.01	0.042
4.00	-29.33	-0.75	0.00	-83.45	0.00	83.45	3,249.58	821.51	3,004.41	2,563.73	0.00	-0.01	0.042
5.00	-29.07	-0.75	0.00	-82.69	0.00	82.69	3,238.59	816.96	2,971.21	2,540.77	0.01	-0.01	0.042
6.00	-28.83	-0.76	0.00	-81.94	0.00	81.94	3,227.51	812.40	2,938.21	2,517.83	0.01	-0.02	0.041
7.00	-28.58	-0.76	0.00	-81.18	0.00	81.18	3,216.36	807.85	2,905.38	2,494.94	0.01	-0.02	0.041
8.00	-28.33	-0.76	0.00	-80.43	0.00	80.43	3,205.14	803.30	2,872.74	2,472.08	0.02	-0.02	0.041
9.00	-28.08	-0.76	0.00	-79.67	0.00	79.67	3,193.83	798.75	2,840.28	2,449.27	0.02	-0.02	0.041
10.00	-27.84	-0.76	0.00	-78.91	0.00	78.91	3,182.45	794.20	2,808.01	2,426.49	0.03	-0.03	0.041
11.00	-27.59	-0.76	0.00	-78.15	0.00	78.15	3,170.98	789.64	2,775.92	2,403.75	0.03	-0.03	0.041
12.00	-27.35	-0.76	0.00	-77.39	0.00	77.39	3,159.44	785.09	2,744.02	2,381.06	0.04	-0.03	0.041
13.00	-27.11	-0.76	0.00	-76.63	0.00	76.63	3,147.82	780.54	2,712.30	2,358.41	0.05	-0.03	0.041
14.00	-26.87	-0.76	0.00	-75.86	0.00	75.86	3,136.13	775.99	2,680.77	2,335.81	0.05	-0.04	0.041
15.00	-26.63	-0.77	0.00	-75.10	0.00	75.10	3,124.35	771.43	2,649.42	2,313.25	0.06	-0.04	0.041
16.00	-26.39	-0.77	0.00	-74.34	0.00	74.34	3,112.50	766.88	2,618.25	2,290.73	0.07	-0.04	0.041
17.00	-26.15	-0.77	0.00	-73.57	0.00	73.57	3,100.57	762.33	2,587.27	2,268.27	0.08	-0.05	0.041
18.00	-25.92	-0.77	0.00	-72.80	0.00	72.80	3,088.56	757.78	2,556.47	2,245.85	0.09	-0.05	0.041
19.00	-25.68	-0.77	0.00	-72.03	0.00	72.03	3,076.47	753.22	2,525.86	2,223.48	0.10	-0.05	0.041
20.00	-25.45	-0.77	0.00	-71.27	0.00	71.27	3,064.30	748.67	2,495.43	2,201.16	0.11	-0.05	0.041
21.00	-25.21	-0.77	0.00	-70.50	0.00	70.50	3,052.06	744.12	2,465.19	2,178.90	0.12	-0.06	0.041
22.00	-24.98	-0.77	0.00	-69.73	0.00	69.73	3,039.74	739.57	2,435.13	2,156.68	0.14	-0.06	0.041
23.00	-24.75	-0.77	0.00	-68.96	0.00	68.96	3,027.34	735.02	2,405.26	2,134.53	0.15	-0.06	0.040
24.00	-24.52	-0.77	0.00	-68.18	0.00	68.18	3,014.86	730.46	2,375.57	2,112.42	0.16	-0.07	0.040
25.00	-24.29	-0.77	0.00	-67.41	0.00	67.41	3,002.30	725.91	2,346.06	2,090.37	0.18	-0.07	0.040
26.00	-24.06	-0.77	0.00	-66.64	0.00	66.64	2,989.67	721.36	2,316.74	2,068.38	0.19	-0.07	0.040
27.00	-23.84	-0.77	0.00	-65.87	0.00	65.87	2,976.95	716.81	2,287.60	2,046.44	0.21	-0.08	0.040
28.00	-23.61	-0.77	0.00	-65.10	0.00	65.10	2,964.16	712.25	2,258.65	2,024.57	0.22	-0.08	0.040
29.00	-23.39	-0.77	0.00	-64.32	0.00	64.32	2,951.29	707.70	2,229.88	2,002.75	0.24	-0.08	0.040
30.00	-23.16	-0.77	0.00	-63.55	0.00	63.55	2,938.34	703.15	2,201.30	1,981.00	0.26	-0.09	0.040
31.00	-22.94	-0.77	0.00	-62.77	0.00	62.77	2,925.32	698.60	2,172.90	1,959.31	0.28	-0.09	0.040
32.00	-22.72	-0.77	0.00	-62.00	0.00	62.00	2,912.22	694.05	2,144.68	1,937.68	0.30	-0.09	0.040
33.00	-22.50	-0.77	0.00	-61.23	0.00	61.23	2,895.87	689.49	2,116.65	1,914.02	0.32	-0.10	0.040
34.00	-22.28	-0.77	0.00	-60.45	0.00	60.45	2,876.75	684.94	2,088.80	1,888.69	0.34	-0.10	0.040
35.00	-22.06	-0.77	0.00	-59.68	0.00	59.68	2,857.63	680.39	2,061.14	1,863.52	0.36	-0.10	0.040
36.00	-21.85	-0.77	0.00	-58.90	0.00	58.90	2,838.51	675.84	2,033.66	1,838.53	0.38	-0.11	0.040
37.00	-21.63	-0.77	0.00	-58.13	0.00	58.13	2,819.39	671.28	2,006.37	1,813.70	0.40	-0.11	0.040
38.00	-21.42	-0.77	0.00	-57.36	0.00	57.36	2,800.27	666.73	1,979.26	1,789.04	0.42	-0.11	0.040
39.00	-21.20	-0.77	0.00	-56.58	0.00	56.58	2,781.15	662.18	1,952.34	1,764.55	0.45	-0.12	0.040
40.00	-20.99	-0.77	0.00	-55.81	0.00	55.81	2,762.03	657.63	1,925.60	1,740.23	0.47	-0.12	0.040
41.00	-20.78	-0.77	0.00	-55.04	0.00	55.04	2,742.91	653.07	1,899.04	1,716.08	0.50	-0.12	0.040
42.00	-20.61	-0.77	0.00	-54.27	0.00	54.27	2,723.79	648.52	1,872.67	1,692.09	0.52	-0.13	0.040
42.78	-20.54	-0.77	0.00	-53.66	0.00	53.66	2,708.83	644.96	1,852.15	1,673.44	0.54	-0.13	0.040
43.00	-20.22	-0.77	0.00	-53.50	0.00	53.50	2,704.68	643.97	1,846.48	1,668.28	0.55	-0.13	0.040
44.00	-19.89	-0.77	0.00	-52.73	0.00	52.73	2,685.56	639.42	1,820.48	1,644.63	0.58	-0.13	0.039
45.00	-19.57	-0.77	0.00	-51.96	0.00	51.96	2,666.44	634.87	1,794.66	1,621.16	0.61	-0.14	0.039

46.00	-19.25	-0.76	0.00	-51.19	0.00	51.19	2,647.32	630.31	1,769.03	1,597.85	0.64	-0.14	0.039
47.00	-19.18	-0.76	0.00	-50.43	0.00	50.43	2,628.20	625.76	1,743.58	1,574.71	0.66	-0.14	0.039
47.22	-19.05	-0.76	0.00	-50.26	0.00	50.26	1,867.62	479.01	1,361.92	1,145.92	0.67	-0.14	0.054
48.00	-18.88	-0.76	0.00	-49.67	0.00	49.67	1,861.47	476.34	1,346.77	1,135.71	0.69	-0.15	0.054
49.00	-18.71	-0.76	0.00	-48.91	0.00	48.91	1,853.54	472.92	1,327.54	1,122.69	0.73	-0.15	0.054
50.00	-18.54	-0.76	0.00	-48.14	0.00	48.14	1,845.53	469.51	1,308.45	1,109.69	0.76	-0.16	0.053
51.00	-18.37	-0.76	0.00	-47.38	0.00	47.38	1,837.45	466.09	1,289.49	1,096.72	0.79	-0.16	0.053
52.00	-18.20	-0.76	0.00	-46.62	0.00	46.62	1,829.29	462.68	1,270.67	1,083.78	0.83	-0.16	0.053
53.00	-18.04	-0.76	0.00	-45.86	0.00	45.86	1,821.04	459.27	1,252.00	1,070.86	0.86	-0.17	0.053
54.00	-17.87	-0.76	0.00	-45.11	0.00	45.11	1,812.72	455.85	1,233.46	1,057.96	0.90	-0.17	0.052
55.00	-17.71	-0.76	0.00	-44.35	0.00	44.35	1,804.33	452.44	1,215.06	1,045.10	0.93	-0.18	0.052
56.00	-17.55	-0.76	0.00	-43.59	0.00	43.59	1,795.85	449.02	1,196.79	1,032.26	0.97	-0.18	0.052
57.00	-17.38	-0.76	0.00	-42.83	0.00	42.83	1,787.30	445.61	1,178.67	1,019.46	1.01	-0.19	0.052
58.00	-17.22	-0.75	0.00	-42.08	0.00	42.08	1,778.66	442.19	1,160.68	1,006.68	1.05	-0.19	0.051
59.00	-17.06	-0.75	0.00	-41.33	0.00	41.33	1,769.95	438.78	1,142.83	993.94	1.09	-0.20	0.051
60.00	-16.90	-0.75	0.00	-40.57	0.00	40.57	1,761.16	435.37	1,125.12	981.23	1.13	-0.20	0.051
61.00	-16.74	-0.75	0.00	-39.82	0.00	39.82	1,752.30	431.95	1,107.55	968.56	1.18	-0.21	0.051
62.00	-16.59	-0.75	0.00	-39.07	0.00	39.07	1,743.35	428.54	1,090.12	955.92	1.22	-0.21	0.050
63.00	-16.43	-0.75	0.00	-38.32	0.00	38.32	1,734.33	425.12	1,072.82	943.32	1.26	-0.22	0.050
64.00	-16.27	-0.75	0.00	-37.58	0.00	37.58	1,725.23	421.71	1,055.67	930.75	1.31	-0.22	0.050
65.00	-16.11	-0.74	0.00	-36.83	0.00	36.83	1,716.05	418.30	1,038.65	918.23	1.36	-0.23	0.050
66.00	-15.96	-0.74	0.00	-36.09	0.00	36.09	1,706.79	414.88	1,021.77	905.74	1.41	-0.23	0.049
67.00	-15.81	-0.74	0.00	-35.34	0.00	35.34	1,697.46	411.47	1,005.03	893.29	1.45	-0.24	0.049
68.00	-15.65	-0.74	0.00	-34.60	0.00	34.60	1,688.04	408.05	988.42	880.89	1.51	-0.24	0.049
69.00	-15.50	-0.74	0.00	-33.87	0.00	33.87	1,678.55	404.64	971.96	868.53	1.56	-0.25	0.048
70.00	-15.35	-0.73	0.00	-33.13	0.00	33.13	1,668.98	401.22	955.63	856.21	1.61	-0.25	0.048
71.00	-15.20	-0.73	0.00	-32.39	0.00	32.39	1,659.33	397.81	939.44	843.93	1.66	-0.26	0.048
72.00	-15.05	-0.73	0.00	-31.66	0.00	31.66	1,649.60	394.40	923.39	831.71	1.72	-0.26	0.047
73.00	-14.90	-0.73	0.00	-30.93	0.00	30.93	1,639.80	390.98	907.48	819.53	1.77	-0.27	0.047
74.00	-14.75	-0.73	0.00	-30.20	0.00	30.20	1,627.78	387.57	891.71	806.34	1.83	-0.27	0.047
75.00	-14.60	-0.72	0.00	-29.48	0.00	29.48	1,613.44	384.15	876.07	792.11	1.89	-0.28	0.046
76.00	-14.45	-0.72	0.00	-28.76	0.00	28.76	1,599.10	380.74	860.58	778.02	1.94	-0.28	0.046
77.00	-14.31	-0.72	0.00	-28.04	0.00	28.04	1,584.76	377.32	845.22	764.04	2.00	-0.29	0.046
78.00	-14.16	-0.71	0.00	-27.32	0.00	27.32	1,570.43	373.91	830.00	750.20	2.06	-0.29	0.045
79.00	-14.02	-0.71	0.00	-26.60	0.00	26.60	1,556.09	370.50	814.91	736.48	2.13	-0.30	0.045
80.00	-13.87	-0.71	0.00	-25.89	0.00	25.89	1,541.75	367.08	799.97	722.89	2.19	-0.30	0.045
81.00	-13.73	-0.71	0.00	-25.18	0.00	25.18	1,527.41	363.67	785.17	709.43	2.25	-0.31	0.044
82.00	-13.59	-0.70	0.00	-24.48	0.00	24.48	1,513.07	360.25	770.50	696.09	2.32	-0.31	0.044
83.00	-13.45	-0.70	0.00	-23.77	0.00	23.77	1,498.73	356.84	755.97	682.88	2.38	-0.32	0.044
84.00	-13.31	-0.70	0.00	-23.07	0.00	23.07	1,484.39	353.43	741.58	669.79	2.45	-0.32	0.043
85.00	-13.17	-0.69	0.00	-22.38	0.00	22.38	1,470.05	350.01	727.33	656.83	2.52	-0.33	0.043
86.00	-13.03	-0.69	0.00	-21.68	0.00	21.68	1,455.71	346.60	713.21	644.00	2.59	-0.33	0.043
87.00	-12.89	-0.69	0.00	-20.99	0.00	20.99	1,441.37	343.18	699.24	631.30	2.66	-0.34	0.042
88.00	-12.84	-0.69	0.00	-20.31	0.00	20.31	1,427.03	339.77	685.40	618.72	2.73	-0.34	0.042
88.36	-12.71	-0.68	0.00	-20.06	0.00	20.06	1,421.80	338.52	680.39	614.16	2.76	-0.34	0.042
89.00	-12.51	-0.68	0.00	-19.62	0.00	19.62	1,412.69	336.35	671.70	606.27	2.80	-0.35	0.041
90.00	-12.31	-0.67	0.00	-18.95	0.00	18.95	1,398.35	332.94	658.14	593.94	2.87	-0.35	0.041
91.00	-12.19	-0.67	0.00	-18.28	0.00	18.28	1,384.01	329.53	644.71	581.74	2.95	-0.36	0.040
91.64	-12.15	-0.66	0.00	-17.86	0.00	17.86	1,058.69	260.79	519.07	454.24	3.00	-0.36	0.051
92.00	-12.03	-0.66	0.00	-17.61	0.00	17.61	1,056.16	259.82	515.22	451.45	3.02	-0.36	0.050
93.00	-11.91	-0.66	0.00	-16.95	0.00	16.95	1,049.15	257.17	504.75	443.82	3.10	-0.37	0.050
94.00	-11.79	-0.65	0.00	-16.30	0.00	16.30	1,042.06	254.51	494.38	436.22	3.18	-0.37	0.049
95.00	-11.34	-0.64	0.00	-15.64	0.00	15.64	1,034.89	251.86	484.12	428.66	3.26	-0.38	0.047
96.00	-11.23	-0.63	0.00	-15.00	0.00	15.00	1,027.65	249.20	473.97	421.12	3.34	-0.39	0.047

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:29 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

97.00	-11.13	-0.63	0.00	-14.37	0.00	14.37	1,020.33	246.55	463.93	413.62	3.42	-0.39	0.046
98.00	-11.03	-0.63	0.00	-13.74	0.00	13.74	1,012.93	243.89	453.99	406.15	3.50	-0.40	0.045
99.00	-10.93	-0.62	0.00	-13.11	0.00	13.11	1,005.45	241.23	444.16	398.71	3.59	-0.40	0.044
100.00	-10.83	-0.62	0.00	-12.49	0.00	12.49	997.89	238.58	434.44	391.31	3.67	-0.41	0.043
101.00	-8.28	-0.51	0.00	-11.86	0.00	11.86	990.26	235.92	424.83	383.94	3.76	-0.41	0.039
102.00	-8.18	-0.51	0.00	-11.35	0.00	11.35	979.73	233.27	415.32	375.54	3.85	-0.42	0.039
103.00	-5.66	-0.39	0.00	-10.85	0.00	10.85	968.57	230.61	405.93	366.99	3.93	-0.42	0.035
104.00	-5.59	-0.39	0.00	-10.46	0.00	10.46	957.42	227.96	396.63	358.54	4.02	-0.43	0.035
105.00	-5.52	-0.38	0.00	-10.07	0.00	10.07	946.27	225.30	387.45	350.18	4.11	-0.43	0.035
106.00	-5.45	-0.38	0.00	-9.69	0.00	9.69	935.12	222.65	378.38	341.93	4.21	-0.44	0.034
107.00	-5.38	-0.38	0.00	-9.31	0.00	9.31	923.96	219.99	369.41	333.77	4.30	-0.44	0.034
108.00	-5.31	-0.37	0.00	-8.93	0.00	8.93	912.81	217.34	360.55	325.72	4.39	-0.45	0.033
109.00	-5.24	-0.37	0.00	-8.56	0.00	8.56	901.66	214.68	351.79	317.76	4.49	-0.46	0.033
110.00	-5.17	-0.37	0.00	-8.19	0.00	8.19	890.50	212.02	343.15	309.90	4.58	-0.46	0.032
111.00	-5.10	-0.37	0.00	-7.82	0.00	7.82	879.35	209.37	334.61	302.13	4.68	-0.47	0.032
112.00	-5.04	-0.36	0.00	-7.45	0.00	7.45	868.20	206.71	326.18	294.47	4.78	-0.47	0.031
113.00	-4.97	-0.36	0.00	-7.09	0.00	7.09	857.04	204.06	317.86	286.90	4.88	-0.48	0.031
114.00	-4.90	-0.36	0.00	-6.73	0.00	6.73	845.89	201.40	309.64	279.44	4.98	-0.48	0.030
115.00	-4.84	-0.35	0.00	-6.38	0.00	6.38	834.74	198.75	301.53	272.07	5.08	-0.48	0.029
116.00	-4.77	-0.35	0.00	-6.02	0.00	6.02	823.58	196.09	293.53	264.80	5.18	-0.49	0.029
117.00	-4.71	-0.35	0.00	-5.67	0.00	5.67	812.43	193.44	285.64	257.63	5.28	-0.49	0.028
118.00	-4.65	-0.34	0.00	-5.33	0.00	5.33	801.28	190.78	277.86	250.55	5.39	-0.50	0.027
119.00	-4.58	-0.34	0.00	-4.99	0.00	4.99	790.13	188.13	270.18	243.58	5.49	-0.50	0.026
120.00	-4.52	-0.34	0.00	-4.65	0.00	4.65	778.97	185.47	262.61	236.70	5.60	-0.51	0.025
121.00	-4.46	-0.33	0.00	-4.31	0.00	4.31	767.82	182.81	255.15	229.93	5.70	-0.51	0.025
122.00	-4.40	-0.33	0.00	-3.98	0.00	3.98	756.67	180.16	247.79	223.25	5.81	-0.52	0.024
123.00	-4.34	-0.32	0.00	-3.65	0.00	3.65	745.51	177.50	240.54	216.67	5.92	-0.52	0.023
124.00	-4.28	-0.32	0.00	-3.33	0.00	3.33	734.36	174.85	233.40	210.18	6.03	-0.52	0.022
125.00	-4.22	-0.32	0.00	-3.01	0.00	3.01	723.21	172.19	226.37	203.80	6.14	-0.53	0.021
126.00	-4.16	-0.31	0.00	-2.69	0.00	2.69	712.05	169.54	219.45	197.52	6.25	-0.53	0.019
127.00	-4.11	-0.31	0.00	-2.37	0.00	2.37	700.90	166.88	212.63	191.33	6.36	-0.53	0.018
128.00	-4.05	-0.31	0.00	-2.06	0.00	2.06	689.75	164.23	205.92	185.24	6.47	-0.54	0.017
129.00	-3.99	-0.30	0.00	-1.76	0.00	1.76	678.59	161.57	199.32	179.25	6.59	-0.54	0.016
130.00	-3.94	-0.30	0.00	-1.46	0.00	1.46	667.44	158.91	192.82	173.36	6.70	-0.54	0.014
131.00	-3.88	-0.29	0.00	-1.16	0.00	1.16	656.29	156.26	186.44	167.57	6.81	-0.54	0.013
132.00	-3.83	-0.29	0.00	-0.86	0.00	0.86	645.14	153.60	180.16	161.87	6.93	-0.54	0.011
133.00	-3.77	-0.29	0.00	-0.57	0.00	0.57	633.98	150.95	173.99	156.28	7.04	-0.55	0.010
134.00	-3.72	-0.28	0.00	-0.28	0.00	0.28	622.83	148.29	167.92	150.78	7.16	-0.55	0.008
135.00	0.00	-0.25	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	7.27	-0.55	0.000

Load Case 0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-21.64	-0.75	0.00	-84.37	0.00	84.37	3,292.77	839.72	3,139.03	2,655.94	0.00	0.00	0.038
1.00	-21.45	-0.75	0.00	-83.62	0.00	83.62	3,282.09	835.17	3,105.10	2,632.84	0.00	0.00	0.038
2.00	-21.27	-0.75	0.00	-82.87	0.00	82.87	3,271.33	830.61	3,071.35	2,609.77	0.00	-0.01	0.038
3.00	-21.09	-0.75	0.00	-82.13	0.00	82.13	3,260.49	826.06	3,037.79	2,586.74	0.00	-0.01	0.038
4.00	-20.91	-0.75	0.00	-81.38	0.00	81.38	3,249.58	821.51	3,004.41	2,563.73	0.00	-0.01	0.038
5.00	-20.73	-0.75	0.00	-80.63	0.00	80.63	3,238.59	816.96	2,971.21	2,540.77	0.01	-0.01	0.038
6.00	-20.56	-0.75	0.00	-79.88	0.00	79.88	3,227.51	812.40	2,938.21	2,517.83	0.01	-0.02	0.038
7.00	-20.38	-0.75	0.00	-79.13	0.00	79.13	3,216.36	807.85	2,905.38	2,494.94	0.01	-0.02	0.038
8.00	-20.20	-0.75	0.00	-78.37	0.00	78.37	3,205.14	803.30	2,872.74	2,472.08	0.02	-0.02	0.038
9.00	-20.03	-0.75	0.00	-77.62	0.00	77.62	3,193.83	798.75	2,840.28	2,449.27	0.02	-0.02	0.038
10.00	-19.85	-0.75	0.00	-76.87	0.00	76.87	3,182.45	794.20	2,808.01	2,426.49	0.03	-0.03	0.038
11.00	-19.68	-0.76	0.00	-76.11	0.00	76.11	3,170.98	789.64	2,775.92	2,403.75	0.03	-0.03	0.038
12.00	-19.51	-0.76	0.00	-75.36	0.00	75.36	3,159.44	785.09	2,744.02	2,381.06	0.04	-0.03	0.038
13.00	-19.33	-0.76	0.00	-74.60	0.00	74.60	3,147.82	780.54	2,712.30	2,358.41	0.05	-0.03	0.038
14.00	-19.16	-0.76	0.00	-73.84	0.00	73.84	3,136.13	775.99	2,680.77	2,335.81	0.05	-0.04	0.038
15.00	-18.99	-0.76	0.00	-73.09	0.00	73.09	3,124.35	771.43	2,649.42	2,313.25	0.06	-0.04	0.038
16.00	-18.82	-0.76	0.00	-72.33	0.00	72.33	3,112.50	766.88	2,618.25	2,290.73	0.07	-0.04	0.038
17.00	-18.65	-0.76	0.00	-71.57	0.00	71.57	3,100.57	762.33	2,587.27	2,268.27	0.08	-0.04	0.038
18.00	-18.48	-0.76	0.00	-70.81	0.00	70.81	3,088.56	757.78	2,556.47	2,245.85	0.09	-0.05	0.038
19.00	-18.31	-0.76	0.00	-70.05	0.00	70.05	3,076.47	753.22	2,525.86	2,223.48	0.10	-0.05	0.037
20.00	-18.15	-0.76	0.00	-69.29	0.00	69.29	3,064.30	748.67	2,495.43	2,201.16	0.11	-0.05	0.037
21.00	-17.98	-0.76	0.00	-68.53	0.00	68.53	3,052.06	744.12	2,465.19	2,178.90	0.12	-0.06	0.037
22.00	-17.82	-0.76	0.00	-67.77	0.00	67.77	3,039.74	739.57	2,435.13	2,156.68	0.13	-0.06	0.037
23.00	-17.65	-0.76	0.00	-67.01	0.00	67.01	3,027.34	735.02	2,405.26	2,134.53	0.15	-0.06	0.037
24.00	-17.49	-0.76	0.00	-66.25	0.00	66.25	3,014.86	730.46	2,375.57	2,112.42	0.16	-0.07	0.037
25.00	-17.32	-0.76	0.00	-65.48	0.00	65.48	3,002.30	725.91	2,346.06	2,090.37	0.17	-0.07	0.037
26.00	-17.16	-0.76	0.00	-64.72	0.00	64.72	2,989.67	721.36	2,316.74	2,068.38	0.19	-0.07	0.037
27.00	-17.00	-0.76	0.00	-63.96	0.00	63.96	2,976.95	716.81	2,287.60	2,046.44	0.20	-0.07	0.037
28.00	-16.84	-0.76	0.00	-63.20	0.00	63.20	2,964.16	712.25	2,258.65	2,024.57	0.22	-0.08	0.037
29.00	-16.68	-0.76	0.00	-62.44	0.00	62.44	2,951.29	707.70	2,229.88	2,002.75	0.24	-0.08	0.037
30.00	-16.52	-0.76	0.00	-61.68	0.00	61.68	2,938.34	703.15	2,201.30	1,981.00	0.25	-0.08	0.037
31.00	-16.36	-0.76	0.00	-60.91	0.00	60.91	2,925.32	698.60	2,172.90	1,959.31	0.27	-0.09	0.037
32.00	-16.20	-0.76	0.00	-60.15	0.00	60.15	2,912.22	694.05	2,144.68	1,937.68	0.29	-0.09	0.037
33.00	-16.05	-0.76	0.00	-59.39	0.00	59.39	2,899.12	689.50	2,116.46	1,916.05	0.31	-0.09	0.037
34.00	-15.89	-0.76	0.00	-58.63	0.00	58.63	2,886.02	684.95	2,088.24	1,894.42	0.33	-0.10	0.037
35.00	-15.73	-0.76	0.00	-57.87	0.00	57.87	2,872.92	680.40	2,060.02	1,872.79	0.35	-0.10	0.037
36.00	-15.58	-0.76	0.00	-57.11	0.00	57.11	2,859.82	675.85	2,031.80	1,851.16	0.37	-0.10	0.037
37.00	-15.43	-0.76	0.00	-56.35	0.00	56.35	2,846.72	671.30	2,003.58	1,829.53	0.39	-0.11	0.037
38.00	-15.27	-0.76	0.00	-55.59	0.00	55.59	2,833.62	666.75	1,975.36	1,807.90	0.41	-0.11	0.037
39.00	-15.12	-0.76	0.00	-54.83	0.00	54.83	2,820.52	662.20	1,947.14	1,786.27	0.44	-0.11	0.037
40.00	-14.97	-0.76	0.00	-54.07	0.00	54.07	2,807.42	657.65	1,918.92	1,764.64	0.46	-0.12	0.036
41.00	-14.82	-0.76	0.00	-53.31	0.00	53.31	2,794.32	653.10	1,890.70	1,743.01	0.48	-0.12	0.036
42.00	-14.70	-0.76	0.00	-52.56	0.00	52.56	2,781.22	648.55	1,862.48	1,721.38	0.51	-0.12	0.036
42.78	-14.65	-0.76	0.00	-51.96	0.00	51.96	2,768.12	644.00	1,834.26	1,700.00	0.53	-0.12	0.036
43.00	-14.42	-0.75	0.00	-51.80	0.00	51.80	2,704.68	643.97	1,846.48	1,668.28	0.54	-0.13	0.036
44.00	-14.18	-0.75	0.00	-51.05	0.00	51.05	2,685.56	639.42	1,820.48	1,644.63	0.56	-0.13	0.036
45.00	-13.95	-0.75	0.00	-50.29	0.00	50.29	2,666.44	634.87	1,794.66	1,621.16	0.59	-0.13	0.036

46.00	-13.73	-0.75	0.00	-49.54	0.00	49.54	2,647.32	630.31	1,769.03	1,597.85	0.62	-0.14	0.036
47.00	-13.68	-0.75	0.00	-48.80	0.00	48.80	2,628.20	625.76	1,743.58	1,574.71	0.65	-0.14	0.036
47.22	-13.58	-0.75	0.00	-48.63	0.00	48.63	1,867.62	479.01	1,361.92	1,145.92	0.65	-0.14	0.050
48.00	-13.46	-0.75	0.00	-48.05	0.00	48.05	1,861.47	476.34	1,346.77	1,135.71	0.68	-0.14	0.050
49.00	-13.34	-0.74	0.00	-47.30	0.00	47.30	1,853.54	472.92	1,327.54	1,122.69	0.71	-0.15	0.049
50.00	-13.22	-0.74	0.00	-46.56	0.00	46.56	1,845.53	469.51	1,308.45	1,109.69	0.74	-0.15	0.049
51.00	-13.10	-0.74	0.00	-45.82	0.00	45.82	1,837.45	466.09	1,289.49	1,096.72	0.77	-0.16	0.049
52.00	-12.98	-0.74	0.00	-45.07	0.00	45.07	1,829.29	462.68	1,270.67	1,083.78	0.80	-0.16	0.049
53.00	-12.86	-0.74	0.00	-44.33	0.00	44.33	1,821.04	459.27	1,252.00	1,070.86	0.84	-0.16	0.048
54.00	-12.75	-0.74	0.00	-43.59	0.00	43.59	1,812.72	455.85	1,233.46	1,057.96	0.87	-0.17	0.048
55.00	-12.63	-0.74	0.00	-42.85	0.00	42.85	1,804.33	452.44	1,215.06	1,045.10	0.91	-0.17	0.048
56.00	-12.51	-0.74	0.00	-42.11	0.00	42.11	1,795.85	449.02	1,196.79	1,032.26	0.94	-0.18	0.048
57.00	-12.40	-0.74	0.00	-41.37	0.00	41.37	1,787.30	445.61	1,178.67	1,019.46	0.98	-0.18	0.048
58.00	-12.28	-0.73	0.00	-40.64	0.00	40.64	1,778.66	442.19	1,160.68	1,006.68	1.02	-0.19	0.047
59.00	-12.17	-0.73	0.00	-39.90	0.00	39.90	1,769.95	438.78	1,142.83	993.94	1.06	-0.19	0.047
60.00	-12.05	-0.73	0.00	-39.17	0.00	39.17	1,761.16	435.37	1,125.12	981.23	1.10	-0.20	0.047
61.00	-11.94	-0.73	0.00	-38.44	0.00	38.44	1,752.30	431.95	1,107.55	968.56	1.14	-0.20	0.047
62.00	-11.83	-0.73	0.00	-37.71	0.00	37.71	1,743.35	428.54	1,090.12	955.92	1.19	-0.21	0.046
63.00	-11.71	-0.73	0.00	-36.98	0.00	36.98	1,734.33	425.12	1,072.82	943.32	1.23	-0.21	0.046
64.00	-11.60	-0.72	0.00	-36.25	0.00	36.25	1,725.23	421.71	1,055.67	930.75	1.27	-0.22	0.046
65.00	-11.49	-0.72	0.00	-35.53	0.00	35.53	1,716.05	418.30	1,038.65	918.23	1.32	-0.22	0.045
66.00	-11.38	-0.72	0.00	-34.81	0.00	34.81	1,706.79	414.88	1,021.77	905.74	1.37	-0.22	0.045
67.00	-11.27	-0.72	0.00	-34.09	0.00	34.09	1,697.46	411.47	1,005.03	893.29	1.41	-0.23	0.045
68.00	-11.16	-0.72	0.00	-33.37	0.00	33.37	1,688.04	408.05	988.42	880.89	1.46	-0.23	0.044
69.00	-11.05	-0.71	0.00	-32.65	0.00	32.65	1,678.55	404.64	971.96	868.53	1.51	-0.24	0.044
70.00	-10.94	-0.71	0.00	-31.93	0.00	31.93	1,668.98	401.22	955.63	856.21	1.56	-0.24	0.044
71.00	-10.84	-0.71	0.00	-31.22	0.00	31.22	1,659.33	397.81	939.44	843.93	1.61	-0.25	0.044
72.00	-10.73	-0.71	0.00	-30.51	0.00	30.51	1,649.60	394.40	923.39	831.71	1.67	-0.25	0.043
73.00	-10.62	-0.71	0.00	-29.81	0.00	29.81	1,639.80	390.98	907.48	819.53	1.72	-0.26	0.043
74.00	-10.52	-0.70	0.00	-29.10	0.00	29.10	1,627.78	387.57	891.71	806.34	1.77	-0.26	0.043
75.00	-10.41	-0.70	0.00	-28.40	0.00	28.40	1,613.44	384.15	876.07	792.11	1.83	-0.27	0.042
76.00	-10.31	-0.70	0.00	-27.70	0.00	27.70	1,599.10	380.74	860.58	778.02	1.89	-0.27	0.042
77.00	-10.20	-0.69	0.00	-27.00	0.00	27.00	1,584.76	377.32	845.22	764.04	1.94	-0.28	0.042
78.00	-10.10	-0.69	0.00	-26.31	0.00	26.31	1,570.43	373.91	830.00	750.20	2.00	-0.28	0.042
79.00	-10.00	-0.69	0.00	-25.62	0.00	25.62	1,556.09	370.50	814.91	736.48	2.06	-0.29	0.041
80.00	-9.89	-0.69	0.00	-24.93	0.00	24.93	1,541.75	367.08	799.97	722.89	2.12	-0.29	0.041
81.00	-9.79	-0.68	0.00	-24.24	0.00	24.24	1,527.41	363.67	785.17	709.43	2.19	-0.30	0.041
82.00	-9.69	-0.68	0.00	-23.56	0.00	23.56	1,513.07	360.25	770.50	696.09	2.25	-0.30	0.040
83.00	-9.59	-0.68	0.00	-22.88	0.00	22.88	1,498.73	356.84	755.97	682.88	2.31	-0.31	0.040
84.00	-9.49	-0.67	0.00	-22.21	0.00	22.21	1,484.39	353.43	741.58	669.79	2.38	-0.31	0.040
85.00	-9.39	-0.67	0.00	-21.53	0.00	21.53	1,470.05	350.01	727.33	656.83	2.44	-0.32	0.039
86.00	-9.29	-0.67	0.00	-20.86	0.00	20.86	1,455.71	346.60	713.21	644.00	2.51	-0.32	0.039
87.00	-9.19	-0.66	0.00	-20.20	0.00	20.20	1,441.37	343.18	699.24	631.30	2.58	-0.33	0.038
88.00	-9.16	-0.66	0.00	-19.54	0.00	19.54	1,427.03	339.77	685.40	618.72	2.65	-0.33	0.038
88.36	-9.07	-0.66	0.00	-19.30	0.00	19.30	1,421.80	338.52	680.39	614.16	2.67	-0.33	0.038
89.00	-8.92	-0.65	0.00	-18.88	0.00	18.88	1,412.69	336.35	671.70	606.27	2.72	-0.34	0.037
90.00	-8.78	-0.64	0.00	-18.23	0.00	18.23	1,398.35	332.94	658.14	593.94	2.79	-0.34	0.037
91.00	-8.69	-0.64	0.00	-17.58	0.00	17.58	1,384.01	329.53	644.71	581.74	2.86	-0.35	0.037
91.64	-8.66	-0.64	0.00	-17.18	0.00	17.18	1,058.69	260.79	519.07	454.24	2.91	-0.35	0.046
92.00	-8.58	-0.64	0.00	-16.94	0.00	16.94	1,056.16	259.82	515.22	451.45	2.93	-0.35	0.046
93.00	-8.49	-0.63	0.00	-16.31	0.00	16.31	1,049.15	257.17	504.75	443.82	3.01	-0.36	0.045
94.00	-8.41	-0.63	0.00	-15.67	0.00	15.67	1,042.06	254.51	494.38	436.22	3.08	-0.36	0.044
95.00	-8.08	-0.61	0.00	-15.04	0.00	15.04	1,034.89	251.86	484.12	428.66	3.16	-0.37	0.043
96.00	-8.01	-0.61	0.00	-14.43	0.00	14.43	1,027.65	249.20	473.97	421.12	3.24	-0.37	0.042

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:29 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

97.00	-7.94	-0.61	0.00	-13.82	0.00	13.82	1,020.33	246.55	463.93	413.62	3.32	-0.38	0.041
98.00	-7.87	-0.60	0.00	-13.21	0.00	13.21	1,012.93	243.89	453.99	406.15	3.40	-0.38	0.040
99.00	-7.80	-0.60	0.00	-12.61	0.00	12.61	1,005.45	241.23	444.16	398.71	3.48	-0.39	0.039
100.00	-7.72	-0.60	0.00	-12.01	0.00	12.01	997.89	238.58	434.44	391.31	3.56	-0.39	0.038
101.00	-5.91	-0.49	0.00	-11.41	0.00	11.41	990.26	235.92	424.83	383.94	3.64	-0.40	0.036
102.00	-5.84	-0.49	0.00	-10.92	0.00	10.92	979.73	233.27	415.32	375.54	3.73	-0.40	0.035
103.00	-4.04	-0.38	0.00	-10.44	0.00	10.44	968.57	230.61	405.93	366.99	3.81	-0.41	0.033
104.00	-3.99	-0.37	0.00	-10.06	0.00	10.06	957.42	227.96	396.63	358.54	3.90	-0.41	0.032
105.00	-3.93	-0.37	0.00	-9.69	0.00	9.69	946.27	225.30	387.45	350.18	3.99	-0.42	0.032
106.00	-3.88	-0.37	0.00	-9.32	0.00	9.32	935.12	222.65	378.38	341.93	4.07	-0.42	0.031
107.00	-3.83	-0.36	0.00	-8.95	0.00	8.95	923.96	219.99	369.41	333.77	4.16	-0.43	0.031
108.00	-3.78	-0.36	0.00	-8.59	0.00	8.59	912.81	217.34	360.55	325.72	4.25	-0.43	0.031
109.00	-3.74	-0.36	0.00	-8.23	0.00	8.23	901.66	214.68	351.79	317.76	4.35	-0.44	0.030
110.00	-3.69	-0.35	0.00	-7.87	0.00	7.87	890.50	212.02	343.15	309.90	4.44	-0.44	0.030
111.00	-3.64	-0.35	0.00	-7.52	0.00	7.52	879.35	209.37	334.61	302.13	4.53	-0.45	0.029
112.00	-3.59	-0.35	0.00	-7.16	0.00	7.16	868.20	206.71	326.18	294.47	4.63	-0.45	0.028
113.00	-3.54	-0.35	0.00	-6.82	0.00	6.82	857.04	204.06	317.86	286.90	4.72	-0.46	0.028
114.00	-3.50	-0.34	0.00	-6.47	0.00	6.47	845.89	201.40	309.64	279.44	4.82	-0.46	0.027
115.00	-3.45	-0.34	0.00	-6.13	0.00	6.13	834.74	198.75	301.53	272.07	4.92	-0.47	0.027
116.00	-3.40	-0.34	0.00	-5.79	0.00	5.79	823.58	196.09	293.53	264.80	5.01	-0.47	0.026
117.00	-3.36	-0.33	0.00	-5.45	0.00	5.45	812.43	193.44	285.64	257.63	5.11	-0.48	0.025
118.00	-3.31	-0.33	0.00	-5.12	0.00	5.12	801.28	190.78	277.86	250.55	5.21	-0.48	0.025
119.00	-3.27	-0.33	0.00	-4.79	0.00	4.79	790.13	188.13	270.18	243.58	5.32	-0.49	0.024
120.00	-3.22	-0.32	0.00	-4.47	0.00	4.47	778.97	185.47	262.61	236.70	5.42	-0.49	0.023
121.00	-3.18	-0.32	0.00	-4.14	0.00	4.14	767.82	182.81	255.15	229.93	5.52	-0.49	0.022
122.00	-3.14	-0.32	0.00	-3.82	0.00	3.82	756.67	180.16	247.79	223.25	5.63	-0.50	0.021
123.00	-3.09	-0.31	0.00	-3.51	0.00	3.51	745.51	177.50	240.54	216.67	5.73	-0.50	0.020
124.00	-3.05	-0.31	0.00	-3.20	0.00	3.20	734.36	174.85	233.40	210.18	5.84	-0.51	0.019
125.00	-3.01	-0.31	0.00	-2.89	0.00	2.89	723.21	172.19	226.37	203.80	5.94	-0.51	0.018
126.00	-2.97	-0.30	0.00	-2.58	0.00	2.58	712.05	169.54	219.45	197.52	6.05	-0.51	0.017
127.00	-2.93	-0.30	0.00	-2.28	0.00	2.28	700.90	166.88	212.63	191.33	6.16	-0.51	0.016
128.00	-2.89	-0.29	0.00	-1.98	0.00	1.98	689.75	164.23	205.92	185.24	6.26	-0.52	0.015
129.00	-2.85	-0.29	0.00	-1.69	0.00	1.69	678.59	161.57	199.32	179.25	6.37	-0.52	0.014
130.00	-2.81	-0.29	0.00	-1.40	0.00	1.40	667.44	158.91	192.82	173.36	6.48	-0.52	0.012
131.00	-2.77	-0.28	0.00	-1.11	0.00	1.11	656.29	156.26	186.44	167.57	6.59	-0.52	0.011
132.00	-2.73	-0.28	0.00	-0.83	0.00	0.83	645.14	153.60	180.16	161.87	6.70	-0.53	0.009
133.00	-2.69	-0.28	0.00	-0.55	0.00	0.55	633.98	150.95	173.99	156.28	6.81	-0.53	0.008
134.00	-2.65	-0.27	0.00	-0.27	0.00	0.27	622.83	148.29	167.92	150.78	6.92	-0.53	0.006
135.00	0.00	-0.25	0.00	0.00	0.00	0.00	611.68	145.64	161.97	145.38	7.03	-0.53	0.000

Site Number: 81552

Code: ANSI/TIA-222-H

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Site Name: Dublin Scioto Park, OH

Engineering Number: OAA765390_C3_02

4/19/2021 8:46:29 AM

Customer: AMERICAN ELECTRIC POWER COMPANY

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	19.60	0.00	29.94	0.00	0.00	1887.93	47.22	0.91
0.9D + 1.0W	19.59	0.00	22.45	0.00	0.00	1853.88	47.22	0.88
1.2D + 1.0Di + 1.0Wi	3.49	0.00	40.02	0.00	0.00	347.80	47.22	0.18
1.2D + 1.0Ev + 1.0Eh	0.75	0.00	30.34	0.00	0.00	86.45	47.22	0.05
0.9D - 1.0Ev + 1.0Eh	0.75	0.00	21.64	0.00	0.00	84.37	47.22	0.05
1.0D + 1.0W	5.41	0.00	24.96	0.00	0.00	516.86	47.22	0.25

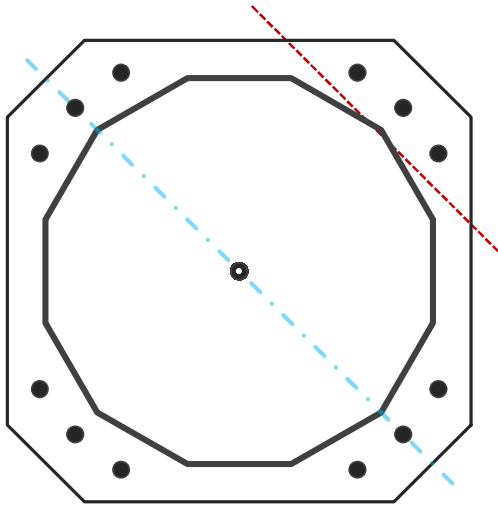
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	12	-
Diameter	40	in
Thickness	3/8	in
Orientation Offset	15	°

Base Reactions		
Moment, Mu	1,887.9	k-ft
Axial, Pu	29.9	k
Shear, Vu	19.6	k
Neutral Axis	315	°

Report Capacities		
Component	Capacity	Result
Base Plate	57%	Pass
Anchor Rods	66%	Pass
Dwyidag	-	-

Base Plate		
Shape	Square	-
Width	48	in
Thickness	2 3/4	in
Grade	A871-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	8	in
Orientation Offset	0	°
Anchor Rod Detail	d	$\eta=0.5$
Clear Distance	3	in
Applied Moment, Mu	1616.7	k
Bending Stress, ϕMn	2833.8	k



Original Anchor Rods		
Arrangement	Cluster	-
Quantity	12	-
Diameter, ϕ	2 1/4	in
Bolt Circle	48	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	159.7	k
Anchor Rods, ϕPn	243.6	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	19.6	1887.9	1.00
Anchor Rod Forces	19.6	1887.9	1.00
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	0.0	0.00
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	46.1507	3.8459	0.1811		9060.05
Bolt	3.9761	3.2477	0.8393	4.5	11234.09
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	0.0000	0.0000	0.0000		0.00
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	Square	-
Width, W	48	in
Thickness, t	2.75	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	26.533	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods		
Anchor Rod Quantity, N	12	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	48	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	159.7	k
Applied Shear, Vu	0.7	k
Compressive Capacity, φPn	243.6	k
Tensile Capacity, φRnt	0.656	OK
Interaction Capacity	0.661	OK

External Base Plate		
Chord Length AA	27.757	in
Additional AA	0.000	in
Section Modulus, Z	52.479	in ³
Applied Moment, Mu	1616.7	k-ft
Bending Capacity, φMn	2833.8	k-ft
Capacity, Mu/φMn	0.571	OK
Chord Length AB	26.342	in
Additional AB	0.000	in
Section Modulus, Z	49.802	in ³
Applied Moment, Mu	1284.6	k-ft
Bending Capacity, φMn	2689.3	k-ft
Capacity, Mu/φMn	0.478	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in ³
Applied Moment, Mu	0.0	k-ft
Bending Capacity, φMn	0.0	k-ft
Capacity, Mu/φMn		

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in ³
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, φMn	0.0	k-ft
Capacity, Mu/φMn		