Attachment C: Updated Application Figure and Appendix Materials

- Revised Figure 03-2: Project Area Parcel Status
- Revised Figure 03-3: Project Layout
- Revised Figure 08-1a: Received Sound Levels: Wind Turbines at Critical Wind Speed (GE Scenario)
- Figure 08-1b: Received Sound Levels: Wind Turbines at Critical Wind Speed (GE/SG Scenario)
- Revised Figure 08-8a: Expected Shadow Flicker Impact Areas (GE2.5-127 Turbine Scenario)
- Figure 08-8b: Expected Shadow Flicker Impact Areas (SG2.7-129 Turbine Scenario)
- Revised Figure 08-13: Structures within 1,500 feet of a Proposed Turbine
- Revised Figure 08-14: Structures within 250 feet of a Project Component
- Revised Appendix O:
 - Revised Table O-1 Structures within 1,500 Feet of a Proposed Turbine
 - o Revised Table O-2: Structures within 250 Feet of a Proposed Project Component





R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxc



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxc



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mx



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxc







R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxc



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxd



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mxc



R:\PROJECTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_03-2_Parcel_Status.mx



R:\PROJECTS\SENECA 6353\OPSB\MAPS\Figure 03-3 Layout.mxc







R:\PROJECTS\SENECA 6353\OPSB\MAPS\Figure l avout my

R:\PROJECTS\SENECA 6353\OPSB\MAPS\Figure 03-3 Lavout.mxc

2,000

13

25

PROJECTS\SENECA 6353\O 3 Lavout.mxc

R:\PROJECTS\SENECA_6353\OPSB\MAPS\Figure_03-3_Layout.mxc

R:\PROJECTS\SENECA 6353\OPSB\MAPS\Figure 3 Lavout.mxc

Revised Figure 03-3 Project Layout Revised Sheet 11 of 27 Seneca Wind Seneca County, Ohio **Project Area** Proposed Turbines (Hub Height) GE 2.3-116 (80 m) ightarrowGE 2.3-116 (90 m) GE 2.3-116 (94 m) \bigcirc \bigcirc GE 2.5-127 or SG 7-129 (134 m) Permanent Met Tower \land 138-kV Electrical Interconnection Cranewalk Delivery Route Electrical Collection Lines Laydown Yard Potential O&M Area Site Road Substation Highway/Major Road - Local Road Parcels County Boundary 1,000 2,000 Feet 1:12,000 Source: ESRI (2016) Tiffin 10 11 12 13

R:\PROJECTS\SENECA_6353\OPSB\MAPS\Figure_03-3_Layout.mxd

16

Craw

25

Revised Figure 03-3 Project Layout Revised Sheet 12 of 27 Seneca Wind Seneca County, Ohio Project Area Proposed Turbines (Hub Height) GE 2.3-116 (80 m) \bigcirc GE 2.3-116 (90 m) GE 2.3-116 (94 m) \bigcirc GE 2.5-127 or SG 7-129 (134 m) \bigcirc Permanent Met Tower 138-kV Electrical Interconnection Cranewalk Delivery Route Electrical Collection Lines Laydown Yard Potential O&M Area Site Road Substation Highway/Major Road - Local Road Parcels County Boundary 1,000 2,000 Feet 1:12,000 Source: ESRI (2016) 12 10 11 13 25

R:\PROJECTS\SENECA_6353\OPSB\MAPS\Figure_03-3_Layout.mxd

R:\PROJECTS\SENECA 6353\O 3 Lavout.mxc

R:\PROJECTS\SENECA 6353\OPSB\MAPS\Figure 03-3 Layout.mxc

R:\PROJECTS\SENECA 6353\OPSB\MAR l avout my

Revised Figure 03-3 Project Layout Sheet 24 of 27 Seneca Wind Seneca County, Ohio Project Area Proposed Turbines (Hub Height) GE 2.3-116 (80 m) \bigcirc GE 2.3-116 (90 m) ightarrow• GE 2.3-116 (94 m) GE 2.5-127 or SG 7-129 (134 m) \bigcirc Permanent Met Tower \land 138-kV Electrical Interconnection Cranewalk Delivery Route Electrical Collection Lines Laydown Yard Potential O&M Area Site Road Substation Highway/Major Road Local Road Parcels County Boundary 1,000 2,000 Feet 1:12,000 Source: ESRI (2016) Tiffin 10 11 12 13 16 20 25

R:\PROJECTS\SENECA_6353\OPSB\MAPS\Figure_03-3_Layout.mxd

R:\PROJECTS\SENECA_6353\NOISE\MAPS\Figure_17_Noise_Scenario1_Max_all_GE.mx

R:\PROJECTS\SENECA_6353\NOISE\MAPS\Figure_18_Noise_Scenario1_Max_GE_SG.mx

R:\PROJECTS\SENECA_6353\SHADOW_FLICKER\MAPS\Figure_2a_Shadow_Flicker_GE.mxd

ROJECTS\SENECA_6353\SHADOW_FLICKER\MAPS\Figure_2b_Shadow_Flicker_Siemens.mx

Revised Figure 08-13 Structures within 1,500 feet of a Proposed Turbine Seneca Wind Seneca County, Ohio Project Area 1,500-foot Turbine Buffer Proposed Turbines (Hub Height) • GE 2.3-116 (80 m) • GE 2.3-116 (90 m) GE 2.3-116 (94 m) \bigcirc GE 2.5-127 or SG 2.7-129 \bigcirc (134 m) Structure Type Barn \triangle Garage House Outbuilding ∻ Silo \diamond \bigcirc Tanks ÷ Tower Trailer ☆ Structure Parcel Status Participating Non-Participating Miles 1:85,000 Source: NAIP (2017) Project Location RENNSY Pittsburgh OHIC DIANA Columbus lanapolis Cincinn

R:\PROJECTS\SENECA 6353\OF

CTS\SENECA_6353\OPSB\MAPS\Suplemental\Figure_08-14_Structures_Near_Components.mxc

Revised Appendix O

- Revised Table O-1: Structures within 1,500 Feet of a Proposed Turbine
- Revised Table O-2: Structures within 250 Feet of a Proposed Project Component

REVISED TABLE O-1 STRUCTURES WITHIN 1,500 FEET OF A PROPOSED TURBINE

Structure	Distance and Direction to Closest Project		Lease Status of
Туре	Nearest Project Component	Component	Underlying Parcel
Barn	555 feet south-southeast	Turbine 07	Participating
Barn	575 feet south	Turbine 07	Participating
Barn	700 feet north	Turbine 71	Participating
Barn	720 feet south-southeast	Turbine 07	Participating
Barn	730 feet southwest	Turbine 12	Participating
Barn	730 feet north	Turbine 24	Participating
Barn	735 feet south	Turbine 12	Participating
Barn	735 feet south-southwest	Turbine 47	Participating
House	745 feet south-southwest	Turbine 07	Participating
Barn	760 feet southwest	Turbine 56	Participating
Tank	780 feet northeast	Turbine 80	Participating
Barn	790 feet south	Turbine 47	Participating
Silos	795 feet southwest	Turbine 47	Participating
House	820 feet northeast	Turbine 58	Participating
Barn	820 feet north	Turbine 71	Participating
Silo	825 feet south	Turbine 12	Participating
Barn	840 feet southeast	Turbine 48	Participating
Barn	845 feet southwest	Turbine 04	Participating
Barn	850 feet northeast	Turbine 19	Participating
Barn	850 feet northwest	Turbine 46	Participating
Barn	855 feet southwest	Turbine 85	Participating
Barn	860 feet northeast	Turbine 05	Participating
Silo	865 feet south	Turbine 12	Participating
Barn	885 feet north-northwest	Turbine 46	Participating
Garage	900 feet northeast	Turbine 58	Participating
Barn	910 feet south-southwest	Turbine 47	Participating
Silos	915 feet southwest	Turbine 47	Participating
Barn	930 feet northwest	Turbine 46	Participating
Barn	935 feet south-southwest	Turbine 26	Participating
Barn	940 feet northeast	Turbine 05	Participating
Barn	945 feet north	Turbine 46	Participating
Barn	950 feet northeast	Turbine 19	Participating
Silos	950 feet southwest	Turbine 47	Participating
Barn	960 feet south	Turbine 26	Participating
Barn	965 feet east	Turbine 42	Participating
Silos	970 feet south	Turbine 26	Participating
Barn	970 feet southwest	Turbine 47	Participating
Silo	980 feet north	Turbine 43	Participating
Silo	990 feet north	Turbine 43	Participating
House	1,000 feet south	Turbine 12	Participating

Structure	Distance and Direction to Closest Project		Lease Status of
Туре	Nearest Project Component	Component	Underlying Parcel
Barn	1,000 feet northeast	Turbine 19	Participating
Barn	1,000 feet northwest	Turbine 71	Participating
House	1,020 feet northeast	Turbine 05	Participating
Barn	1,020 feet north	Turbine 71	Participating
Barn	1,025 feet southwest	Turbine 26	Participating
House	1,025 feet west	Turbine 35	Participating
Barn	1,025 feet south	Turbine 71	Participating
Barn	1,030 feet west	Turbine 07	Participating
Barn	1,030 feet southeast	Turbine 31	Participating
House	1,030 feet west-southwest	Turbine 85	Participating
Silo	1,035 feet northeast	Turbine 18	Participating
Barn	1,040 feet east	Turbine 42	Participating
Barn	1,050 feet north	Turbine 43	Participating
Barn	1,050 feet west-southwest	Turbine 52	Participating
House	1,055 feet east-northeast	Turbine 55	Participating
Silos	1,060 feet west-southwest	Turbine 07	Participating
Garage	1,060 feet south	Turbine 26	Participating
Barn	1,070 feet west-southwest	Turbine 07	Participating
House	1,080 feet northeast	Turbine 19	Participating
Outbuilding	1,080 feet north	Turbine 43	Participating
House	1,080 feet north-northwest	Turbine 46	Participating
Barn	1,085 feet north	Turbine 71	Participating
Silo	1,085 feet northeast	Turbine 75	Participating
Barn	1,095 feet southwest	Turbine 26	Participating
Barn	1,095 feet west-southwest	Turbine 52	Participating
Barn	1,095 feet south	Turbine 71	Participating
Barn	1,100 feet southwest	Turbine 47	Participating
Silo	1,105 feet southwest	Turbine 04	Participating
Silo	1,110 feet southwest	Turbine 04	Participating
Barn	1,110 feet southeast	Turbine 31	Participating
House	1,115 feet south-southwest	Turbine 26	Participating
Outbuilding	1,125 feet north-northwest	Turbine 43	Participating
Barn	1,125 feet west-southwest	Turbine 52	Participating
House	1,130 feet southeast	Turbine 48	Participating
Barn	1,130 feet south	Turbine 71	Participating
House	1,145 feet west	Turbine 35	Participating
Garage	1,150 feet southwest	Turbine 58	Non-Participating
Silos	1,155 feet north-northwest	Turbine 11	Participating
Barn	1,160 feet southwest	Turbine 04	Participating
Barn	1,160 feet northwest	Turbine 08	Participating
House	1,160 feet north-northwest	Turbine 43	Participating
Silos	1,175 feet northeast	Turbine 18	Participating
Tower	1,175 feet southwest	Turbine 47	Participating

Structure	Distance and Direction to	Closest Project	Lease Status of
Туре	Nearest Project Component	Component	Underlying Parcel
Barn	1,180 feet west-southwest	Turbine 52	Participating
Barn	1,180 feet south	Turbine 71	Non-Participating
Barn	1,190 feet west-southwest	Turbine 74	Participating
Garage	1,200 feet south	Turbine 02	Participating
Barn	1,200 feet southeast	Turbine 48	Participating
Outbuilding	1,200 feet southwest	Turbine 48	Participating
Barn	1,205 feet southwest	Turbine 71	Non-Participating
House	1,210 feet northwest	Turbine 05	Participating
Garage	1,210 feet south	Turbine 71	Non-Participating
Barn	1,215 feet southeast	Turbine 48	Participating
House	1,215 feet south-southwest	Turbine 48	Participating
Garage	1,215 feet west-northwest	Turbine 61	Participating
Barn	1,220 feet south	Turbine 02	Participating
Silos	1,225 feet northeast	Turbine 18	Participating
Garage	1,225 feet west	Turbine 56	Participating
Barn	1,225 feet south	Turbine 71	Participating
Garage	1,230 feet southeast	Turbine 12	Participating
Barn	1,230 feet northeast	Turbine 18	Participating
Silo	1,230 feet southeast	Turbine 52	Participating
Barn	1,235 feet south-southeast	Turbine 52	Participating
Barn	1,240 feet northeast	Turbine 18	Participating
Outbuilding	1,240 feet northeast	Turbine 27	Participating
Barn	1,250 feet north-northwest	Turbine 11	Participating
House	1,250 feet southwest	Turbine 47	Participating
House	1,255 feet southwest	Turbine 04	Participating
Outbuilding	1,260 feet south	Turbine 02	Participating
House	1,260 feet west	Turbine 56	Participating
House	1,260 feet west	Turbine 61	Non-Participating
Barn	1,265 feet west	Turbine 52	Participating
House	1,265 feet northwest	Turbine 58	Participating
House	1,270 feet west-southwest	Turbine 07	Participating
Tanks	1,270 feet northwest	Turbine 71	Participating
Barn	1,270 feet south-southwest	Turbine 72	Non-Participating
House	1,275 feet east	Turbine 42	Participating
Barn	1,285 feet southeast	Turbine 60	Participating
Barn	1,285 feet southwest	Turbine 61	Participating
Garage	1,290 feet north-northwest	Turbine 15	Participating
Outbuilding	1,290 feet northeast	Turbine 27	Participating
Barn	1,290 feet south-southwest	Turbine 78	Participating
House	1,295 feet south	Turbine 71	Non-Participating
Barn	1,295 feet south-southeast	Turbine 78	Participating
Tanks	1,300 feet northeast	Turbine 24	Participating
Trailer	1,300 feet southeast	Turbine 52	Participating

Structure	Distance and Direction to Closest Project		Lease Status of
Туре	Nearest Project Component	Component	Underlying Parcel
Outbuilding	1,310 feet northwest	Turbine 08	Participating
House	1,310 feet southeast	Turbine 12	Participating
Outbuilding	1,320 feet northeast	Turbine 27	Participating
Barn	1,320 feet southeast	Turbine 30	Participating
Barn	1,320 feet west	Turbine 52	Participating
House	1,325 feet south	Turbine 71	Non-Participating
House	1,325 feet southwest	Turbine 71	Non-Participating
Trailer	1,335 feet southwest	Turbine 88	Participating
House	1,340 feet northwest	Turbine 08	Participating
Barn	1,340 feet north-northwest	Turbine 11	Participating
Barn	1,340 feet south	Turbine 72	Non-Participating
Silos	1,340 feet south-southwest	Turbine 78	Participating
Barn	1,345 feet south-southeast	Turbine 78	Participating
Barn	1,350 feet northeast	Turbine 18	Participating
House	1,360 feet east-southeast	Turbine 06	Participating
House	1,360 feet southwest	Turbine 53	Participating
Barn	1,360 feet southwest	Turbine 61	Participating
Barn	1,360 feet southwest	Turbine 72	Non-Participating
Barn	1,365 feet south-southwest	Turbine 78	Participating
Barn	1,370 feet southeast	Turbine 31	Participating
Barn	1,370 feet west-northwest	Turbine 94	Non-Participating
Barn	1,375 feet north-northwest	Turbine 11	Participating
Barn	1,375 feet south-southwest	Turbine 78	Participating
Garage	1,380 feet south	Turbine 02	Participating
Barn	1,380 feet east-southeast	Turbine 10	Non-Participating
Barn	1,380 feet southeast	Turbine 23	Non-Participating
House	1,380 feet northwest	Turbine 69	Participating
Barn	1,380 feet northwest	Turbine 70	Non-Participating
Barn	1,390 feet southwest	Turbine 61	Participating
House	1,390 feet northwest	Turbine 69	Participating
Barn	1,395 feet northeast	Turbine 27	Participating
Barn	1,395 feet southeast	Turbine 31	Participating
House	1,395 feet southeast	Turbine 52	Participating
Barn	1,400 feet east	Turbine 09	Non-Participating
House	1,400 feet northwest	Turbine 15	Participating
Barn	1,400 feet northwest	Turbine 58	Participating
Barn	1,400 feet north	Turbine 79	Participating
House	1,405 feet northeast	Turbine 27	Participating
House	1,410 feet north-northeast	Turbine 08	Non-Participating
Outbuilding	1,410 feet northwest	Turbine 58	Participating
Garage	1,410 feet west-southwest	Turbine 74	Non-Participating
Barn	1,410 feet southeast	Turbine 87	Non-Participating
Silo	1,415 feet south-southeast	Turbine 78	Participating

Structure	Distance and Direction to	e and Direction to Closest Project	
Туре	Nearest Project Component	Component	Underlying Parcel
Barn	1,420 feet southeast	Turbine 23	Non-Participating
Barn	1,420 feet southeast	Turbine 26	Non-Participating
Garage	1,425 feet southeast	Turbine 06	Participating
Garage	1,425 feet northwest	Turbine 46	Participating
House	1,430 feet south	Turbine 02	Participating
Garage	1,430 feet southeast	Turbine 52	Participating
House	1,430 feet northwest	Turbine 59	Non-Participating
House	1,435 feet southwest	Turbine 12	Participating
Garage	1,440 feet north-northwest	Turbine 11	Participating
House	1,440 feet south-southwest	Turbine 52	Non-Participating
Silo	1,440 feet south-southeast	Turbine 78	Participating
House	1,445 feet south-southeast	Turbine 04	Non-Participating
Barn	1,445 feet southeast	Turbine 87	Non-Participating
Barn	1,450 feet northeast	Turbine 10	Non-Participating
House	1,450 feet north	Turbine 17	Participating
House	1,450 feet northeast	Turbine 26	Non-Participating
Garage	1,450 feet northeast	Turbine 26	Non-Participating
Silo	1,450 feet south-southwest	Turbine 57	Non-Participating
Garage	1,450 feet southwest	Turbine 61	Participating
Barn	1,450 feet southwest	Turbine 64	Participating
Barn	1,450 feet west-southwest	Turbine 74	Non-Participating
Garage	1,450 feet southeast	Turbine 91	Non-Participating
Barn	1,455 feet south-southeast	Turbine 78	Participating
House	1,460 feet northeast	Turbine 05	Non-Participating
Barn	1,460 feet south-southeast	Turbine 09	Non-Participating
House	1,460 feet east-northeast	Turbine 16	Non-Participating
Barn	1,460 feet southeast	Turbine 42	Non-Participating
Garage	1,460 feet northwest	Turbine 72	Non-Participating
Barn	1,460 feet south	Turbine 72	Non-Participating
House	1,460 feet northeast	Turbine 75	Participating
House	1,465 feet southeast	Turbine 06	Participating
Barn	1,465 feet northeast	Turbine 10	Non-Participating
House	1,465 feet north-northwest	Turbine 11	Participating
Barn	1,465 feet north-northwest	Turbine 17	Participating
House	1,465 feet northeast	Turbine 18	Participating
Garage	1,465 feet southwest	Turbine 53	Participating
Barn	1,470 feet east-northeast	Turbine 09	Non-Participating
House	1,470 feet north-northwest	Turbine 11	Participating
Silo	1,470 feet south-southwest	Turbine 57	Non-Participating
Barn	1,475 feet south-southeast	Turbine 09	Non-Participating
Garage	1,475 feet northwest	Turbine 63	Participating
House	1,475 feet southeast	Turbine 91	Non-Participating
Barn	1,480 feet northwest	Turbine 05	Non-Participating

Structure	Distance and Direction to	Closest Project	Lease Status of
Туре	Nearest Project Component	Component	Underlying Parcel
House	1,480 feet southeast	Turbine 38	Non-Participating
House	1,480 feet northeast	Turbine 39	Non-Participating
House	1,480 feet northeast	Turbine 42	Non-Participating
House	1,480 feet southwest	Turbine 56	Non-Participating
Garage	1,480 feet southwest	Turbine 58	Non-Participating
Garage	1,480 feet northwest	Turbine 59	Non-Participating
House	1,480 feet northwest	Turbine 61	Participating
House	1,480 feet northwest	Turbine 72	Non-Participating
Barn	1,480 feet northwest	Turbine 74	Non-Participating
House	1,480 feet west-southwest	Turbine 74	Non-Participating
Barn	1,480 feet northeast	Turbine 75	Participating
Barn	1,480 feet southeast	Turbine 83	Non-Participating
Barn	1,485 feet southeast	Turbine 23	Non-Participating
Barn	1,485 feet south-southwest	Turbine 57	Non-Participating
Barn	1,485 feet southwest	Turbine 72	Non-Participating
House	1,485 feet south-southwest	Turbine 78	Participating
Barn	1,490 feet south-southeast	Turbine 04	Non-Participating
House	1,490 feet southeast	Turbine 12	Non-Participating
Garage	1,490 feet northeast	Turbine 56	Non-Participating
House	1,490 feet southwest	Turbine 58	Non-Participating
Garage	1,490 feet south-southwest	Turbine 72	Non-Participating
House	1,490 feet south	Turbine 72	Non-Participating
Barn	1,490 feet south-southeast	Turbine 78	Participating
Barn	1,490 feet south-southwest	Turbine 94	Non-Participating
House	1,495 feet south-southwest	Turbine 72	Non-Participating
House	1,500 feet southeast	Turbine 04	Non-Participating
Barn	1,500 feet north-northeast	Turbine 08	Non-Participating
House	1,500 feet southeast	Turbine 10	Non-Participating
Barn	1,500 feet northeast	Turbine 11	Non-Participating
Garage	1,500 feet north	Turbine 12	Non-Participating
House	1,500 feet southeast	Turbine 12	Non-Participating
Barn	1,500 feet northeast	Turbine 20	Non-Participating
House	1,500 feet southeast	Turbine 26	Non-Participating
Barn	1,500 feet east-southeast	Turbine 27	Non-Participating
House	1,500 feet southeast	Turbine 33	Non-Participating
House	1,500 feet southwest	Turbine 61	Participating
Barn	1,500 feet north-northwest	Turbine 68	Participating
House	1,500 feet southwest	Turbine 72	Non-Participating
House	1,500 feet east-northeast	Turbine 85	Non-Participating
House	1,500 feet southeast	Turbine 87	Non-Participating
Barn	1,500 feet southeast	Turbine 87	Non-Participating
Silo	1,500 feet southeast	Turbine 89	Participating
Silo	1,500 feet northeast	Turbine 92	Non-Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
Barn	1,500 feet northeast	Turbine 92	Non-Participating
House	1,500 feet west-northwest	Turbine 94	Non-Participating
House	1,500 feet west-northwest	Turbine 94	Non-Participating
Garage	1,500 feet northwest	Turbine 95	Participating

REVISED TABLE O-2 STRUCTURES WITHIN 250 FEET OF A PROPOSED PROJECT COMPONENT

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
Garage	10 feet west	Electrical Connection Line	Participating
Silos	10 feet west	Electrical Connection Line	Participating
House	10 feet north	Electrical Connection Line	Non-Participating
Silo	10 feet east	Site Road	Participating
Barn	15 feet south	Electrical Connection Line	Participating
Barn	20 feet north	Electrical Connection Line	Non-Participating
House	20 feet north	Electrical Connection Line	Non-Participating
Garage	20 feet north	Electrical Connection Line	Non-Participating
Barn	25 feet southeast	Site Road	Participating
Barn	30 feet south	Electrical Connection Line	Participating
Barn	30 feet southeast	Electrical Connection Line	Participating
Silos	35 feet south	Electrical Connection Line	Participating
Barn	35 feet north	Electrical Connection Line	Non-Participating
Barn	40 feet south	Electrical Connection Line	Participating
Barn	40 feet south	Electrical Connection Line	Participating
Barn	40 feet south	Electrical Connection Line	Participating
House	40 feet north	Site Road	Non-Participating
Silo	40 feet north	Site Road	Participating
Barn	45 feet south	Electrical Connection Line	Participating
Tank	50 feet west-northwest	Electrical Connection Line	Participating
House	50 feet northwest	Electrical Connection Line	Participating
Garage	50 feet north	Site Road	Non-Participating
Barn	50 feet west	Site Road	Non-Participating
Outbuilding	55 feet south	Electrical Connection Line	Participating
Barn	55 feet southeast	Electrical Connection Line	Participating
Garage	55 feet west	Site Road	Non-Participating
Garage	60 feet north	Electrical Connection Line	Non-Participating
Garage	60 feet southeast	Electrical Connection Line	Participating
Garage	60 feet north	Electrical Connection Line	Non-Participating
House	60 feet north-northeast	Site Road	Non-Participating
Barn	60 feet south	Site Road	Participating
House	65 feet north	Site Road	Non-Participating
Barn	65 feet southeast	Site Road	Non-Participating
House	65 feet east	Site Road	Non-Participating
House	70 feet north	Electrical Connection Line	Non-Participating
Tower	70 feet west-northwest	Electrical Connection Line	Participating
Barn	70 feet north	Electrical Connection Line	Non-Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
House	70 feet west	Site Road	Non-Participating
Barn	70 feet west	Site Road	Non-Participating
House	70 feet south	Site Road	Non-Participating
House	75 feet north	Electrical Connection Line	Participating
House	75 feet south-southeast	Electrical Connection Line	Non-Participating
House	80 feet southeast	Electrical Connection Line	Participating
House	80 feet west	Electrical Connection Line	Non-Participating
Trailer	85 feet west	Electrical Connection Line	Participating
House	85 feet north	Site Road	Participating
Barn	85 feet south-southwest	Site Road	Non-Participating
Barn	85 feet east	Site Road	Participating
Barn	90 feet east-southeast	Electrical Connection Line	Participating
Barn	90 feet southwest	Electrical Connection Line	Participating
House	90 feet east-southeast	Site Road	Participating
House	90 feet northeast	Site Road	Non-Participating
House	90 feet west	Site Road	Non-Participating
House	95 feet north	Electrical Connection Line	Non-Participating
Outbuilding	95 feet southwest	Site Road	Non-Participating
House	95 feet north-northeast	Site Road	Non-Participating
House	95 feet south-southeast	Site Road	Non-Participating
House	100 feet west-northwest	Cranewalk	Participating
Outbuilding	100 feet west	Electrical Connection Line	Participating
Garage	100 feet northwest	Electrical Connection Line	Non-Participating
Barn	100 feet southeast	Electrical Connection Line	Participating
House	100 feet west	Site Road	Participating
House	100 feet east-southeast	Site Road	Non-Participating
Garage	105 feet northwest	Electrical Connection Line	Participating
Garage	105 feet west-northwest	Electrical Connection Line	Participating
Barn	105 feet west	Electrical Connection Line	Participating
House	105 feet north-northeast	Electrical Connection Line	Participating
Barn	105 feet south	Electrical Connection Line	Non-Participating
Barn	105 feet southwest	Site Road	Non-Participating
Barn	105 feet southeast	Site Road	Non-Participating
Barn	105 feet southwest	Site Road	Participating
House	110 feet east	Electrical Connection Line	Participating
Barn	110 feet west	Site Road	Non-Participating
House	115 east-northeast	Electrical Connection Line	Non-Participating
House	115 feet south- southwest	Electrical Connection Line	Participating
Barn	115 feet southwest	Site Road	Non-Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
Tanks	120 feet northwest	Electrical Connection Line	Non-Participating
Barn	120 feet east-southeast	Site Road	Participating
House	120 feet south	Site Road	Non-Participating
House	125 feet east	Cranewalk	Non-Participating
House	125 feet southeast	Electrical Connection Line	Participating
House	125 feet west-northwest	Electrical Connection Line	Participating
House	125 feet northeast	Electrical Connection Line	Non-Participating
Barn	125 feet southeast	Electrical Connection Line	Participating
Barn	125 feet south	Electrical Connection Line	Non-Participating
Garage	125 feet north-northeast	Site Road	Non-Participating
Restaurant	125 feet northeast	Site Road	Participating
Barn	130 feet west-northwest	Cranewalk	Participating
Barn	130 feet south	Electrical Connection Line	Non-Participating
Barn	130 feet south	Site Road	Participating
Garage	135 feet north	Electrical Connection Line	Participating
Tanks	135 feet northwest	Electrical Connection Line	Participating
Garage	135 feet east	Electrical Connection Line	Participating
House	135 feet north	Electrical Connection Line	Non-Participating
House	135 feet east	Site Road	Non-Participating
Barn	140 feet west-southwest	Electrical Connection Line	Participating
Barn	140 feet west-southwest	Electrical Connection Line	Participating
House	140 feet west-northwest	Electrical Connection Line	Participating
Barn	140 feet south	Electrical Connection Line	Participating
Barn	140 feet west	Electrical Connection Line	Participating
Barn	140 feet east	Site Road	Non-Participating
Barn	140 feet southeast	Site Road	Non-Participating
House	140 feet west	Site Road	Non-Participating
Barn	140 feet west	Site Road	Non-Participating
Barn	145 feet north	Electrical Connection Line	Participating
Barn	145 feet north	Electrical Connection Line	Non-Participating
Barn	145 feet southeast	Site Road	Participating
House	145 feet south- southwest	Site Road	Non-Participating
Barn	145 feet west	Site Road	Non-Participating
House	145 east-southeast	Site Road	Non-Participating
Outbuilding	145 feet southeast	Site Road	Non-Participating
Barn	150 feet southeast	Electrical Connection Line	Participating
Garage	150 feet northwest	Electrical Connection Line	Non-Participating
Outbuilding	150 feet north	Site Road	Non-Participating
Barn	150 feet southeast	Site Road	Non-Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
House	150 feet southwest	Site Road	Participating
Barn	150 feet south- southwest	Site Road	Non-Participating
Barn	150 feet northeast	Site Road	Participating
Barn	155 feet east-southeast	Electrical Connection Line	Participating
House	155 feet northwest	Electrical Connection Line	Non-Participating
House	155 feet south	Site Road	Non-Participating
Outbuilding	155 feet north	Site Road	Non-Participating
Barn	155 feet east-southeast	Site Road	Non-Participating
Barn	155 feet east-southeast	Site Road	Participating
Barn	155 feet southwest	Site Road	Participating
Barn	160 feet west-northwest	Electrical Connection Line	Participating
Barn	160 feet southeast	Electrical Connection Line	Participating
Barn	160 feet southeast	Electrical Connection Line	Participating
House	160 feet north	Electrical Connection Line	Participating
House	160 feet south-southeast	Site Road	Participating
Silo	160 feet southwest	Site Road	Non-Participating
House	165 feet northwest	Electrical Connection Line	Non-Participating
Barn	165 feet south	Electrical Connection Line	Participating
Trailer	165 feet north-northeast	Electrical Connection Line	Non-Participating
Barn	165 feet east	Site Road	Participating
Garage	165 feet north	Site Road	Participating
Barn	165 feet northeast	Site Road	Non-Participating
Barn	170 feet east-northeast	Electrical Connection Line	Participating
Barn	170 feet north	Electrical Connection Line	Non-Participating
Silo	170 feet southeast	Electrical Connection Line	Participating
House	170 feet northwest	Electrical Connection Line	Non-Participating
Barn	170 feet southwest	Electrical Connection Line	Participating
Garage	170 feet south	Potential O&M	Non-Participating
Garage	170 feet north	Site Road	Non-Participating
Barn	170 feet north	Site Road	Non-Participating
Garage	170 feet south-southeast	Site Road	Non-Participating
Barn	170 feet north-northwest	Site Road	Participating
Barn	170 feet east	Site Road	Participating
House	170 feet northwest	Site Road	Non-Participating
Barn	170 feet east-northeast	Site Road	Participating
House	170 feet east	Site Road	Non-Participating
Barn	175 feet southwest	Electrical Connection Line	Participating
House	175 feet north-northwest	Site Road	Non-Participating
Silo	175 feet east	Site Road	Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel
Barn	180 feet northwest	Electrical Connection Line	Participating
Barn	180 feet northwest	Electrical Connection Line	Non-Participating
House	180 feet northwest	Electrical Connection Line	Non-Participating
House	180 feet east-northeast	Electrical Connection Line	Non-Participating
Barn	180 feet north	Electrical Connection Line	Participating
Garage	180 feet south	Site Road	Non-Participating
House	180 feet southwest	Site Road	Non-Participating
Garage	180 feet northwest	Site Road	Non-Participating
Silo	180 feet east	Site Road	Participating
Trailer	180 feet east-northeast	Site Road	Participating
House	180 feet east	Site Road	Non-Participating
Barn	180 feet southeast	Site Road	Non-Participating
Barn	180 feet northeast	Site Road	Non-Participating
Barn	185 feet west	Electrical Connection Line	Participating
Silo	185 feet southeast	Electrical Connection Line	Participating
House	185 feet northeast	Site Road	Non-Participating
Barn	185 feet southeast	Site Road	Non-Participating
Garage	190 feet northwest	Electrical Connection Line	Non-Participating
Barn	190 feet north	Electrical Connection Line	Non-Participating
House	190 feet west-northwest	Site Road	Non-Participating
Outbuilding	195 feet west-northwest	Electrical Connection Line	Participating
Barn	195 feet west	Electrical Connection Line	Participating
Barn	195 feet northeast	Electrical Connection Line	Non-Participating
House	195 feet southwest	Site Road	Non-Participating
Barn	195 feet south	Site Road	Non-Participating
House	200 feet south-southeast	Electrical Connection Line	Participating
Garage	200 feet southeast	Electrical Connection Line	Participating
Barn	200 feet south	Electrical Connection Line	Participating
House	200 feet east-southeast	Electrical Connection Line	Participating
House	200 feet northeast	Electrical Connection Line	Participating
Barn	200 feet northwest	Electrical Connection Line	Non-Participating
Barn	200 feet north	Electrical Connection Line	Participating
House	200 feet southeast	Site Road	Participating
Barn	200 feet northwest	Site Road	Participating
Outbuilding	200 feet southeast	Site Road	Non-Participating
House	200 feet southeast	Site Road	Non-Participating
Barn	205 feet east-northeast	Electrical Connection Line	Non-Participating
Barn	205 feet west-northwest	Site Road	Participating
Barn	205 feet northeast	Site Road	Non-Participating
Barn	205 feet northwest	Site Road	Participating

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel		
Silo	210 feet west-northwest	Cranewalk	Participating		
Barn	210 feet southeast	Electrical Connection Line	Participating		
Barn	210 feet northwest	Electrical Connection Line	Participating		
Garage	210 feet north	Electrical Connection Line	Participating		
Barn	210 feet east	Electrical Connection Line	Participating		
Garage	210 feet north	Site Road	Non-Participating		
Barn	210 feet north-northeast	Site Road	Non-Participating		
House	210 feet north-northeast	Site Road	Participating		
Barn	210 feet south	Site Road	Participating		
House	215 feet south	Electrical Connection Line	Participating		
Barn	215 feet northwest	Site Road	Participating		
House	215 feet east	Site Road	Non-Participating		
Barn	215 feet east	Site Road	Non-Participating		
Barn	215 feet east	Site Road	Non-Participating		
Garage	215 feet east-southeast	Site Road	Non-Participating		
House	220 feet southeast	Site Road	Non-Participating		
Barn	220 feet north	Site Road	Non-Participating		
House	220 feet north-northwest	Site Road	Participating		
Garage	220 feet east-southeast	Site Road	Non-Participating		
House	220 feet north	Site Road	Non-Participating		
Outbuilding	220 feet northwest	Site Road	Non-Participating		
Outbuilding	220 feet east-southeast	Site Road	Participating		
Silo	225 feet west-northwest	Cranewalk	Participating		
Garage	225 feet southeast	Electrical Connection Line	Participating		
Garage	225 feet south- southwest	Electrical Connection Line	Participating		
Silo	230 feet southeast	Electrical Connection Line	Participating		
Garage	230 feet north	Electrical Connection Line	Non-Participating		
House	230 feet north	Site Road	Non-Participating		
Barn	230 feet east	Site Road	Participating		
House	230 feet southeast	Site Road	Non-Participating		
Garage	230 feet northwest	Site Road	Non-Participating		
House	230 feet northeast	Site Road	Participating		
Barn	230 feet east-southeast	Site Road	Participating		
Barn	234 feet southeast	Site Road	Non-Participating		
Trailer	235 feet northeast	Electrical Connection Line	Participating		
House	235 feet east-southeast	Electrical Connection Line	Non-Participating		
Trailer	235 feet southwest	Site Road	Non-Participating		
Garage	235 feet northeast	Site Road	Participating		
Trailer	240 feet northwest	Electrical Connection Line	Non-Participating		

Structure Type	Distance and Direction to Nearest Project Component	Closest Project Component	Lease Status of Underlying Parcel		
House	240 feet west	Electrical Connection Line	Non-Participating		
House	240 feet northwest	Electrical Connection Line	Non-Participating		
Garage	240 feet northwest	Electrical Connection Line	Non-Participating		
Barn	240 feet southwest	Site Road	Non-Participating		
Barn	245 feet west	Site Road	Non-Participating		
Garage	250 feet northwest	Electrical Connection Line	Non-Participating		
House	250 feet south	Electrical Connection Line	Non-Participating		
Outbuilding	250 feet southwest	Electrical Connection Line	Participating		
Silos	250 feet southeast	Electrical Connection Line	Participating		
Trailer	250 feet northeast	Electrical Connection Line	Participating		
House	250 feet south	Electrical Connection Line	Participating		
House	250 feet southeast	Electrical Connection Line	Participating		
Barn	250 feet southeast	Electrical Connection Line	Non-Participating		
House	250 feet west	Electrical Connection Line	Non-Participating		
Barn	250 feet southeast	Electrical Connection Line	Participating		
Barn	250 feet southwest	Electrical Connection Line	Non-Participating		
Barn	250 feet east	Site Road	Non-Participating		
Garage	250 feet southwest	Site Road	Non-Participating		

Attachment D: 2017 Raptor Report

TECHNICAL MEMORANDUM

Date:	May 9, 2017
То:	Ed Shoener, Shoener Environmental
From:	Jason Ritzert, Western EcoSystems Technology, Inc. (WEST)
Subject:	Raptor Nest Survey Results for the Seneca Wind Project

INTRODUCTION

This memorandum summarizes the results of 2017 surveys for raptor nests conducted in the Seneca Wind Project (the Project or Project area) located in Seneca County, Ohio. The objective of the survey was to identify raptor species nesting within 1 mile (mi; 1.6 kilometers [km]) of the Project area that may be subject to disturbance and/or displacement effects from Project development and operation.

Suitable raptor nesting habitat is present in the Project area and 1 mi buffer in the form of deciduous trees and man-made structures such as power poles. One survey for raptor nests was conducted in late March and early April 2017 prior to leaf out. The survey consisted of searching suitable nesting areas from public roads within the Project area and a 1-mi buffer.

METHODS

The survey effort focused on species that build large nest structures, such as bald eagle (*Haliaeetus leucocephalus*) and red-tailed hawk (*Buteo jamaicensis*). However, areas containing grassland were also surveyed for ground nesting species, such as northern harriers (*Circus cyaneus*). Other species that nest on the ground or species that nest in cavities were recorded if observed, but were not the focus of surveys. Areas with potentially suitable habitat were viewed with binoculars and spotting scopes, and searched for potential raptor nest structures. Potential nest locations were recorded on recent aerial photographs, and digitized in a geographical information system (GIS), ArcGIS 10.

Data recorded for each nest site included nest status (active or inactive), the number of adults and young present, species occupying nest site, behavior of adults at the nest, nest condition (poor, fair, good), nest location (global positioning system [GPS] coordinates) and nest substrate.

Terminology

Included below are descriptions of terms used during the documentation of nests (see Table 1).

Nest ID

A unique nest identification number was assigned to each nest documented.

Species

A species was assigned to each nest where possible. When a nest could not be identified to species it was classified as an unknown raptor nest or unknown eagle nest. Nest size, location on the landscape, the nest substrate, and location on the nest substrate was used to determine if a large unoccupied stick nest was consistent with the size and placement of an eagle nest. Bald eagle nests are typically placed near the tops of live trees in a main fork that can support the weight of the nest, and are typically a large open platform. Bald eagle nests occur in deciduous or coniferous trees (Buehler 2000). Osprey (*Pandion haliaetus*) nests are typically placed in dead trees or in broken off branches of live trees, and are often located over water or adjacent to large waterbodies, and are typically flat and unkempt. Osprey nests are typically placed in deciduous trees either live or dead. Ospreys also regularly use artificial structures such as communications towers, powerline towers, or nesting platforms (Poole et al.2002). Unknown raptor nests, including old nests or nests that could become suitable for raptors, were documented in order to populate a nest database to ensure that future surveys include all potentially suitable nest sites.

Nest Type

Nest type describes the size and material used for nesting. General nest types included:

- Small Stick Nest roughly eight to 10 inches (in; 20 to 25 centimeters [cm]) in diameter, bowl-shaped, comprised of small sticks, grasses, mud and other material, and typical of nests used by accipiter species.
- Medium Stick Nest typically 10 to 20 in (25 to 51 cm) in diameter, bowl-shaped, comprised of larger sticks, and typical of nests used by Buteo species.
- Large Stick Nest typically greater than 20 in (51 cm) in diameter, large bowl or flat platform-shaped, comprised of intertwined large sticks from trees, shrubs or other scrub species, and typical of nests used by eagles or osprey.

Nest Condition

Nest condition was subjectively categorized using descriptions ranging from poor to excellent. Nests in poor to fair condition appeared in disrepair, were sloughing, or sagging heavily, and would require some level of effort to rebuild in order to be suitable for successful nesting. Nests in good to excellent condition were those that appeared to have been well maintained, had a well-defined bowl shape, were not sagging or sloughing, and appeared to be suitable for nesting.

Substrate

The substrate in which a nest was observed was recorded to provide observers a visual reference. Substrates included manmade structures, such as power line poles, nest platforms, and conifer or deciduous trees.

Nest Status

Basic nest use was categorized following definitions from the US Fish and Wildlife Service (USFWS) Eagle Conservation Plan Guidance (USFWS 2013). Nests were classified as occupied if any of the following were observed at the nest structure: (1) an adult in an incubating position, (2) eggs, (3) nestlings or fledglings, (4) occurrence of a pair of adults (or, sometimes sub-adults), (5) a newly constructed or refurbished stick nest in the area where territorial behavior of a raptor had been observed early in the breeding season, or (6) a recently repaired nest with fresh sticks (clean breaks) or fresh boughs on top, and/or droppings and/or molted feathers on its rim or underneath. Occupied nests were further classified as active if an egg or eggs had been laid or nestlings were observed, or inactive if no eggs or chicks were present. A nest that does not meet the above criteria for "occupied" was classified as "unoccupied".

RESULTS

During the survey, three active bald eagle nests, eight active red-tailed hawk nests, one active Cooper's hawk (*Accipiter cooperil*) nest, one great horned owl nest (*Bubo virginianus*), and 17 inactive unknown raptor species nests were observed within the Project area (Figure 1). An additional four active red-tailed hawk nests, one active great horned owl nest, and 13 inactive unknown raptor species nests were observed within the 1 mi (1.2 km) buffer of the Project area. The inactive unknown raptor species nests were likely constructed by red-tailed hawks, based on their size and the relative abundance of this species in the Project area and 1 mi (1.2 km) buffer. However, the inactive nests could also be used by other raptor species, such as Cooper's hawk or great horned owl. No northern harriers were observed during the raptor nest survey.

Nest	Survey		-	Nest	Nest		UTM	NAD83	Consistent with bald	-
ID	Date	Species ¹	Nest Status	Туре	Condition	Substrate	Easting	Northing	eagle nest?	Comments
SN01	3/30/2017	UNK	unoccupied - inactive	medium stick	good	deciduous tree	331099	4539107	no	
SN02	3/30/2017	UNK	unoccupied - inactive	large stick	good	oak species	325077	4539522	no	
SN03	3/30/2017	UNK	unoccupied - inactive	large stick	good	deciduous tree	321944	4539560	no	
SN04	3/30/2017	GHOW	occupied- active	large stick	good	deciduous tree	320195	4538780	no	
SN05	3/30/2017	UNK	unoccupied - inactive	medium stick	dilapidated	deciduous tree	320542	4540352	no	
SN06	3/30/2017	UNK	unoccupied - inactive	medium stick	good	oak species	326639	4543167	no	
SN07	3/30/2017	UNK	unoccupied - inactive	large stick	dilapidated	deciduous tree	325930	4542904	no	
SN08	3/30/2017	RTHA	occupied- active	large stick	good	maple species	325220	4541890	no	adult in incubating position Possibly an incomplete BAEA nest. One BAEA flew 400 meters southeast of nest. Two adults observed near
SN09	3/30/2017	UNK	unoccupied - inactive	large stick	fair	white pine	325964	4544980	possibly	nest location on previous date.
SN10	3/30/2017	UNK	unoccupied - inactive	medium stick	fair	hickory species	327817	4543599	no	
SN11	3/30/2017	UNK	unoccupied - inactive	large stick	fair	deciduous tree	329730	4543562	no	

Table 1. Raptor nest details for the Seneca Wind Project and 1 mile (1.2 kilometer) buffer, Spring 2017.

Nest	Survey	-	-	Nest	Nest	-	UTM	NAD83	Consistent with bald	
ID	Date	Species ¹	Nest Status	Туре	Condition	Substrate	Easting	Northing	eagle nest?	Comments
SN12	3/30/2017	СОНА	occupied- active	large stick	fair	oak species	324653	4545034	no	nest building
SN13	3/30/2017	RTHA	occupied- active	large stick	good	deciduous tree	329878	4547010	no	
SN14	3/30/2017	UNK	unoccupied - inactive	large stick	fair	deciduous tree	326656	4549618	no	
SN15	3/30/2017	UNK	unoccupied - inactive	large stick	good	deciduous tree	324805	4549183	no	
SN16	3/30/2017	BAEA	occupied- active	large stick	good	sycamore	324569	4548374	yes	adult in incubating position
SN17	3/30/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	330056	4546053	no	
SN18	3/30/2017	UNK	unoccupied - inactive	large stick	good	oak species	330716	4545086	no	
SN19	3/30/2017	BAEA	occupied- active	large stick	good	beech species	329989	4540990	yes	adult in incubating position
SN20	3/30/2017	UNK	unoccupied - inactive	medium stick	good	deciduous tree	325717	4543096	no	
SN21	3/30/2017	UNK	unoccupied - inactive	medium stick	good	maple species	325618	4540647	no	
SN22	4/3/2017	UNK	unoccupied	medium stick	fair	deciduous tree	331289	4555336	no	
SN23	4/3/2017	UNK	unoccupied - inactive	medium stick	dilapidated	deciduous tree	328768	4555494	no	
SN24	4/3/2017	RTHA	occupied- active	large stick	good	deciduous tree	328760	4555161	no	adult in incubating position
SN25	4/3/2017	RTHA	occupied- active	large stick	good	deciduous tree	324367	4550739	no	adult in incubating position

Table 1. Raptor nest details for the Seneca Wind Project and 1 mile (1.2 kilometer) buffer, Spring 2017.

Nest	Survey	-	-	Nest	Nest	-	UTM NAD83		Consistent with bald	-
ID	Date	Species ¹	Nest Status	Туре	Condition	Substrate	Easting	Northing	eagle nest?	Comments
SN26	4/3/2017	RTHA	occupied- active	large stick	good	deciduous tree	325897	4551072	no	adult in incubating position
SN27	4/3/2017	RTHA	occupied- active	medium stick	good	deciduous tree	327735	4552586	no	adult in incubating position
SN28	4/10/2017	UNK	unoccupied - inactive	large stick	good	maple species	324407	4538654	no	
SN29	4/10/2017	RTHA	occupied- active	large stick	good	deciduous tree	455396 1	334594	no	adult in incubating position
SN30	4/10/2017	UNK	unoccupied - inactive	large stick	good	deciduous tree	336671	4554997	no	
SN31	4/10/2017	GHOW	occupied- active	large stick	good	deciduous tree	337450	4554729	no	two nestlings present
SN32	4/10/2017	UNK	unoccupied - inactive	medium stick	fair	maple species	338106	4556124	no	
SN33	4/10/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	337657	4553142	no	
SN34	4/10/2017	UNK	unoccupied - inactive	medium stick	good	oak species	339498	4556902	no	
SN35	4/11/2017	RTHA	occupied- active	medium stick	good	deciduous tree	342316	4557339	no	adult in incubating position one adult in incubating
SN36	4/11/2017	RTHA	occupied- active	large stick	good	deciduous tree	331220	4553155	no	position/second adult flew past nest to the north
SN37	4/11/2017	UNK	unoccupied - inactive	large stick	fair	deciduous tree	338385	4551996	no	

 Table 1. Raptor nest details for the Seneca Wind Project and 1 mile (1.2 kilometer) buffer, Spring 2017.

Nest	Survey	-	-	Nest	Nest	-	UTM	NAD83	Consistent with bald	-
ID	Date	Species ¹	Nest Status	Туре	Condition	Substrate	Easting	Northing	eagle nest?	Comments
SN38	4/11/2017	RTHA	occupied- active	large stick	good	deciduous tree	342154	4551739	no	adult in incubating position
SN39	4/11/2017	RTHA	occupied- active	large stick	good	deciduous tree	334404	4555518	no	adult in incubating position
SN40	4/11/2017	BAEA	occupied- active	large stick	good	deciduous tree	332593	4549096	yes	One adult standing in nest
SN41	4/11/2017	UNK	unoccupied - inactive	medium stick	dilapidated	deciduous tree	334585	4547280	no	
SN42	4/11/2017	UNK	unoccupied - inactive	large stick	fair	deciduous tree	335355	4547729	no	
SN43	4/11/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	333900	4545517	no	
SN44	4/17/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	345464	4544733	no	
SN45	4/17/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	344904	4546853	no	
SN46	4/17/2017	UNK	unoccupied - inactive	medium stick	fair	deciduous tree	345814	4548682	no	
SN47	4/17/2017	RTHA	occupied- active	large stick	good	deciduous tree	345783	4549989	no	adult in incubating position
SN48	4/17/2017	UNK	unoccupied - inactive	large stick	fair	deciduous tree	343347	4550246	no	

Table 1. Raptor nest details for the Seneca Wind Project and 1 mile (1.2 kilometer) buffer, Spring 2017.

¹UNK = unknown raptor; BAEA = bald eagle; GHOW = great horned owl; COHA = Cooper's hawk; RTHA = red-tailed hawk

Figure 1. Raptor nest survey results for the Seneca Wind Project and 1 mile (1.2 kilometer) buffer, Spring 2017.

REFERENCES

- Buehler, David A. 2000. Bald Eagle (Haliaeetus leucocephalus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America
- Poole, Alan F., Rob O. Bierregaard and Mark S. Martell. 2002. Osprey (*Pandion haliaetus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America
- US Fish and Wildlife Service (USFWS). 2013. Eagle Conservation Plan Guidance. Module 1 Land-Based Wind Energy. Version 2. Division of Migratory Bird Management, USFWS. April 2013. Available online at: <u>http://www.fws.gov/migratorybirds/Eagle_Conservation_Plan_Guidance-Module%201.pdf</u>

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

9/14/2018 4:02:20 PM

in

Case No(s). 18-0488-EL-BGN

Summary: Text Seneca Wind, LLC Supplement to Application, Part 2 of 2 electronically filed by Teresa Orahood on behalf of Devin D. Parram