

ATTACHMENT 1

Table A-1: Crowned Ridge Wind Farm 200 MW
GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's
Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53
UTM NAD83 Zone 14

WTG	Type	Turbine Model	Easting (m)	Northing (m)	Base Elev. AMSL (m)	Sound Profile
CRI-20	Primary	GE2.3 116RD 90HH r2.madE	659,920	4,994,924	594.0	LNTE
CRI-21	Primary	GE2.3 116RD 90HH r2.madE	657,925	4,994,896	617.1	Normal
CRI-22	Primary	GE2.3 116RD 90HH r2.madE	656,543	4,994,796	616.5	LNTE
CRI-24	Primary	GE2.3 116RD 90HH r2.madE	655,852	4,994,652	609.0	LNTE
CRI-25	Primary	GE2.3 116RD 90HH r2.madE	658,251	4,994,286	605.5	LNTE
CRI-26	Primary	GE2.3 116RD 90HH r2.madE	665,405	4,994,191	578.5	Normal
CRI-27	Primary	GE2.3 116RD 90HH r2.madE	657,442	4,994,187	621.0	Normal
CRI-28	Primary	GE2.3 116RD 90HH r2.madE	664,517	4,994,168	579.0	Normal
CRI-29	Primary	GE2.3 116RD 90HH r2.madE	655,940	4,994,069	606.9	Curtailed
CRI-30	Primary	GE2.3 116RD 90HH r2.madE	659,871	4,994,052	593.7	Normal
CRI-31	Primary	GE2.3 116RD 90HH r2.madE	655,030	4,994,051	603.0	LNTE
CRI-32	Primary	GE2.3 116RD 90HH r2.madE	660,704	4,993,998	606.0	LNTE
CRI-33	Primary	GE2.3 116RD 90HH r2.madE	656,566	4,993,941	618.0	Normal
CRI-34	Primary	GE2.3 116RD 90HH r2.madE	658,966	4,993,856	599.7	Normal
CRI-35	Primary	GE2.3 116RD 90HH r2.madE	657,602	4,993,347	607.4	Normal
CRI-36	Primary	GE2.3 116RD 90HH r2.madE	659,966	4,993,319	594.0	LNTE
CRI-37	Primary	GE2.3 116RD 90HH r2.madE	664,419	4,993,110	587.3	Normal
CRI-38	Primary	GE2.3 116RD 90HH r2.madE	658,338	4,992,981	600.5	Normal
CRI-39	Primary	GE2.3 116RD 90HH r2.madE	656,507	4,992,958	609.0	Normal
CRI-41	Primary	GE2.3 116RD 90HH r2.madE	663,782	4,992,883	597.7	Normal
CRI-43	Primary	GE2.3 116RD 90HH r2.madE	666,181	4,992,815	577.9	Normal
CRI-44	Primary	GE2.3 116RD 90HH r2.madE	665,665	4,992,460	576.0	Curtailed
CRI-46	Primary	GE2.3 116RD 90HH r2.madE	664,387	4,992,505	591.0	Normal
CRI-48	Primary	GE2.3 116RD 90HH r2.madE	663,794	4,991,782	587.1	Curtailed
CRI-50	Primary	GE2.3 116RD 90HH r2.madE	662,930	4,991,655	612.0	Normal
CRI-51	Primary	GE2.3 116RD 90HH r2.madE	666,299	4,991,723	575.3	Normal
CRI-52	Primary	GE2.3 116RD 90HH r2.madE	665,441	4,991,398	575.5	Normal
CRI-53	Primary	GE2.3 116RD 90HH r2.madE	659,750	4,990,981	598.7	LNTE
CRI-54	Primary	GE2.3 116RD 90HH r2.madE	665,979	4,990,946	573.7	Normal
CRI-55	Primary	GE2.3 116RD 90HH r2.madE	659,045	4,990,899	597.1	Normal
CRI-58	Primary	GE2.3 116RD 90HH r2.madE	665,663	4,990,303	585.0	Normal
CRI-59	Primary	GE2.3 116RD 90HH r2.madE	666,523	4,990,291	573.0	Normal
CRI-61	Primary	GE2.3 116RD 90HH r2.madE	662,982	4,990,178	612.0	Normal
CRI-62	Primary	GE2.3 116RD 90HH r2.madE	660,954	4,990,170	600.8	Normal
CRI-63	Primary	GE2.3 116RD 90HH r2.madE	664,627	4,989,977	588.6	Normal
CRI-64	Primary	GE2.3 116RD 90HH r2.madE	663,858	4,990,188	604.3	Normal
CRI-65	Primary	GE2.3 116RD 90HH r2.madE	661,732	4,989,898	609.0	Normal
CRI-66	Primary	GE2.3 116RD 90HH r2.madE	663,165	4,989,613	614.7	Normal
CRI-69	Primary	GE2.3 116RD 80HH r2.madE	660,621	4,989,453	605.6	Normal
CRI-70	Primary	GE2.3 116RD 90HH r2.madE	662,171	4,989,319	611.0	Normal
CRI-71	Primary	GE2.3 116RD 80HH r2.madE	659,405	4,989,320	607.3	Normal

Table A-1: Crowned Ridge Wind Farm 200 MW
GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's
Curtailment with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53
UTM NAD83 Zone 14
continued

WTG	Type	Turbine Model	Easting (m)	Northing (m)	Base Elev. AMSL (m)	Sound Profile
CRI-72	Primary	GE2.3 116RD 80HH r2.madE	660,087	4,989,309	606.0	Normal
CRI-73	Primary	GE2.3 116RD 90HH r2.madE	661,344	4,989,297	609.8	Normal
CRI-74	Primary	GE2.3 116RD 90HH r2.madE	663,041	4,988,744	615.0	Normal
CRI-75	Primary	GE2.3 116RD 90HH r2.madE	664,137	4,988,702	609.0	Normal
CRI-76	Primary	GE2.3 116RD 90HH r2.madE	662,399	4,988,667	615.0	Normal
CRI-77	Primary	GE2.3 116RD 80HH r2.madE	659,158	4,988,642	612.0	Normal
CRI-78	Primary	GE2.3 116RD 80HH r2.madE	660,811	4,988,558	604.1	Normal
CRI-80	Primary	GE2.3 116RD 90HH r2.madE	661,552	4,988,481	608.8	Normal
CRI-81	Primary	GE2.3 116RD 90HH r2.madE	659,825	4,988,365	606.8	Normal
CRI-82	Primary	GE2.3 116RD 90HH r2.madE	663,271	4,988,133	613.0	Normal
CRI-83	Primary	GE2.3 116RD 90HH r2.madE	662,227	4,988,103	606.6	Normal
CRI-84	Primary	GE2.3 116RD 80HH r2.madE	660,677	4,987,880	600.6	Normal
CRI-85	Primary	GE2.3 116RD 90HH r2.madE	659,295	4,987,798	612.0	Normal
CRI-86	Primary	GE2.3 116RD 90HH r2.madE	658,534	4,987,759	613.1	Normal
CRI-87	Primary	GE2.3 116RD 90HH r2.madE	661,830	4,987,596	609.0	Normal
CRI-88	Primary	GE2.3 116RD 90HH r2.madE	660,157	4,987,492	603.0	Normal
CRI-89	Primary	GE2.3 116RD 90HH r2.madE	657,758	4,986,926	614.9	Normal
CRI-90	Primary	GE2.3 116RD 90HH r2.madE	658,545	4,986,881	612.0	Normal
CRI-91	Primary	GE2.3 116RD 90HH r2.madE	657,023	4,986,868	612.0	Normal
CRI-92	Primary	GE2.3 116RD 80HH r2.madE	660,039	4,986,804	607.2	Normal
CRI-93	Primary	GE2.3 116RD 80HH r2.madE	659,133	4,986,700	607.9	Normal
CRI-94	Primary	GE2.3 116RD 80HH r2.madE	660,716	4,986,660	600.6	Normal
CRI-95	Primary	GE2.3 116RD 90HH r2.madE	657,488	4,986,184	612.0	Curtailed
CRI-96	Primary	GE2.3 116RD 90HH r2.madE	656,744	4,986,037	609.0	Normal
CRI-97	Primary	GE2.3 116RD 90HH r2.madE	655,899	4,985,715	592.7	Normal
CRI-98	Primary	GE2.3 116RD 90HH r2.madE	657,015	4,985,192	608.9	Normal
CRI-99	Primary	GE2.3 116RD 90HH r2.madE	672,521	4,990,188	556.7	Normal
CRI-100	Primary	GE2.3 116RD 90HH r2.madE	668,885	4,990,286	585.0	Normal
CRI-101	Primary	GE2.3 116RD 90HH r2.madE	672,921	4,990,513	544.6	Normal
CRI-102	Primary	GE2.3 116RD 90HH r2.madE	668,059	4,991,023	581.0	Normal
CRI-103	Primary	GE2.3 116RD 90HH r2.madE	669,279	4,991,115	582.0	Normal
CRI-104	Primary	GE2.3 116RD 90HH r2.madE	672,009	4,991,151	555.0	Normal
CRI-105	Primary	GE2.3 116RD 90HH r2.madE	670,488	4,991,091	571.6	Normal
CRI-106	Primary	GE2.3 116RD 90HH r2.madE	671,278	4,991,335	566.2	Normal
CRI-107	Primary	GE2.3 116RD 90HH r2.madE	667,723	4,991,800	582.0	Normal
CRI-108	Primary	GE2.3 116RD 90HH r2.madE	672,917	4,991,775	541.2	Normal
CRI-109	Primary	GE2.3 116RD 90HH r2.madE	670,897	4,992,616	557.4	Normal
CRI-111	Primary	GE2.3 116RD 90HH r2.madE	671,220	4,993,526	550.6	Normal
CRI-112	Primary	GE2.3 116RD 90HH r2.madE	670,419	4,993,665	561.0	Normal
CRI-114	Primary	GE2.3 116RD 90HH r2.madE	669,318	4,994,256	561.0	Normal
CRI-117	Primary	GE2.3 116RD 90HH r2.madE	669,488	4,994,930	544.8	Normal

[illegible]

Table A-2: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Receptor ID
Realistic case sound results at land parcel boundaries and occupied structures
Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's
Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53 **Ground Attenuation Factor 0.5**
UTM NAD83 Zone 14 **Curtailed Turbines: 29, 44, 48, 95**
Codington County

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C1-NP	Non-P	Boundary	657,051	4,983,917	590.3	37.7	4,186
CR1-C2-NP	Non-P	Boundary	658,435	4,984,609	601.8	38.4	5,036
CR1-C3-NP	Non-P	Boundary	657,812	4,984,785	603.4	41.1	2,936
CR1-C4-NP	Non-P	Boundary	659,890	4,985,620	605.2	41.9	3,914
CR1-C6-P	Participant	Boundary	663,383	4,994,502	591.0	39.1	3,878
CR1-C7-NP	Non-P	Boundary	660,455	4,985,631	591.0	41.9	3,484
CR1-C8-P	Participant	Boundary	660,476	4,984,821	597.0	38.0	6,086
CR1-C9-NP	Non-P	Boundary	665,264	4,985,116	609.0	33.4	10,840
CR1-C10-P	Participant	Boundary	662,862	4,985,695	601.7	39.2	4,150
CR1-C11-P	Participant	Boundary	663,622	4,985,714	608.8	37.5	5,397
CR1-C12-NP	Non-P	Boundary	662,246	4,986,500	605.1	46.4	1,955
CR1-C13-NP	Non-P	Boundary	663,599	4,986,512	615.0	40.3	3,875
CR1-C14-NP	Non-P	Boundary	657,803	4,986,003	609.0	44.4	1,857
CR1-C15-NP	Non-P	Boundary	662,794	4,986,895	612.9	49.4	1,017
CR1-C16-NP	Non-P	Boundary	661,244	4,986,473	597.0	45.9	1,837
CR1-C17-P	Participant	Boundary	658,819	4,986,842	611.4	52.4	925
CR1-C18-P	Participant	Boundary	663,578	4,987,413	609.4	43.7	2,566
CR1-C19-P	Participant	Boundary	660,393	4,987,529	608.4	52.9	784
CR1-C20-P	Participant	Boundary	662,024	4,987,612	604.2	53.6	640
CR1-C26-P	Participant	Boundary	658,015	4,987,993	606.7	46.1	1,867
CR1-C27-NP	Non-P	Boundary	657,234	4,988,151	587.2	41.7	4,265
CR1-C28-NP	Non-P	Boundary	665,232	4,989,006	583.9	41.6	3,727
CR1-C29-NP	Non-P	Boundary	666,496	4,989,001	574.3	40.0	4,232
CR1-C30-P	Participant	Boundary	661,978	4,989,318	612.8	53.7	1,358
CR1-C31-NP	Non-P	Boundary	665,639	4,989,013	584.7	41.0	4,232
CR1-C32-NP	Non-P	Boundary	657,187	4,989,566	573.2	38.6	7,142
CR1-C33-NP	Non-P	Boundary	657,126	4,990,843	567.0	38.4	6,489
CR1-C34-NP	Non-P	Boundary	658,759	4,990,463	589.4	45.7	2,913
CR1-C35-P	Participant	Boundary	661,955	4,990,153	606.1	49.4	1,112
CR1-C36-P	Participant	Boundary	663,116	4,990,548	610.7	48.4	1,545
CR1-C37-NP	Non-P	Boundary	663,829	4,990,572	594.0	48.4	1,263
CR1-C38-NP	Non-P	Boundary	660,308	4,990,904	591.2	44.5	1,148
CR1-C39-NP	Non-P	Boundary	659,741	4,991,242	583.3	49.4	3,471
CR1-C40-NP	Non-P	Boundary	658,706	4,991,231	579.8	46.0	3,281
CR1-C41-NP	Non-P	Boundary	665,075	4,992,148	578.8	44.5	2,126
CR1-C42-P	Participant	Boundary	658,965	4,993,598	580.1	51.1	846
CR1-C44-NP	Non-P	Boundary	665,447	4,992,972	578.1	46.2	2,162
CR1-C45-NP	Non-P	Boundary	653,821	4,993,552	573.0	35.3	4,291
CR1-C46-NP	Non-P	Boundary	655,723	4,993,574	609.0	41.2	1,772

Table A-2: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Receptor ID

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Coddington County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C47-P	Participant	Boundary	663,454	4,992,888	612.0	48.6	1,076
CR1-C48-P	Participant	Boundary	664,571	4,993,741	586.6	47.0	1,407
CR1-C49-P	Participant	Boundary	662,224	4,993,664	609.0	38.4	5,105
CR1-C50-P	Participant	Boundary	657,048	4,994,159	618.0	47.9	1,299
CR1-C51-P	Participant	Boundary	657,600	4,993,586	620.0	51.9	784
CR1-C52-NP	Non-P	Boundary	654,994	4,995,172	603.0	39.2	3,291
CR1-C53-NP	Non-P	Boundary	664,171	4,995,340	580.5	38.3	4,009
CR1-C54-NP	Non-P	Boundary	663,495	4,995,329	582.9	36.8	5,075
CR1-C55-NP	Non-P	Boundary	660,155	4,994,412	607.0	46.8	1,506
CR1-C56-P	Participant	Boundary	656,199	4,995,194	603.0	44.7	1,726
CR1-C57-P	Participant	Boundary	656,526	4,995,198	616.1	45.8	1,319
CR1-C58-NP	Non-P	Boundary	657,670	4,996,842	615.0	34.2	6,437
CR1-C59-P	Participant	Boundary	660,784	5,000,081	591.5	27.7	17,155
CR1-C60-NP	Non-P	Boundary	656,909	4,998,465	609.3	30.1	12,096
CR1-C61-NP	Non-P	Boundary	656,928	4,997,784	612.0	31.6	9,885
CR1-C62-NP	Non-P	Boundary	658,155	4,994,994	614.5	42.9	820
CR1-C63-NP	Non-P	Boundary	658,543	4,995,211	606.8	40.9	2,277
CR1-C64-P	Participant	Boundary	658,623	4,992,794	576.6	48.9	1,119
CR1-C65-NP	Non-P	Boundary	665,516	4,995,045	578.0	41.0	2,825
CR1-C70-NP	Non-P	Boundary	664,950	4,988,325	596.1	40.0	2,940
CR1-C71-NP	Non-P	Boundary	664,421	4,988,988	600.0	43.3	1,322
CR1-C105-NP	Non-P	Boundary	659,131	5,000,043	609.0	27.8	17,001
CR1-C107-NP	Non-P	Boundary	656,548	4,998,450	595.6	30.0	11,988
CR1-C109-NP	Non-P	Boundary	654,552	4,996,783	592.6	31.8	8,189
CR1-C110-NP	Non-P	Boundary	654,553	4,996,633	588.7	32.2	7,772
CR1-C111-NP	Non-P	Boundary	654,596	4,995,168	599.1	37.3	3,930
CR1-C112-NP	Non-P	Boundary	659,955	4,984,990	604.0	38.9	5,958
CR2-C150-P	Participant	Boundary	655,905	4,985,521	600.0	52.7	636
CR1-C1-NP	Non-P	Structure	656,743	4,983,525	596.0	35.6	5,541
CR1-C2-NP	Non-P	Structure	658,791	4,984,483	602.0	37.6	6,273
CR1-C3-NP	Non-P	Structure	657,888	4,984,697	604.2	40.3	3,294
CR1-C4-NP	Non-P	Structure	659,744	4,984,749	606.0	38.0	6,706
CR1-C5-NP	Non-P	Structure	659,958	4,984,794	604.8	38.1	6,601
CR1-C6-P	Participant	Structure	662,989	4,995,228	599.8	36.2	6,102
CR1-C7-NP	Non-P	Structure	660,893	4,984,861	593.2	37.9	5,932
CR1-C8-P	Participant	Structure	660,532	4,984,445	599.4	36.7	7,293
CR1-C9-NP	Non-P	Structure	665,352	4,985,004	609.0	33.1	11,283
CR1-C10-P	Participant	Structure	663,510	4,985,195	609.0	36.2	6,535

Table A-2: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Receptor ID

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Codington County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C11-P	Participant	Structure	664,111	4,985,679	609.0	36.3	6,676
CR1-C12-1-NP	Non-P	Structure	662,199	4,986,047	606.0	42.0	2,956
CR1-C12-NP	Non-P	Structure	662,222	4,985,736	603.0	40.2	3,921
CR1-C13-NP	Non-P	Structure	663,792	4,985,785	612.0	37.3	5,643
CR1-C14-NP	Non-P	Structure	657,982	4,985,894	609.0	43.7	1,880
CR1-C15-NP	Non-P	Structure	663,291	4,986,026	615.0	39.6	3,907
CR1-C16-NP	Non-P	Structure	661,960	4,986,288	606.0	43.4	2,648
CR1-C17-P	Participant	Structure	658,031	4,986,373	609.1	46.5	1,886
CR1-C18-P	Participant	Structure	663,651	4,987,157	610.4	42.2	3,435
CR1-C19-P	Participant	Structure	659,243	4,987,276	611.6	49.2	1,722
CR1-C20-P	Participant	Structure	663,054	4,987,455	606.0	45.9	2,336
CR1-C21-P	Participant	Structure	660,756	4,984,086	594.0	35.6	8,445
CR1-C22-P	Participant	Structure	660,755	4,984,082	594.0	35.6	8,458
CR1-C23-P	Participant	Structure	660,619	4,984,078	595.8	35.6	8,478
CR1-C26-P	Participant	Structure	657,767	4,988,493	597.0	42.6	3,484
CR1-C27-NP	Non-P	Structure	656,876	4,988,683	583.0	39.2	5,974
CR1-C28-NP	Non-P	Structure	665,429	4,988,598	590.9	39.8	4,252
CR1-C29-NP	Non-P	Structure	666,572	4,988,867	575.9	39.3	4,675
CR1-C30-P	Participant	Structure	661,699	4,988,957	615.0	49.5	1,614
CR1-C31-NP	Non-P	Structure	665,939	4,988,950	585.4	40.4	4,531
CR1-C32-NP	Non-P	Structure	655,843	4,989,581	568.8	35.7	9,708
CR1-C33-NP	Non-P	Structure	656,839	4,990,404	569.8	37.5	7,418
CR1-C34-NP	Non-P	Structure	658,661	4,990,389	588.2	44.4	2,093
CR1-C35-P	Participant	Structure	662,025	4,990,475	609.0	45.5	2,123
CR1-C36-P	Participant	Structure	663,181	4,990,600	615.0	47.5	1,532
CR1-C37-NP	Non-P	Structure	663,563	4,991,342	605.1	42.2	1,631
CR1-C38-NP	Non-P	Structure	660,639	4,991,557	597.0	41.2	3,474
CR1-C39-NP	Non-P	Structure	660,144	4,991,670	588.0	42.3	2,605
CR1-C40-NP	Non-P	Structure	657,865	4,991,818	583.7	42.8	2,690
CR1-C41-NP	Non-P	Structure	665,053	4,992,084	576.1	44.2	2,356
CR1-C42-P	Participant	Structure	659,458	4,992,229	580.0	42.1	3,947
CR1-C44-NP	Non-P	Structure	665,076	4,993,095	578.2	43.8	2,155
CR1-C45-NP	Non-P	Structure	653,390	4,993,503	573.2	33.3	5,673
CR1-C46-NP	Non-P	Structure	655,802	4,993,540	609.1	41.0	1,795
CR1-C47-P	Participant	Structure	662,825	4,993,508	613.9	39.6	3,750
CR1-C48-P	Participant	Structure	664,247	4,993,646	588.0	45.0	1,847
CR1-C49-P	Participant	Structure	662,250	4,993,731	609.0	38.4	5,148
CR1-C50-P	Participant	Structure	656,806	4,994,388	621.0	46.3	1,591

continued

[illegible]

Table A-2: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Receptor ID

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailment with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Grant County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-G12-NP	Non-P	Structure	668,229	4,989,039	575.0	37.5	4,623
CR1-G13-NP	Non-P	Structure	672,216	4,989,142	558.0	38.2	3,576
CR1-G14-NP	Non-P	Structure	668,156	4,989,332	574.1	38.7	3,940
CR1-G15-P	Participant	Structure	668,396	4,989,607	576.0	40.8	2,746
CR1-G16-NP	Non-P	Structure	668,419	4,989,861	576.0	42.9	2,070
CR1-G18-P	Participant	Structure	668,678	4,990,722	585.0	46.6	1,585
CR1-G19-P	Participant	Structure	671,018	4,990,744	570.0	45.0	2,077
CR1-G21-P	Participant	Structure	666,766	4,991,807	577.1	46.1	1,555
CR1-G22-NP	Non-P	Structure	674,670	4,991,955	527.6	34.0	5,781
CR1-G23-NP	Non-P	Structure	670,471	4,992,104	560.0	44.0	2,185
CR1-G24-P	Participant	Structure	673,058	4,992,440	539.4	41.6	2,231
CR1-G25-P	Participant	Structure	671,391	4,992,858	549.0	45.3	1,804
CR1-G26-P	Participant	Structure	672,589	4,993,869	531.0	37.2	3,140
CR1-G27-NP	Non-P	Structure	676,630	4,994,642	480.8	26.7	8,678
CR1-G28-P	Participant	Structure	673,113	4,994,772	513.9	34.0	1,614
CR1-G32-P	Participant	Structure	669,477	4,995,401	546.0	46.6	1,545
CR1-G33-P	Participant	Structure	668,911	4,995,550	548.7	41.0	2,779
CR1-G34-NP	Non-P	Structure	671,320	4,995,798	531.0	41.4	2,238
CR1-G36-NP	Non-P	Structure	673,559	4,996,344	498.0	30.5	6,483
CR1-G37-NP	Non-P	Structure	668,998	4,996,452	549.0	36.2	5,246
CR1-G38-P	Participant	Structure	673,972	4,996,493	494.5	29.4	6,827
CR1-G41-P	Participant	Structure	671,563	4,997,050	497.6	35.0	6,378
CR1-G42-NP	Non-P	Structure	670,566	4,997,097	518.9	34.0	6,476
CR1-G43-NP	Non-P	Structure	661,141	5,001,721	583.6	25.5	6,552
CR1-G44-NP	Non-P	Structure	661,781	5,001,732	583.7	25.4	6,939
CR1-G59-P	Participant	Structure	675,755	4,994,888	487.7	28.0	5,981
CR1-G60-P	Participant	Structure	675,830	4,995,687	477.0	27.2	7,329
CR1-G65-P	Participant	Structure	671,496	4,994,973	537.0	44.1	1,539
CR1-G66-P	Participant	Structure	670,802	4,994,681	539.7	44.8	1,801
CR1-G67-P	Participant	Structure	669,597	4,993,440	556.1	44.6	2,106
CR1-G68-NP	Non-P	Structure	669,159	4,993,632	565.6	44.4	2,113
CR1-G70-NP	Non-P	Structure	677,465	4,991,043	492.0	26.5	15,006
CR1-G77-NP	Non-P	Structure	676,031	4,992,629	502.7	29.2	8,878
CR1-G81-P	Participant	Structure	671,478	4,997,523	508.8	31.6	7,828
CR1-G105-NP	Non-P	Structure	668,696	4,998,325	549.0	30.1	11,263
CR1-G108-P	Participant	Structure	669,516	5,001,186	522.2	25.4	19,908
CR1-G109-NP	Non-P	Structure	667,064	5,000,425	566.2	26.6	19,704
CR1-G110-NP	Non-P	Structure	671,218	5,005,064	456.2	21.1	28,615

continued

[illegible]

Table A-3: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

Ground Attenuation Factor 0.5

UTM NAD83 Zone 14

Curtailed Turbines: 29, 44, 48, 95

Codington County

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C62-NP	Non-P	Boundary	658,155	4,994,994	614.5	50.0	820
CR1-C55-NP	Non-P	Boundary	660,139	4,994,937	607.0	49.5	1,506
CR1-C71-NP	Non-P	Boundary	664,414	4,988,688	600.0	49.1	1,322
CR1-C38-NP	Non-P	Boundary	660,955	4,990,468	591.2	49.0	1,148
CR1-C39-NP	Non-P	Boundary	659,741	4,991,242	583.3	48.4	3,471
CR1-C15-NP	Non-P	Boundary	662,794	4,986,895	612.9	48.3	1,017
CR1-C37-NP	Non-P	Boundary	663,829	4,990,572	594.0	47.4	1,263
CR1-C12-NP	Non-P	Boundary	662,246	4,986,500	605.1	45.3	1,955
CR1-C41-NP	Non-P	Boundary	664,797	4,992,137	578.8	45.2	2,126
CR1-C40-NP	Non-P	Boundary	658,706	4,991,231	579.8	44.9	3,281
CR1-C44-NP	Non-P	Boundary	665,041	4,993,032	578.1	44.9	2,162
CR1-C16-NP	Non-P	Boundary	661,244	4,986,473	597.0	44.7	1,837
CR1-C34-NP	Non-P	Boundary	658,759	4,990,463	589.4	44.5	2,913
CR1-C46-NP	Non-P	Boundary	655,903	4,993,577	609.0	43.5	1,772
CR1-C14-NP	Non-P	Boundary	657,803	4,986,003	609.0	43.1	1,857
CR1-C63-NP	Non-P	Boundary	658,543	4,995,211	606.8	42.9	2,277
CR1-C28-NP	Non-P	Boundary	665,232	4,989,006	583.9	41.4	3,727
CR1-C70-NP	Non-P	Boundary	664,950	4,988,325	596.1	41.0	2,940
CR1-C4-NP	Non-P	Boundary	659,890	4,985,620	605.2	40.6	3,914
CR1-C7-NP	Non-P	Boundary	660,455	4,985,631	591.0	40.6	3,484
CR1-C27-NP	Non-P	Boundary	657,234	4,988,151	587.2	40.4	4,265
CR1-C31-NP	Non-P	Boundary	665,639	4,989,013	584.7	40.4	4,232
CR1-C65-NP	Non-P	Boundary	665,516	4,995,045	578.0	40.0	2,825
CR1-C3-NP	Non-P	Boundary	657,812	4,984,785	603.4	39.8	2,936
CR1-C13-NP	Non-P	Boundary	663,599	4,986,512	615.0	39.2	3,875
CR1-C29-NP	Non-P	Boundary	666,496	4,989,001	574.3	39.0	4,232
CR1-C52-NP	Non-P	Boundary	654,994	4,995,172	603.0	38.5	3,291
CR1-C33-NP	Non-P	Boundary	657,126	4,990,843	567.0	37.7	6,489
CR1-C53-NP	Non-P	Boundary	664,171	4,995,340	580.5	37.6	4,009
CR1-C112-NP	Non-P	Boundary	659,955	4,984,990	604.0	37.6	5,958
CR1-C32-NP	Non-P	Boundary	657,187	4,989,566	573.2	37.5	7,142
CR1-C2-NP	Non-P	Boundary	658,435	4,984,609	601.8	37.1	5,036
CR1-C111-NP	Non-P	Boundary	654,596	4,995,168	599.1	36.7	3,930
CR1-C1-NP	Non-P	Boundary	657,051	4,983,917	590.3	36.4	4,186
CR1-C54-NP	Non-P	Boundary	663,495	4,995,329	582.9	36.3	5,075
CR1-C45-NP	Non-P	Boundary	653,821	4,993,552	573.0	34.8	4,291
CR1-C58-NP	Non-P	Boundary	657,848	4,996,840	615.0	34.7	6,437
CR1-C9-NP	Non-P	Boundary	665,264	4,985,116	609.0	32.4	10,840
CR1-C110-NP	Non-P	Boundary	654,553	4,996,633	588.7	31.9	7,772

Table A-3: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Codington County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C61-NP	Non-P	Boundary	656,928	4,997,784	612.0	31.6	9,885
CR1-C109-NP	Non-P	Boundary	654,552	4,996,783	592.6	31.5	8,189
CR1-C60-NP	Non-P	Boundary	656,909	4,998,465	609.3	30.0	12,096
CR1-C107-NP	Non-P	Boundary	656,548	4,998,450	595.6	29.9	11,988
CR1-C105-NP	Non-P	Boundary	658,956	5,000,036	609.0	27.6	17,001
CR1-C48-P	Participant	Boundary	664,262	4,992,514	586.6	54.9	1,407
CR1-C30-P	Participant	Boundary	661,978	4,989,318	612.8	52.9	1,358
CR1-C51-P	Participant	Boundary	657,753	4,994,889	620.0	52.8	784
CR1-C20-P	Participant	Boundary	662,024	4,987,612	604.2	52.5	640
CR1-C19-P	Participant	Boundary	660,393	4,987,529	608.4	51.7	784
CR2-C150-P	Participant	Boundary	655,905	4,985,521	600.0	51.6	636
CR1-C17-P	Participant	Boundary	658,819	4,986,842	611.4	51.3	925
CR1-C42-P	Participant	Boundary	658,965	4,993,598	580.1	50.0	846
CR1-C35-P	Participant	Boundary	661,955	4,990,153	606.1	48.7	1,112
CR1-C50-P	Participant	Boundary	656,589	4,993,600	618.0	48.4	1,299
CR1-C47-P	Participant	Boundary	663,454	4,992,888	612.0	48.1	1,076
CR1-C64-P	Participant	Boundary	658,623	4,992,794	576.6	47.8	1,119
CR1-C36-P	Participant	Boundary	663,116	4,990,548	610.7	47.6	1,545
CR1-C57-P	Participant	Boundary	656,548	4,995,198	616.1	45.2	1,319
CR1-C26-P	Participant	Boundary	658,015	4,987,993	606.7	44.9	1,867
CR1-C56-P	Participant	Boundary	656,199	4,995,194	603.0	44.0	1,726
CR1-C18-P	Participant	Boundary	663,578	4,987,413	609.4	42.9	2,566
CR1-C6-P	Participant	Boundary	663,383	4,994,502	591.0	38.8	3,878
CR1-C49-P	Participant	Boundary	662,282	4,993,665	609.0	38.2	5,105
CR1-C10-P	Participant	Boundary	662,862	4,985,695	601.7	38.0	4,150
CR1-C8-P	Participant	Boundary	660,476	4,984,821	597.0	36.7	6,086
CR1-C11-P	Participant	Boundary	663,622	4,985,714	608.8	36.4	5,397
CR1-C59-P	Participant	Boundary	660,784	5,000,081	591.5	27.5	17,155
CR1-C62-NP	Non-P	Structure	658,375	4,995,138	615.0	44.8	1,676
CR1-C44-NP	Non-P	Structure	665,076	4,993,095	578.2	44.6	2,155
CR1-C41-NP	Non-P	Structure	665,053	4,992,084	576.1	44.4	2,356
CR1-C37-NP	Non-P	Structure	663,563	4,991,342	605.1	43.7	1,631
CR1-C34-NP	Non-P	Structure	658,661	4,990,389	588.2	43.3	2,093
CR1-C46-NP	Non-P	Structure	655,802	4,993,540	609.1	42.9	1,795
CR1-C63-NP	Non-P	Structure	658,566	4,995,254	612.4	42.5	2,408
CR1-C14-NP	Non-P	Structure	657,982	4,985,894	609.0	42.4	1,880
CR1-C16-NP	Non-P	Structure	661,960	4,986,288	606.0	42.2	2,648
CR1-C40-NP	Non-P	Structure	657,865	4,991,818	583.7	42.0	2,690

Table A-3: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailment with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Codington County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-C39-NP	Non-P	Structure	660,144	4,991,670	588.0	41.5	2,605
CR1-C12-1-NP	Non-P	Structure	662,199	4,986,047	606.0	40.8	2,956
CR1-C38-NP	Non-P	Structure	660,639	4,991,557	597.0	40.8	3,474
CR1-C71-NP	Non-P	Structure	665,137	4,988,378	595.6	40.2	3,448
CR1-C70-NP	Non-P	Structure	665,135	4,988,293	595.9	39.9	3,540
CR1-C28-NP	Non-P	Structure	665,429	4,988,598	590.9	39.6	4,252
CR1-C31-NP	Non-P	Structure	665,939	4,988,950	585.4	39.6	4,531
CR1-C72-NP	Non-P	Structure	665,158	4,988,170	594.6	39.5	3,776
CR1-C12-NP	Non-P	Structure	662,222	4,985,736	603.0	39.0	3,921
CR1-C3-NP	Non-P	Structure	657,888	4,984,697	604.2	39.0	3,294
CR1-C55-NP	Non-P	Structure	660,914	4,995,169	607.5	39.0	3,360
CR1-C15-NP	Non-P	Structure	663,291	4,986,026	615.0	38.5	3,907
CR1-C29-NP	Non-P	Structure	666,572	4,988,867	575.9	38.3	4,675
CR1-C27-NP	Non-P	Structure	656,876	4,988,683	583.0	37.9	5,974
CR1-C52-NP	Non-P	Structure	654,924	4,995,231	603.0	37.9	3,589
CR1-C67-NP	Non-P	Structure	659,789	4,985,057	606.0	37.9	5,791
CR1-C66-NP	Non-P	Structure	659,718	4,985,032	606.0	37.8	5,800
CR1-C65-NP	Non-P	Structure	665,805	4,995,305	579.0	37.6	3,884
CR1-C112-NP	Non-P	Structure	660,002	4,984,908	604.6	37.2	6,207
CR1-C5-NP	Non-P	Structure	659,958	4,984,794	604.8	36.8	6,601
CR1-C33-NP	Non-P	Structure	656,839	4,990,404	569.8	36.7	7,418
CR1-C4-NP	Non-P	Structure	659,744	4,984,749	606.0	36.7	6,706
CR1-C7-NP	Non-P	Structure	660,893	4,984,861	593.2	36.7	5,932
CR1-C13-NP	Non-P	Structure	663,792	4,985,785	612.0	36.3	5,643
CR1-C2-NP	Non-P	Structure	658,791	4,984,483	602.0	36.3	6,273
CR1-C54-NP	Non-P	Structure	663,421	4,995,376	583.4	36.0	5,351
CR1-C32-NP	Non-P	Structure	655,843	4,989,581	568.8	34.7	9,708
CR1-C58-NP	Non-P	Structure	657,781	4,996,906	615.0	34.5	6,611
CR1-C1-NP	Non-P	Structure	656,743	4,983,525	596.0	34.3	5,541
CR1-C53-NP	Non-P	Structure	663,376	4,996,043	578.8	34.1	7,201
CR1-C45-NP	Non-P	Structure	653,390	4,993,503	573.2	32.9	5,673
CR1-C111-NP	Non-P	Structure	653,857	4,995,573	591.0	32.7	6,306
CR1-C9-NP	Non-P	Structure	665,352	4,985,004	609.0	32.1	11,283
CR1-C110-NP	Non-P	Structure	654,385	4,996,686	593.9	31.5	8,228
CR1-C61-NP	Non-P	Structure	656,690	4,997,831	612.0	31.3	9,970
CR1-C109-NP	Non-P	Structure	653,780	4,996,828	588.0	30.1	9,859
CR1-C60-NP	Non-P	Structure	656,855	4,998,565	613.5	29.8	12,408
CR1-C107-NP	Non-P	Structure	656,811	4,999,855	598.8	27.5	16,621

continued

[illegible]

Table A-3: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results at land parcel boundaries and occupied structures

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailment with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Ground Attenuation Factor 0.5

Grant County

Curtailed Turbines: 29, 44, 48, 95

continued

Receptor ID	Participation Status	Type	Easting (m)	Northing (m)	Elevation AMSL (m)	Real Case Sound (dB(A))	Distance to Nearest Turbine (ft)
CR1-G68-NP	Non-P	Structure	669,159	4,993,632	565.6	44.4	2,113
CR1-G23-NP	Non-P	Structure	670,471	4,992,104	560.0	44.0	2,185
CR1-G16-NP	Non-P	Structure	668,419	4,989,861	576.0	42.9	2,070
CR1-G34-NP	Non-P	Structure	671,320	4,995,798	531.0	41.4	2,238
CR1-G14-NP	Non-P	Structure	668,156	4,989,332	574.1	38.7	3,940
CR1-G13-NP	Non-P	Structure	672,216	4,989,142	558.0	38.2	3,576
CR1-G12-NP	Non-P	Structure	668,229	4,989,039	575.0	37.5	4,623
CR1-G37-NP	Non-P	Structure	668,998	4,996,452	549.0	36.2	5,246
CR1-G22-NP	Non-P	Structure	674,670	4,991,955	527.6	34.0	5,781
CR1-G42-NP	Non-P	Structure	670,566	4,997,097	518.9	34.0	6,476
CR1-G36-NP	Non-P	Structure	673,559	4,996,344	498.0	30.5	6,483
CR1-G105-NP	Non-P	Structure	668,696	4,998,325	549.0	30.1	11,263
CR1-G77-NP	Non-P	Structure	676,031	4,992,629	502.7	29.2	8,878
CR1-G130-NP	Non-P	Structure	668,147	5,000,233	549.0	26.8	17,756
CR1-G27-NP	Non-P	Structure	676,630	4,994,642	480.8	26.7	8,678
CR1-G109-NP	Non-P	Structure	667,064	5,000,425	566.2	26.6	19,704
CR1-G70-NP	Non-P	Structure	677,465	4,991,043	492.0	26.5	15,006
CR1-G125-NP	Non-P	Structure	668,289	5,000,643	543.0	26.3	18,888
CR1-G43-NP	Non-P	Structure	661,141	5,001,721	583.6	25.5	6,552
CR1-G44-NP	Non-P	Structure	661,781	5,001,732	583.7	25.4	6,939
CR1-G117-NP	Non-P	Structure	663,801	5,005,084	581.3	22.1	4,501
CR1-G113-NP	Non-P	Structure	666,228	5,005,549	537.0	21.6	12,575
CR1-G110-NP	Non-P	Structure	671,218	5,005,064	456.2	21.1	28,615
CR1-G115-NP	Non-P	Structure	664,933	5,006,731	544.6	20.8	10,531
CR1-G114-NP	Non-P	Structure	666,214	5,006,667	521.1	20.7	13,878
CR1-G600-NP	Non-P	Structure	674,301	5,005,773	393.0	19.6	36,397
CR1-G18-P	Participant	Structure	668,678	4,990,722	585.0	46.6	1,585
CR1-G32-P	Participant	Structure	669,477	4,995,401	546.0	46.6	1,545
CR1-G21-P	Participant	Structure	666,766	4,991,807	577.1	46.1	1,555
CR1-G25-P	Participant	Structure	671,391	4,992,858	549.0	45.3	1,804
CR1-G19-P	Participant	Structure	671,018	4,990,744	570.0	45.0	2,077
CR1-G66-P	Participant	Structure	670,802	4,994,681	539.7	44.8	1,801
CR1-G67-P	Participant	Structure	669,597	4,993,440	556.1	44.6	2,106
CR1-G65-P	Participant	Structure	671,496	4,994,973	537.0	44.1	1,539
CR1-G24-P	Participant	Structure	673,058	4,992,440	539.4	41.6	2,231
CR1-G33-P	Participant	Structure	668,911	4,995,550	548.7	41.0	2,779
CR1-G15-P	Participant	Structure	668,396	4,989,607	576.0	40.8	2,746
CR1-G26-P	Participant	Structure	672,589	4,993,869	531.0	37.2	3,140

11

Table A-4: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results 25 ft from occupied structures perimeter

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

UTM NAD83 Zone 14

Codington County

Ground Attenuation Factor 0.5

Curtailed Turbines: 29, 44, 48, 95

Receptor ID	Participation Status	Easting (m)	Northing (m)	Elevation AMSL (m)	Curtailed	23 LNTE's	All LNTE's	Distance to Nearest Turbine (ft)
					Real Case Sound (dB(A))	Real Case Sound (dB(A))	Real Case Sound (dB(A))	
CR1-C62-NP	Non-P	ive point: User d	658,375	4,995,138.0	45.0	44.0	43.6	1,676
CR1-C44-NP	Non-P	ive point: User d	665,076	4,993,095.0	44.7	44.2	43.6	2,155
CR1-C41-NP	Non-P	ive point: User d	665,053	4,992,084.0	44.4	44.4	43.9	2,356
CR1-C37-NP	Non-P	ive point: User d	663,563	4,991,342.0	43.8	45.0	44.8	1,631
CR1-C34-NP	Non-P	ive point: User d	658,661	4,990,389.0	43.4	43.4	41.9	2,093
CR1-C46-NP	Non-P	ive point: User d	655,802	4,993,540.0	42.9	44.5	44.1	1,795
CR1-C63-NP	Non-P	ive point: User d	658,566	4,995,254.0	42.6	41.8	41.4	2,408
CR1-C14-NP	Non-P	ive point: User d	657,982	4,985,894.0	42.4	44.3	43.3	1,880
CR1-C16-NP	Non-P	ive point: User d	661,960	4,986,288.0	42.3	42.3	40.6	2,648
CR1-C40-NP	Non-P	ive point: User d	657,865	4,991,818.0	42.1	42.0	40.5	2,690
CR1-C39-NP	Non-P	ive point: User d	660,144	4,991,670.0	41.6	41.5	40.8	2,605
CR1-C38-NP	Non-P	ive point: User d	660,639	4,991,557.0	40.9	40.8	39.9	3,474
CR1-C12-1-NP	Non-P	ive point: User d	662,199	4,986,047.0	40.9	40.9	39.3	2,956
CR1-C71-NP	Non-P	ive point: User d	665,137	4,988,378.0	40.2	40.0	38.8	3,448
CR1-C70-NP	Non-P	ive point: User d	665,135	4,988,293.0	40.0	39.8	38.6	3,540
CR1-C31-NP	Non-P	ive point: User d	665,939	4,988,950.0	39.7	39.4	38.3	4,531
CR1-C28-NP	Non-P	ive point: User d	665,429	4,988,598.0	39.7	39.4	38.3	4,252
CR1-C72-NP	Non-P	ive point: User d	665,158	4,988,170.0	39.6	39.3	38.1	3,776
CR1-C55-NP	Non-P	ive point: User d	660,914	4,995,169.0	39.5	39.5	39.5	3,360
CR1-C3-NP	Non-P	ive point: User d	657,888	4,984,697.0	39.1	39.5	38.1	3,294
CR1-C12-NP	Non-P	ive point: User d	662,222	4,985,736.0	39.1	39.1	37.6	3,921
CR1-C15-NP	Non-P	ive point: User d	663,291	4,986,026.0	38.5	38.5	37.1	3,907
CR1-C29-NP	Non-P	ive point: User d	666,572	4,988,867.0	38.4	38.3	37.1	4,675
CR1-C52-NP	Non-P	ive point: User d	654,924	4,995,231.0	38.0	38.3	38.1	3,589
CR1-C67-NP	Non-P	ive point: User d	659,789	4,985,057.0	38.0	38.1	36.7	5,791
CR1-C27-NP	Non-P	ive point: User d	656,876	4,988,683.0	38.0	38.1	36.8	5,974
CR1-C66-NP	Non-P	ive point: User d	659,718	4,985,032.0	37.9	38.0	36.7	5,800
CR1-C65-NP	Non-P	ive point: User d	665,805	4,995,305.0	37.7	37.7	36.5	3,884
CR1-C112-NP	Non-P	ive point: User d	660,002	4,984,907.8	37.3	37.4	36.1	6,207
CR1-C5-NP	Non-P	ive point: User d	659,958	4,984,794.0	36.9	37.0	35.8	6,601
CR1-C4-NP	Non-P	ive point: User d	659,744	4,984,749.0	36.8	36.9	35.7	6,706
CR1-C7-NP	Non-P	ive point: User d	660,893	4,984,861.0	36.7	36.7	35.6	5,932
CR1-C33-NP	Non-P	ive point: User d	656,839	4,990,404.0	36.7	36.7	35.8	7,418
CR1-C2-NP	Non-P	ive point: User d	658,791	4,984,483.0	36.3	36.6	35.4	6,273
CR1-C13-NP	Non-P	ive point: User d	663,792	4,985,785.0	36.3	36.3	35.2	5,643
CR1-C54-NP	Non-P	ive point: User d	663,421	4,995,376.0	36.0	35.9	35.2	5,351
CR1-C32-NP	Non-P	ive point: User d	655,843	4,989,581.0	34.7	34.8	34.0	9,708
CR1-C58-NP	Non-P	ive point: User d	657,781	4,996,906.0	34.5	34.3	33.9	6,611
CR1-C1-NP	Non-P	ive point: User d	656,743	4,983,525.0	34.4	34.6	33.4	5,541

Table A-4: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results 25 ft from occupied structures perimeter

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

Ground Attenuation Factor 0.5

UTM NAD83 Zone 14

Curtailed Turbines: 29, 44, 48, 95

Codington County

continued

Receptor ID	Participation Status	Easting (m)	Northing (m)	Elevation AMSL (m)	Curtailed	23 LNTE's	All LNTE's	Distance to Nearest Turbine (ft)
					Real Case Sound (dB(A))	Real Case Sound (dB(A))	Real Case Sound (dB(A))	
CR1-C53-NP	Non-P	ive point: User d	663,376	4,996,043.0	34.1	34.0	33.5	7,201
CR1-C45-NP	Non-P	ive point: User d	653,390	4,993,503.0	32.9	33.2	33.0	5,673
CR1-C111-NP	Non-P	ive point: User d	653,857	4,995,573.2	32.8	33.0	32.9	6,306
CR1-C9-NP	Non-P	ive point: User d	665,352	4,985,004.0	32.1	32.1	31.6	11,283
CR1-C110-NP	Non-P	ive point: User d	654,385	4,996,685.6	31.5	31.7	31.6	8,228
CR1-C61-NP	Non-P	ive point: User d	656,690	4,997,831.0	31.4	31.4	31.2	9,970
CR1-C109-NP	Non-P	ive point: User d	653,780	4,996,828.4	30.1	30.4	30.2	9,859
CR1-C60-NP	Non-P	ive point: User d	656,855	4,998,565.0	29.8	29.9	29.8	12,408
CR1-C107-NP	Non-P	ive point: User d	656,811	4,999,855.2	27.5	27.6	27.6	16,621
CR1-C105-NP	Non-P	ive point: User d	658,372	5,001,256.8	25.9	26.0	26.1	20,922
CR1-C30-P	Participant	ive point: User d	661,699	4,988,957.0	49.5	49.5	47.7	1,614
CR1-C19-P	Participant	ive point: User d	659,243	4,987,276.0	48.0	48.0	46.2	1,722
CR1-C50-P	Participant	ive point: User d	656,806	4,994,388.0	47.4	47.0	46.6	1,591
CR1-C36-P	Participant	ive point: User d	663,181	4,990,600.0	46.9	45.6	45.3	1,532
CR1-C68-P	Participant	ive point: User d	662,652	4,987,606.0	46.6	46.5	44.8	2,146
CR1-C69-P	Participant	ive point: User d	662,685	4,987,619.0	46.5	46.5	44.7	2,185
CR2-C150-P	Participant	ive point: User d	657,178	4,985,788.0	46.3	47.4	46.1	1,640
CR1-C48-P	Participant	ive point: User d	664,247	4,993,646.0	46.2	45.4	44.6	1,847
CR1-C17-P	Participant	ive point: User d	658,031	4,986,373.0	45.4	46.4	45.1	1,886
CR1-C35-P	Participant	ive point: User d	662,025	4,990,475.0	45.2	44.9	43.6	2,123
CR1-C51-P	Participant	ive point: User d	657,455	4,995,160.0	44.9	44.0	43.6	1,768
CR1-C20-P	Participant	ive point: User d	663,054	4,987,455.0	44.9	44.9	43.1	2,336
CR1-C11-P	Participant	ive point: User d	664,111	4,985,679.0	44.9	44.9	44.9	6,676
CR1-C57-P	Participant	ive point: User d	656,628	4,995,266.0	44.2	44.1	43.9	1,568
CR1-C56-P	Participant	ive point: User d	655,953	4,995,244.0	43.0	43.0	42.9	1,972
CR1-C26-P	Participant	ive point: User d	657,767	4,988,493.0	41.4	41.5	39.9	3,484
CR1-C18-P	Participant	ive point: User d	663,651	4,987,157.0	41.4	41.3	39.8	3,435
CR1-C42-P	Participant	ive point: User d	659,458	4,992,229.0	41.2	41.1	40.1	3,947
CR1-C64-P	Participant	ive point: User d	659,436	4,992,174.0	41.2	41.1	40.1	4,049
CR1-C47-P	Participant	ive point: User d	662,825	4,993,508.0	39.8	39.1	38.7	3,750
CR1-C49-P	Participant	ive point: User d	662,250	4,993,731.0	38.2	37.8	37.4	5,148
CR1-C6-P	Participant	ive point: User d	662,989	4,995,228.0	35.8	35.6	35.1	6,102
CR1-C8-P	Participant	ive point: User d	660,532	4,984,445.0	35.5	35.5	34.5	7,293
CR1-C10-P	Participant	ive point: User d	663,510	4,985,195.0	35.1	35.1	34.1	6,535
CR1-C23-P	Participant	ive point: User d	660,619	4,984,078.0	34.4	34.4	33.5	8,478
CR1-C21-P	Participant	ive point: User d	660,756	4,984,086.0	34.3	34.4	33.5	8,445
CR1-C22-P	Participant	ive point: User d	660,755	4,984,082.0	34.3	34.4	33.5	8,458
CR1-C59-P	Participant	ive point: User d	661,548	5,000,754.0	26.6	26.7	26.8	19,859

Table A-4: Crowned Ridge 200 MW Sound Level Tabular Results Sorted by Sound Level

Realistic case sound results 25 ft from occupied structures perimeter

Results using GE 2.3-116-90 m HH, GE 2.3-116-80 m HH WTG's

Curtailement with LNTE on only 20, 22, 24, 25, 31, 32, 36, 53

Ground Attenuation Factor 0.5

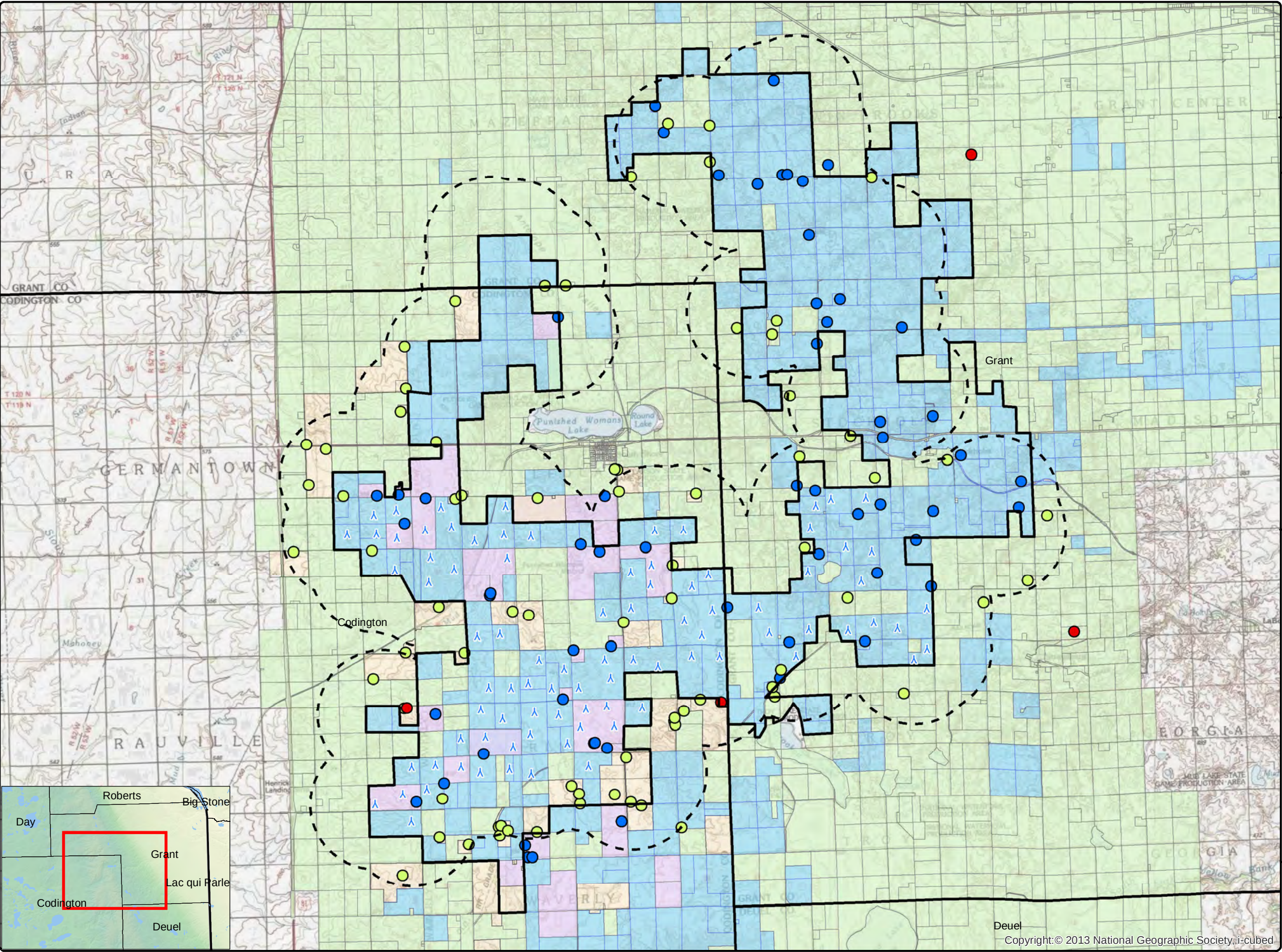
UTM NAD83 Zone 14

Curtailed Turbines: 29, 44, 48, 95

Grant County

continued

Receptor ID	Participation Status	Easting (m)	Northing (m)	Elevation AMSL (m)	Curtailed	23 LNTE's	All LNTE's	Distance to Nearest Turbine (ft)
					Real Case Sound (dB(A))	Real Case Sound (dB(A))	Real Case Sound (dB(A))	
CR1-G68-NP	Non-P	ve point: User de	669,159	4,993,632.0	44.4	44.4	42.6	2,113
CR1-G23-NP	Non-P	ve point: User de	670,471	4,992,104.0	44.0	44.0	42.2	2,185
CR1-G16-NP	Non-P	ve point: User de	668,419	4,989,861.0	42.9	42.9	41.2	2,070
CR1-G34-NP	Non-P	ve point: User de	671,320	4,995,798.0	41.4	41.3	39.6	2,238
CR1-G14-NP	Non-P	ve point: User de	668,156	4,989,332.0	38.7	38.7	37.3	3,940
CR1-G13-NP	Non-P	ve point: User de	672,216	4,989,142.0	38.2	38.2	36.6	3,576
CR1-G12-NP	Non-P	ve point: User de	668,229	4,989,039.0	37.5	37.4	36.2	4,623
CR1-G37-NP	Non-P	ve point: User de	668,998	4,996,452.0	36.2	36.2	34.8	5,246
CR1-G22-NP	Non-P	ve point: User de	674,670	4,991,955.0	34.0	34.0	32.7	5,781
CR1-G42-NP	Non-P	ve point: User de	670,566	4,997,097.0	34.0	34.0	32.8	6,476
CR1-G36-NP	Non-P	ve point: User de	673,559	4,996,344.0	30.5	30.5	29.7	6,483
CR1-G105-NP	Non-P	ve point: User de	668,696	4,998,325.0	30.1	30.2	29.6	11,263
CR1-G77-NP	Non-P	ve point: User de	676,031	4,992,629.0	29.2	29.2	28.6	8,878
CR1-G130-NP	Non-P	ve point: User de	668,147	5,000,233.0	26.8	27.0	26.8	17,756
CR1-G27-NP	Non-P	ve point: User de	676,630	4,994,642.0	26.7	26.8	26.5	8,678
CR1-G109-NP	Non-P	ve point: User de	667,064	5,000,425.0	26.6	26.8	26.7	19,704
CR1-G70-NP	Non-P	ve point: User de	677,465	4,991,043.1	26.5	26.5	26.2	15,006
CR1-G125-NP	Non-P	ve point: User de	668,289	5,000,643.0	26.3	26.4	26.3	18,888
CR1-G43-NP	Non-P	ve point: User de	661,141	5,001,721.0	25.5	25.6	25.7	6,552
CR1-G44-NP	Non-P	ve point: User de	661,781	5,001,732.0	25.4	25.6	25.7	6,939
CR1-G117-NP	Non-P	ve point: User de	663,801	5,005,084.0	22.1	22.4	22.5	4,501
CR1-G113-NP	Non-P	ve point: User de	666,228	5,005,549.0	21.6	21.8	22.0	12,575
CR1-G110-NP	Non-P	ve point: User de	671,218	5,005,064.0	21.1	21.3	21.5	28,615
CR1-G115-NP	Non-P	ve point: User de	664,933	5,006,731.0	20.8	21.0	21.2	10,531
CR1-G114-NP	Non-P	ve point: User de	666,214	5,006,667.0	20.7	20.9	21.1	13,878
CR1-G600-NP	Non-P	ve point: User de	674,301	5,005,772.8	19.6	19.8	20.0	36,397
CR1-G32-P	Participant	ve point: User de	669,477	4,995,401.0	46.6	46.6	44.9	1,545
CR1-G18-P	Participant	ve point: User de	668,678	4,990,722.0	46.6	46.6	44.8	1,585
CR1-G21-P	Participant	ve point: User de	666,766	4,991,807.0	46.1	46.1	44.6	1,555
CR1-G25-P	Participant	ve point: User de	671,391	4,992,858.0	45.3	45.3	43.5	1,804
CR1-G19-P	Participant	ve point: User de	671,018	4,990,744.0	45.0	45.0	43.2	2,077
CR1-G66-P	Participant	ve point: User de	670,802	4,994,681.0	44.8	44.8	43.0	1,801
CR1-G67-P	Participant	ve point: User de	669,597	4,993,440.0	44.6	44.6	42.8	2,106
CR1-G65-P	Participant	ve point: User de	671,496	4,994,973.0	44.1	44.1	42.4	1,539
CR1-G24-P	Participant	ve point: User de	673,058	4,992,440.0	41.6	41.6	39.9	2,231
CR1-G33-P	Participant	ve point: User de	668,911	4,995,550.0	41.0	41.0	39.3	2,779
CR1-G15-P	Participant	ve point: User de	668,396	4,989,607.0	40.8	40.7	39.1	2,746
CR1-G26-P	Participant	ve point: User de	672,589	4,993,869.0	37.2	37.2	35.7	3,140





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Project Overview Map

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codington County land parcels within 2 km of a wind turbine.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date

Drawn By: AS **Checked By:** JH

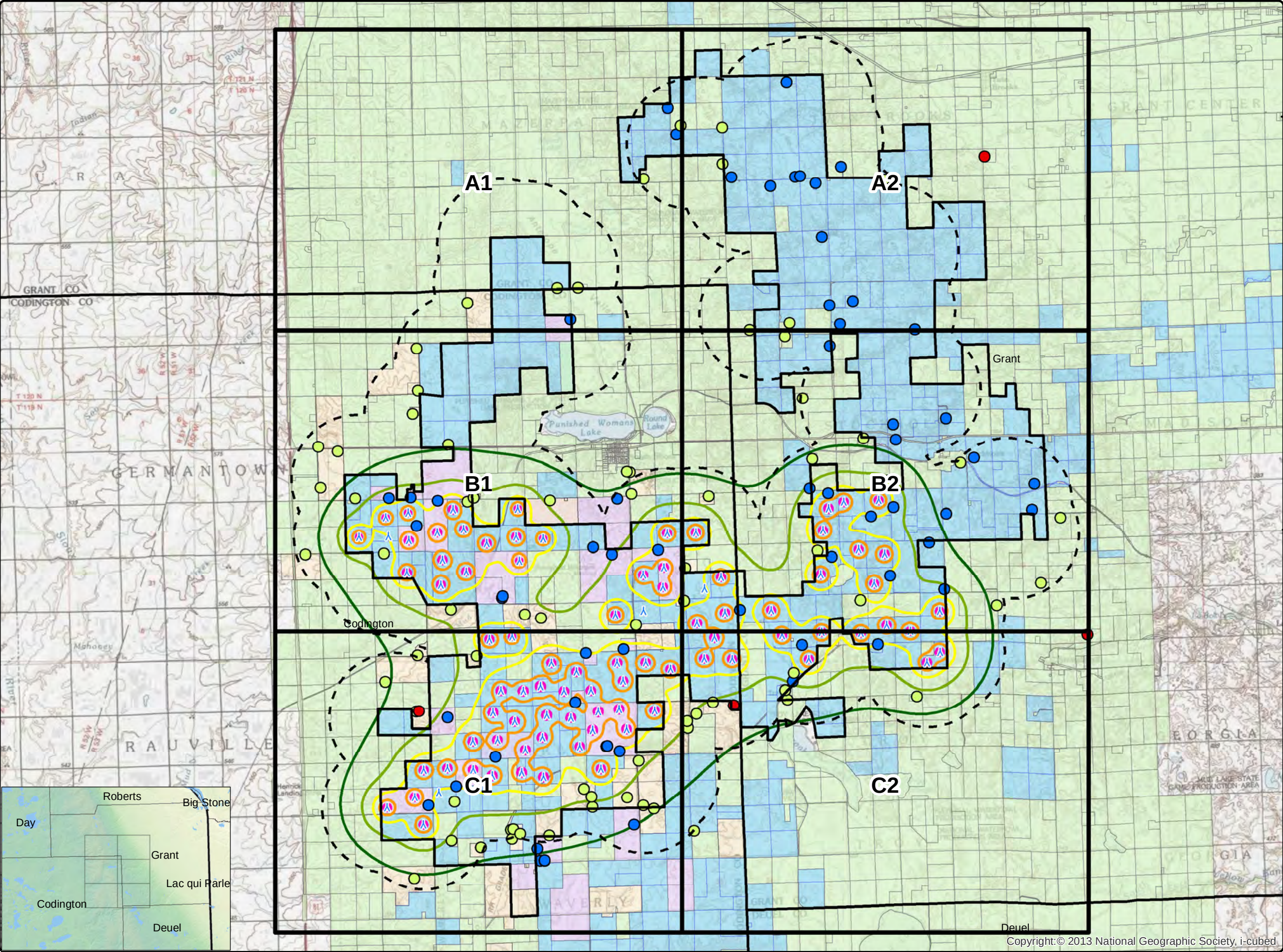
Legend

- Crowned Ridge 200 MW
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Intervenor
- Non Participants
- Participants
- Non-Part. Occupied Codington Parcels
- Participating Occupied Codington Parcels
- Non-Participating Parcels
- Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.



Copyright:© 2013 National Geographic Society, i-cubed





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
200 MW
Sound Overview Map**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codrington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

#	Description	Date
1	Original	2019.1.2

Drawn By: AS **Checked By:** JH

Legend

- Crowned Ridge 200 MW
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Intervenor
- Non Participants
- Participants

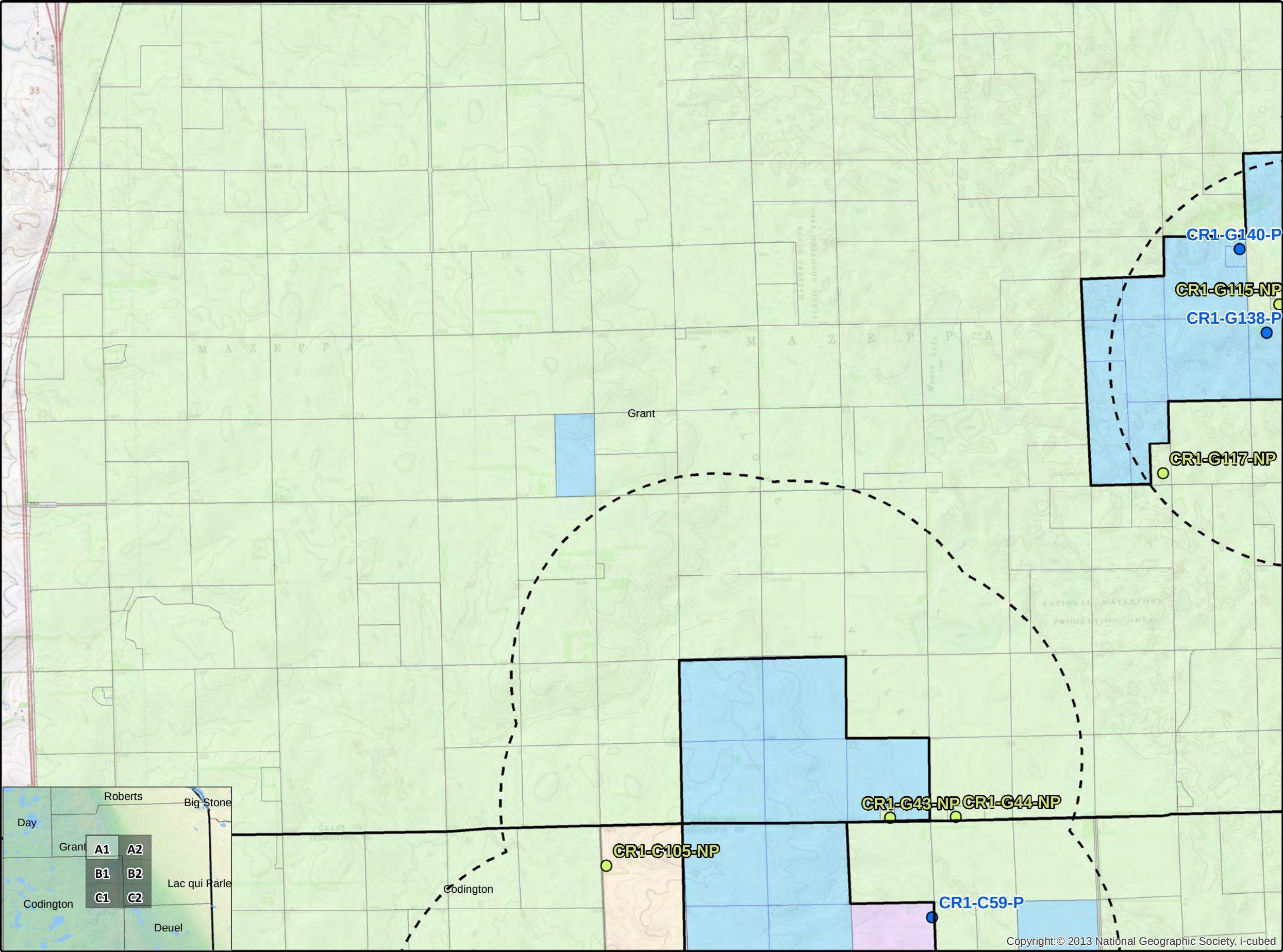
Sound Pressure (dBA)

- 35
- 40
- 45
- 50
- 55

- Non-Part. Occupied Codrington Parcels
- Participating Occupied Codrington Parcels
- Non-Participating Parcels
- Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.







EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.
Codington County land parcels within 2 km of a wind turbine.
Curtailed.
Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date

Drawn By: AS **Checked By:** JH

Legend

- Crowned Ridge 200 MW
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Intervenor
- Non Participants
- Participants

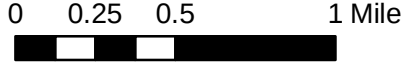
Sound Pressure (dBA)

- 35
- 40
- 45
- 50
- 55

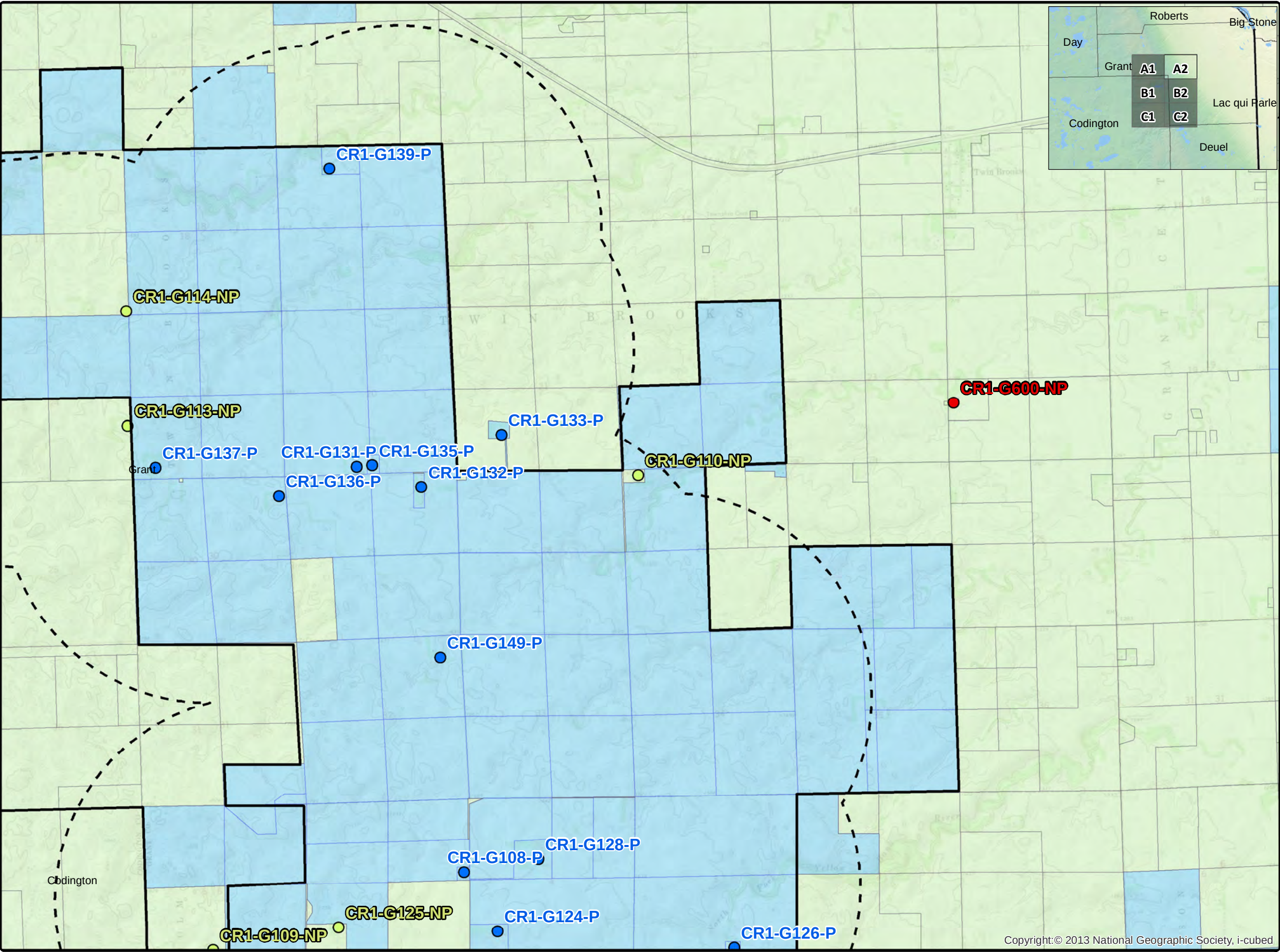
- Non-Part. Occupied Codington Parcels
- Participating Occupied Codington Parcels
- Non-Participating Parcels
- Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

**Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines**

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codrington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date

Drawn By: AS Checked By: JH

Legend

Crowned Ridge 200 MW

2 km Turbine Buffer

County Lines

CR1 Project Boundary

Intervenor

Non Participants

Participants

Sound Pressure (dBA)

35

40

45

50

55

Non-Part. Occupied Codrington Parcels

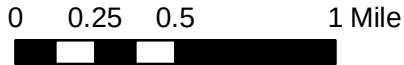
Participating Occupied Codrington Parcels

Non-Participating Parcels

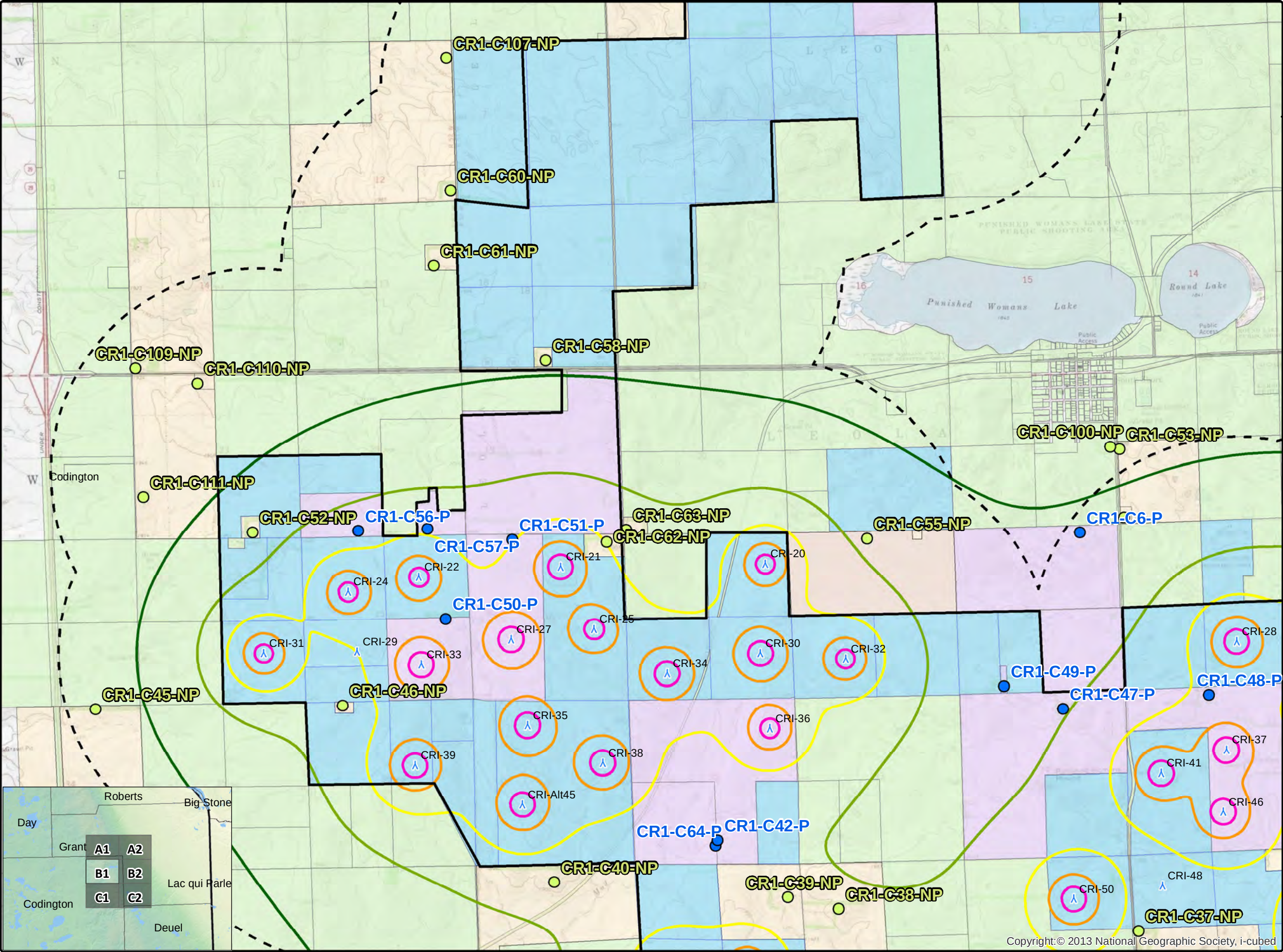
Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date
Drawn By:	AS	Checked By: JH

Legend

- Crowned Ridge 200 MW
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Intervenor
- Non Participants
- Participants

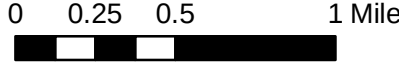
Sound Pressure (dBA)

- 35
- 40
- 45
- 50
- 55

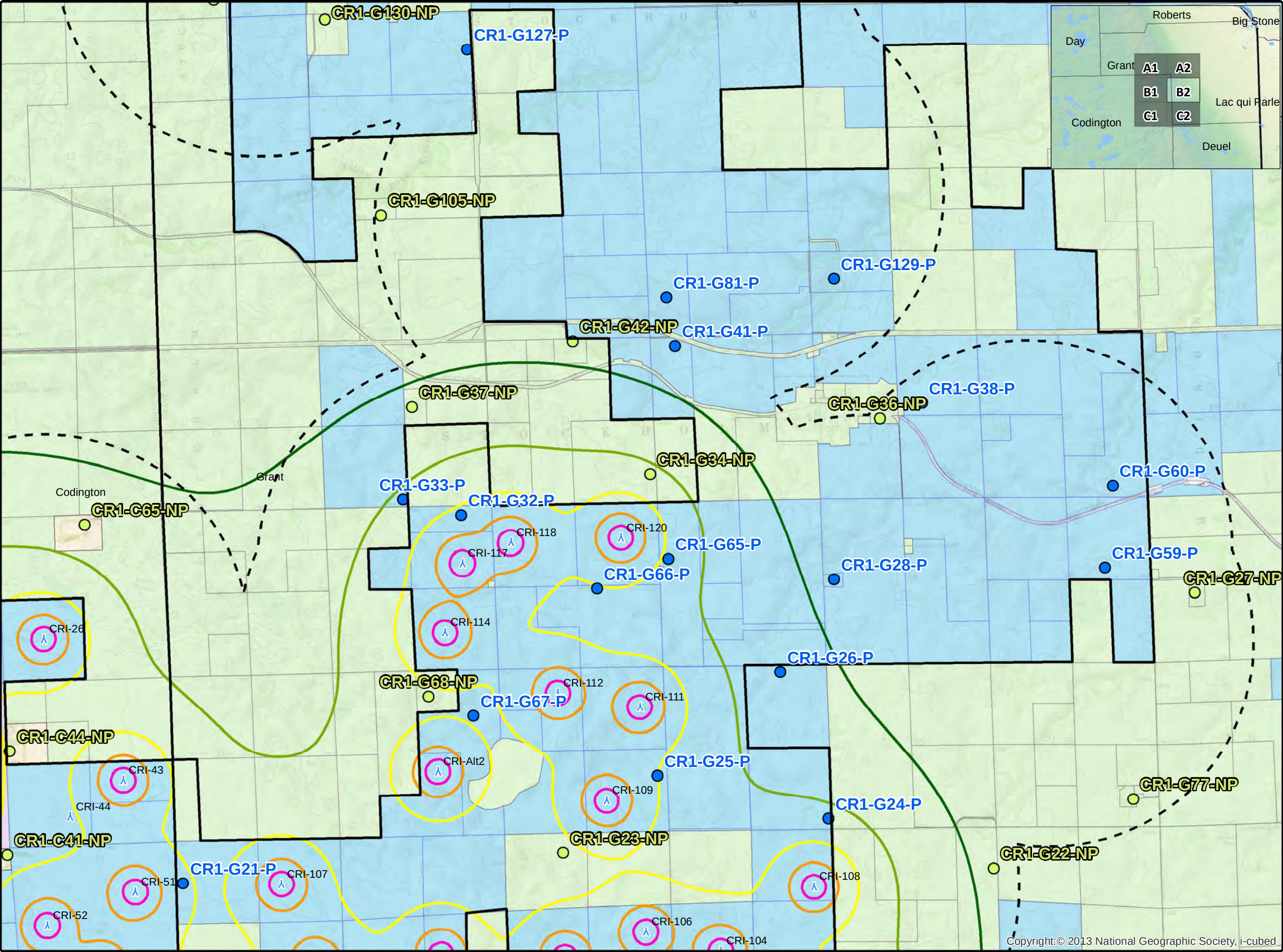
- Non-Part. Occupied Codington Parcels
- Participating Occupied Codington Parcels
- Non-Participating Parcels
- Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date
Drawn By: AS		Checked By: JH

Legend

- Crowned Ridge 200 MW
- 2 km Turbine Buffer
- County Lines
- CR1 Project Boundary
- Intervenor
- Non Participants
- Participants

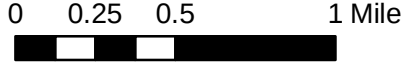
Sound Pressure (dBA)

- 35
- 40
- 45
- 50
- 55

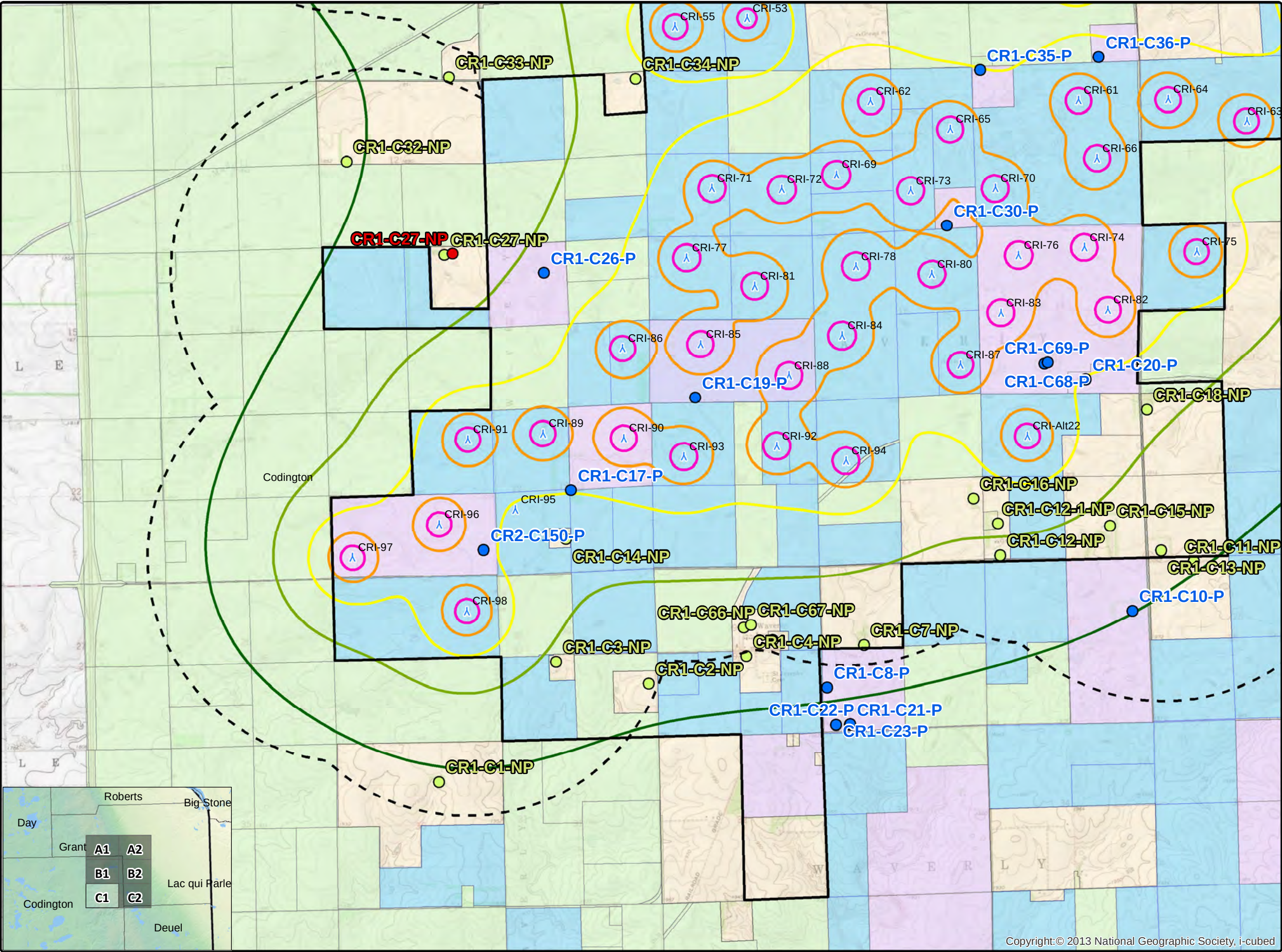
- Non-Part. Occupied Codington Parcels
- Participating Occupied Codington Parcels
- Non-Participating Parcels
- Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.





EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date

Drawn By: AS Checked By: JH

Legend

 Crowned Ridge 200 MW

 2 km Turbine Buffer

 County Lines

 CR1 Project Boundary

 Intervenor

 Non Participants

 Participants

Sound Pressure (dBA)

 35

 40

 45

 50

 55

 Non-Part. Occupied Codington Parcels

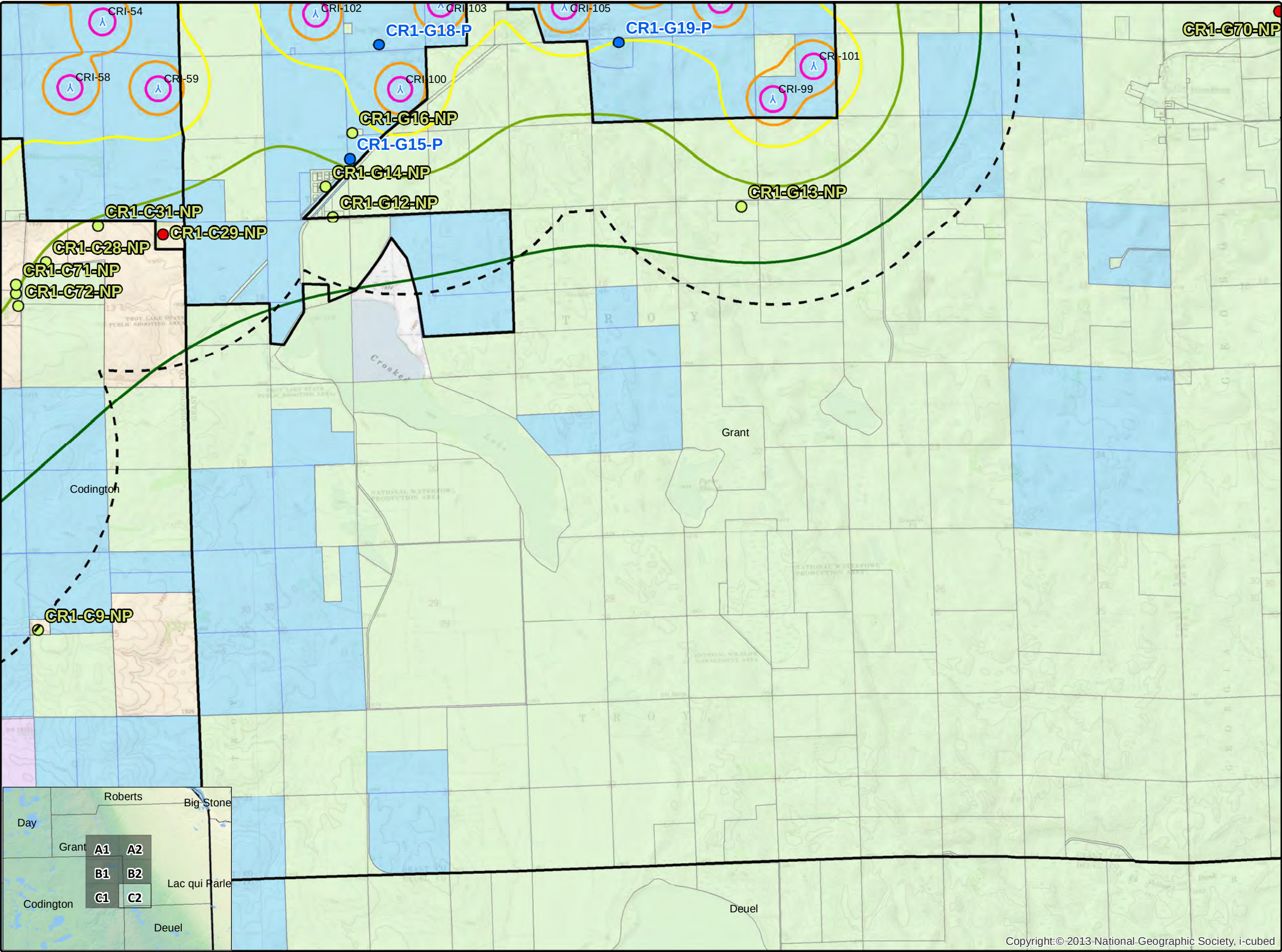
 Participating Occupied Codington Parcels

 Non-Participating Parcels

 Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.







EAPC
WIND ENERGY

www.eapc.net | 701.775.3000

Crowned Ridge Wind Farm
200 MW
Sound Pressure Iso-Lines

Client
SWCA Environmental Consultants

Project Description
Wind turbine layout with land parcels within the project footprint and existing occupied structures.

Codington County land parcels within 2 km of a wind turbine.

Curtailed.

Ground attenuation factor = 0.5.

Location: Watertown, SD
Project #: 20174430

Issue Dates

1	Original	2019.1.2
#	Description	Date

Drawn By: AS Checked By: JH

Legend

 Crowned Ridge 200 MW

 2 km Turbine Buffer

 County Lines

 CR1 Project Boundary

 Intervenors

 Non Participants

 Participants

Sound Pressure (dBA)

 35

 40

 45

 50

 55

 Non-Part. Occupied Codington Parcels

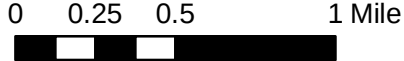
 Participating Occupied Codington Parcels

 Non-Participating Parcels

 Participating Parcels

COPYRIGHT:
All maps, plans, specifications, computer files, field data, notes and other documents and instruments prepared by EAPC as instruments of service shall remain the property of EAPC. EAPC shall retain all common law, statutory and other reserved rights, including the copyright thereto.





Neither EAPC nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information disclosed on this drawing; or (b) assumes any liability with respect to the use of any information or methods disclosed on this drawing. Any recipient of this document, by their acceptance or use of this document, releases EAPC, its parent corporations and its affiliates, from any liability for direct, indirect, consequential, or special loss or damage whether arising in contract, warranty, express or implied, tort or otherwise, and irrespective of fault, negligence, and strict liability. The responsibilities for the applications and use of the material contained in this document remain solely with the client.