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Glacier Ridge Wind Farm Application for Certificate of Site Compatibility, Case No. PU-16-539: Late-Filed Exhibit No. 33 (Revised)

Per the Commission's exclusion areas, the Project wind turbines must be at least 1.1 times the tip height from the property line of nonparticipating landowners, or at least 541 feet. The nearest proposed turbine to a non-participating parcel is Turbine 37, approximately 220 feet from the currently non-participating parcel to the north. Glacier Ridge Wind is currently pursuing a participation agreement with this landowner. If the landowner does not sign an agreement or a waiver from the property line setback, Turbine 37 will either be shifted to meet the setback or will be replaced with an alternate turbine location. The rest of the turbines are at least 541 feet from a non-participating property line.

The nearest proposed turbine to a nonparticipating residence is Turbine 79, which is located 1,966 feet from Residence #25. The nearest proposed turbine to nonparticipant Mr. Schroeder (residence #36) is Turbine 54, which is located 2,334 feet to the southeast. Nonparticipant Mr. Trebold resides at either residence #127 or #83. The nearest proposed turbine to nonparticipant residence #127 is Turbine 1, which is 3,487 feet to the north; the nearest proposed turbine to nonparticipant residence #83 is Turbine 2, which is 3,804 feet to the north/northwest. The attached table summarizes the participation status for each residence nearby, as well as the distance to the nearest proposed turbine and the predicted sound and shadow flicker levels at each residence.

Glacier Ridge Receptor Summary - Revised October 26, 2016

Receptor ID	Participating Parcel?	UTM Coordinates		Cumulative Calculated Sound Power Level at Receptor [dBA]	Cumulative Predicted Shadow Flicker [hours per year]	Nearest Turbine	Distance to Nearest Turbine [ft]
		Easting [m]	Northing [m]				
R014	Yes	587562	5221104	40.0	0	A9	3089
R021*	Yes	588531	5220177	40.8	4	A9	3304
R022	Yes	590255	5217954	38.7	2	T87	4247
R023	Yes	590572	5217874	37.1	N/A**	T87	5159
R024	Yes	585578	5219533	41.2	N/A**	T81	5034
R025	No	585118	5217293	46.1	27	T79	1966
R028	Yes	584354	5216931	43.1	3	T78	3372
R029	No	584690	5214845	45.6	22	T76	2262
R030	No	583869	5214113	45.7	0	T76	3542
R031	No	587158	5216301	45.9	23	T71	2025
R032	No	586878	5213678	42.9	3	T61	3808
R033	No	588565	5214953	45.0	20	T67	2039
R034	No	587238	5209958	46.4	5	T51	2568
R035	Yes	586989	5209860	46.1	9	T50	2774
R036	No	588612	5210827	45.4	9	T54	2334
R037	No	590176	5209874	41.5	5	T41	4216
R038	No	591832	5209102	44.1	12	T42	1969
R042	Yes	583918	5208982	45.9	17	T55	2022
R043	No	588721	5208679	44.7	8	A20	2947
R045	Yes	587501	5203580	45.9	13	T18	1981
R046	Yes	587109	5204862	45.7	9	T30	2057
R047	Yes	587199	5204831	46.0	4	T30	2032
R048	Yes	587383	5202578	45.7	24	T9	2047
R049	Yes	585767	5202491	47.1	32	T7	1990
R050	No	585108	5204313	46.5	13	T16	2100
R051	No	585569	5204380	45.8	9	T17	1967
R052	No	586360	5206498	46.6	2	T28	1968
R053	Yes	587162	5207247	45.5	16	A18	1980
R054	No	587053	5207619	44.4	14	A18	2914
R055	No	583742	5205228	45.2	30	T23	2022
R057	Yes	585372	5206769	48.3	44	T26	1968
R059	No	583799	5208374	42.8	3	T55	2792
R060	No	584400	5208230	45.5	4	T55	2011
R061	No	581643	5209458	39.0	2	A4	3997
R062	No	581835	5209785	41.0	3	A4	3365
R063	No	581753	5209984	41.5	3	A4	3779
R070	No	585680	5211529	47.7	0	A17	3574
R073	Yes	584021	5203718	46.2	14	T21	2152
R074	Yes	584004	5203615	46.1	17	T15	2113
R075	No	583392	5203391	44.2	11	T13	2769
R076	No	583205	5203338	43.8	6	T12	2506
R083	No	585526	5200014	38.6	0	T2	3804
R100	Yes	588329	5202120	44.3	1	T9	2238
R111	No	591834	5206916	40.0	0	A3	3581
R112	Yes	588722	5214037	46.0	10	T66	2185
R119	No	583617	5215549	47.6	36	T76	1967
R124	Yes	588614	5217226	40.9	0	T85	3735
R127	No	584738	5200004	39.2	0	T1	3487
R128	Yes	587393	5203011	46.1	38	T8	1986

*Residence R021 was confirmed to be abandoned after the sound and shadow flicker studies were completed.

**N/A = not applicable; receptor was not included in shadow flicker analysis because it was further than 1,500 meters from the nearest turbine.