Submitted by: Chair of the Assembly at

the Request of the Mayor

CLERK'S OFFICE

AMENDED AND APPROVED

Prepared by: Planning Department For reading: August 31, 2010

Date: 8-31-10

Anchorage, Alaska AO No. 2010-50(S)

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

THE ANCHORAGE ASSEMBLY ORDAINS:

<u>Section 1.</u> Anchorage Municipal Code section 21.35.020 is hereby amended to read as follows: (Other definitions in the referenced section are not affected and are therefore not set out unless for context.)

21.35.020 Definitions and rules of construction.

B. The following words, terms and phrases, when used in this title, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

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Watershed manager means the executive director of the office of community planning and development or designee, who is the administrator of, and storm water program coordinator for, the National Pollutant Discharge Elimination System municipal separate storm sewer system permit required under federal law.

 Wind Energy Conversion System (WECS) means any device or assemblage which directly converts wind energy into usable thermal, mechanical, or electrical energy, including such devices as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries, and associated control equipment.

A. A small WECS has a rated power capacity of not more than 25 kW and is intended to produce power primarily for on-site consumption, either instead of or as a supplement to utility power.

B. A utility WECS has one or more WECS units with a rated capacity

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greater than 25 [100] kW, and is intended primarily to provide distributed electric power as a public or private utility.

(GAAB 21.05.020; AO No. 77-355; AO No. 78-16; AO No. 78-28; AO No. 78-171; AO No. 78-231; AO No. 79-214; AO No. 80-42; AO No. 81-67(S); AO No. 81-97; AO No. 81-180; AO No. 82-54; AO No. 82-167; AO No. 83-91(S); AO No. 84-14; AO No. 84-52; AO No. 85-58; AO No. 85-159; AO No. 85-91, 10-1-85; AO No. 85-216; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 86-171; AO No. 88-172; AO No. 88-171(S-1), 12-31-88; AO No. 89-35, 4-7-89; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 91-35; AO No. 90-152(S); AO No. 91-90(S); AO No. 91-184; AO No. 92-7(S-2); AO No. 92-26; AO No. 92-93; AO No. 92-128(S); AO No. 92-129(S); AO No. 93-58; AO No. 93-148, § 1, 11-16-93; AO No. 94-62, § 2, 4-12-94; AO No. 95-68(S-1), §§ 2, 3, 8-8-95; AO No. 95-173, § 1, 11-14-95; AO No. 96-41, § 1, 3-5-96; AO No. 96-131(S), § 1, 10-22-96; AO No. 98-106, § 1, 7-21-98; AO No. 98-160, § 3, 12-8-98; AO No. 99-62, § 2, 5-11-99; AO No. 2000-119(S), § 8, 2-20-01; AO No. 2001-79(S), § 1, 5-8-01; AO No. 2001-80, § 1, 5-8-01; AO No. 2002-101(S), § 2, 4-9-02; AO No. 2002-109, § 2, 9-10-02; AO No. 2002-117, § 4, 1-28-03; AO No. 2003-62(S-1). § 3. 10-1-03; AO No. 2003-97, § 1, 9-30-03; AO No. 2003-132, § 1, 10-7-03; AO No. 2003-124(S), § 1, 1-20-04; AO. No. 2004-108(S), § 2, 10-26-04; AO No. 2005-9, § 1, 3-1-05; AO No. 2005-150(S-1), § 1, 2-28-06; AO No. 2005-185(S), § 1, 2-28-06; AO No. 2005-124(S-1A), § 4, 4-18-06; AO No. 2006-121, § 1, 9-26-06; AO No. 2006-64(S-1), § 1, 12-12-06)

<u>Section 2.</u> Anchorage Municipal Code subsection 21.40.020 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.020 PLI public lands and institutions district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 6. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
 - Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

- C. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
 - 22. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
 - 23. Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

(GAAB 21.05.050.A; AO No. 77-355; AO No. 79-25; AO No. 81-67(S); AO No. 81-178(S); AO No. 82-24; AO No. 83-78; AO No. 84-34; AO No. 85-18; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 86-19; AO No. 86-90; AO No. 88-7(S), 7-4-88; AO No. 90-152(S); AO No. 92-93; AO No. 93-148, § 3, 11-16-93; AO No. 95-68(S-1), § 4, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 3, 5-11-99; AO No. 99-131, § 6, 10-26-99; AO No. 99-149, § 1, 12-14-99; AO No. 2002-109, § 3, 9-12-02; AO No. 2003-132, § 2, 10-7-03; AO No. 2005-9, § 2, 3-1-05; AO No. 2005-42(S), § 1, 5-31-05; AO No. 2005-150(S-1), § 2, 2-28-06; AO No. 2005-185(S), § 2, 2-28-06; AO No. 2006-64(S-1), § 5, 4-18-06; AO No. 2006-64(S-1), § 5, 2, 3, 12-12-06)

<u>Section 3.</u> Anchorage Municipal Code subsection 21.40.030 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.030 R-1 and R-1A single-family residential districts.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 9. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.B; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-216; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 1, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 4, 5-11-99; AO No 2002-109, § 3, 9-10-02; AO No. 2005-175, § 1, 1-10-06; AO No. 2005-178, § 2, 1-24-06; AO No.

2005-185(S), § 3, 2-28-06; AO No. 2005-124(S-1A), § 6, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 4.</u> Anchorage Municipal Code subsection 21.40.040 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.040 R-2A two-family residential district (large lot); R-2D two-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 9. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 2, 6-9-98; AO No. 99-49, § 2, 3-23-99; AO No. 99-62, § 5, 5-11-99; AO No. 2005-175, § 2, 1-10-06; AO No. 2005-178, § 3, 1-24-06; AO No. 2005-185(S), § 4, 2-28-06; AO No. 2005-124(S-1A), § 7, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 5.</u> Anchorage Municipal Code subsection 21.40.045 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.045 R-2M multiple-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 3, 6-9-98; AO No. 99-49, § 3, 3-23-99; AO No. 99-62, § 6, 5-11-99; AO No. 2005-175, § 3, 1-10-06; AO No. 2005-178, § 4, 1-24-06; AO No. 2005-185(S), § 5, 2-28-06; AO No. 2005-124(S-1A), § 8, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

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Anchorage Municipal Code subsection 21.40.050 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

R-3 multiple-family residential district. 21.40.050

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C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

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One small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.D; AO No. 77-355; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-218; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 7, 5-11-99; AO No. 2005-175, § 4, 1-10-06; AO No. 2005-178, § 5, 1-24-06; AO No. 2005-185(S), § 6, 2-28-06; AO No. 2005-124(S-1A), § 9, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

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Section 7. Anchorage Municipal Code subsection 21.40.060 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

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R-4 multiple-family residential district. 21.40.060

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C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

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- 9. One free-standing small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.
- 10. Building-mounted small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.E; AO No. 77-355; AO No. 80-27; AO No. 81-67(\$); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(\$-1), 12-31-88; AO No. 88-147(\$-2); AO No. 92-114; AO No. 96-131(\$), § 2, 10-22-96; AO No. 99-62, § 8, 5-11-99; AO No. 2003-124(\$), § 2, 1-20-04; AO No. 2005-175, § 5, 1-10-06; AO No. 2005-178, § 6, 1-24-06; AO No. 2005-185(\$), § 7, 2-28-06; AO No. 2005-124(\$-1A), § 10, 4-18-06; AO No. 2006-64(\$-1), §§ 2, 3, 12-12-06)

<u>Section 8.</u> Anchorage Municipal Code subsection 21.40.070 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.070 R-5 rural residential district; R-5A, rural residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.F; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-52; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 9, 5-11-99; AO No. 2002-63(S), § 1, 5-21-02; AO No. 2005-175, § 6, 1-10-06; AO No. 2005-178, § 7, 1-24-06; AO No. 2005-185(S), § 8, 2-28-06; AO No. 2005-124(S-1A), § 11, 4-18-06; AO No. 2006-121, § 2, 9-26-06; AO No. 2006-64(S-1), § 5, 3, 12-12-06)

<u>Section 9.</u> Anchorage Municipal Code subsection 21.40.080 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.080 R-6 suburban residential district (large lot).

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- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45,410.

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(GAAB 21.05.050.G; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-27, § 1, 2-23-99; AO No. 99-62, § 10, 5-11-99; AO No. 2005-175, § 7, 1-10-06; AO No. 2005-178, § 8, 1-24-06; AO No. 2005-185(S), § 9, 2-28-06; AO No. 2005-124(S-1A), § 12, 4-18-06; AO No. 2006-121, § 3, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 10.</u> Anchorage Municipal Code subsection 21.40.090 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.090 R-7 intermediate rural residential district.

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C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.H; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-219; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 11, 5-11-99; AO No. 2005-175,

§ 8, 1-10-06; AO No. 2005-178, § 9, 1-24-06; AO No. 2005-185(S), § 10, 2-28-06; AO No. 2005-124(S-1A), § 13, 4-18-06; AO No. 2006-121, § 4, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 11.</u> Anchorage Municipal Code subsection 21.40.100 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.100 R-8 rural residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 12. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.U; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 4, 6-9-98; AO No. 99-62, § 12, 5-11-99; AO No. 2005-175, § 9, 1-10-06; AO No. 2005-178, § 10, 1-24-06; AO No. 2005-185(S), § 11, 2-28-06; AO No. 2005-124(S-1A), § 14, 4-18-06; AO No. 2006-121, § 5, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 12.</u> Anchorage Municipal Code subsection 21.40.110 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.110 R-9 rural residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 12. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.V; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78;

AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 5, 6-9-98; AO No. 99-62, § 13, 5-11-99; AO No. 2005-175, § 10, 1-10-06; AO No. 2005-178, § 11, 1-24-06; AO No. 2005-185(S), § 12, 2-28-06; AO No. 2005-124(S-1A), § 15, 4-18-06; AO No. 2006-121, § 6, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 13.</u> Anchorage Municipal Code subsection 21.40.115 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.115 R-10 residential alpine/slope district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(AO No. 81-97; AO No. 81-217; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 6, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 14, 5-11-99; AO No. 2005-175, § 11, 1-10-06; AO No. 2005-178, § 12, 1-24-06; AO No. 2005-185(S), § 13, 2-28-06; AO No. 2005-124(S-1A), § 16, 4-18-06; AO No. 2006-121, § 7, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 14.</u> Anchorage Municipal Code subsection 21.40.117 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.117 R-11 Turnagain Arm district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 8. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

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(AO No. 82-162; AO No. 84-34; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-122; AO No. 86-182; AO No. 88-143; AO No. 88-144, 11-26-88; AO No. 88-171(S-1), 12-31-88; AO No. 94-120, § 1, 8-23-94; AO No. 94-238(S), § 3, 2-28-94; AO No. 94-239, § 1, 2-14-95; AO No. 96-118, § 1, 8-22-96; AO No. 96-118, § 1, 8-13-96; AO No. 99-62, § 15, 5-11-99; AO No. 2001-88, § 1, 6-5-01; AO No. 2005-175, § 12, 1-10-06; AO No. 2005-178, § 13, 1-24-06; AO No. 2005-185(S), § 14, 2-28-06; AO No. 2005-124(S-1A), § 17, 4-18-06; AO No. 2006-121, § 8, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 15. Anchorage Municipal Code subsection 21.40.130 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.130 R-O residential-office district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.I; AO No. 77-219; AO No. 77-355; AO No. 78-199; AO No. 80-57; AO No. 81-67(S); AO No. 83-226; AO No. 85-18; AO No. 85-23; AO No. 85-69; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 86-171; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 91-97; AO No. 92-114; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 16, 5-11-99; AO No. 2003-124(S), § 3, 1-20-04; AO No. 2005-175, § 13, 1-10-06; AO No. 2005-178, § 14, 1-24-06; AO No. 2005-185(S), § 15, 2-28-06; AO No. 2005-124(S-1A), § 18, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 16. Anchorage Municipal Code subsection 21.40.140 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

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21.40.140 B-1A local and neighborhood business district.

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C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

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 6. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.J; AO No. 77-355; AO No. 78-28; AO No. 78-169; AO No. 81-67(S); AO No. 81-143; AO No. 83-210; AO No. 85-18; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 87-62; AO No. 88-49(S); AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 17, 5-11-99; AO No. 2005-185(S), § 16, 2-28-06; AO No. 2005-124(S-1A), § 19, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 17.</u> Anchorage Municipal Code subsection 21.40.150 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.150 B-2A central business district core.

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C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

> Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

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(GAAB 21.05.050.W; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 87-148; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 6, 8-8-95; AO No. 98-160, § 4, 12-8-98; AO No. 98-188, §§ 1--3, 1-12-99; AO No. 99-62, § 19, 5-11-99; AO No. 99-131, § 7, 10-26-99; AO No. 2001-80, § 3, 5-8-01; AO No. 2005-185(S), § 18, 2-28-06; AO No. 2005-124(S-1A), § 21, 4-18-06; AO No. 2006-49, § 1, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 5, 10-23-07)

<u>Section 18.</u> Anchorage Municipal Code subsection 21.40.160 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.160 B-2B central business district, intermediate.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 4. Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.Y; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 7, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 5, 12-8-98; AO No. 98-188, §§ 4--6, 1-12-99; AO No. 99-62, § 20, 5-11-99; AO No. 99-131, § 8, 10-26-99; AO No. 99-149, § 2, 12-14-99; AO No. 2001-80, § 4, 5-8-01; AO No. 2005-185(S), § 19, 2-28-06; AO No. 2005-124(S-1A), § 22, 4-18-06; AO No. 2006-49, § 2, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 6, 10-23-07)

<u>Section 19.</u> Anchorage Municipal Code subsection 21.40.170 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.170 B-2C central business district, periphery.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.X; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 8, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 6, 12-8-98; AO No. 98-173, § 4, 11-3-98; AO No. 98-188, §§ 7--9, 1-12-99; AO No. 99-62, § 21, 5-11-99; AO No.

99-131, § 9, 10-26-99; AO No. 99-149, § 3, 12-14-99; AO No. 2001-80, § 5, 5-8-01; AO No. 2005-185(S), § 20, 2-28-06; AO No. 2005-124(S-1A), § 23, 4-18-06; AO No. 2006-49, § 3, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 7, 10-23-07)

<u>Section 20.</u> Anchorage Municipal Code subsection 21.40.180 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.180 B-3 general business district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 3. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.M; AO No. 77-355; AO No. 78-28; AO No. 80-57; AO No. 80-132; AO No. 81-67(S); AO No. 83-209; AO No. 85-18; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 86-182; AO No. 87-32; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-26; AO No. 92-114; AO No. 95-68(S-1), § 9, 8-8-95; AO No. 96-107, § 1, 7-30-96; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 7, 12-8-98; AO No. 99-62, § 22, 5-11-99; AO No. 2001-80, § 6, 5-8-01; AO No. 2004-108(S), § 3, 10-26-04; AO No. 2005-185(S), § 21, 2-28-06; AO No. 2005-124(S-1A), § 24, 4-18-06; AO No. 2006-64(S-1), § § 2, 3, 12-12-06)

<u>Section 21.</u> Anchorage Municipal Code subsection 21.40.200 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.200 I-1 light industrial district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 4. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

- 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
- D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
 - 17. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.

(GAAB 21.05.050.0; AO No. 77-355; AO No. 79-95; AO No. 81-67(S); AO No. 82-105; AO No. 84-57; AO No. 85-91, 10-1-85; AO No. 85-95; AO No. 86-50; AO No. 86-90; AO No. 87-32; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 92-114; AO No. 95-68(S-1), § 11, 8-8-95; AO No. 95-76, § 1, 4-4-95; AO No. 95-194, § 1, 1-2-96; AO No. 98-160, § 9, 12-8-98; AO No. 98-173, § 5, 11-3-98; AO No. 99-62, § 24, 5-11-99; AO No. 2001-80, § 8, 5-8-01; AO No. 2004-5, § 1, 1-20-04; AO. No. 2004-108(S), § 5, 10-26-04; AO No. 2004-178(am), § 1, 1-25-05; AO No. 2005-9, § 3, 3-1-05; AO No. 2005-185(S), § 23, 2-28-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 22. Anchorage Municipal Code subsection 21.40.210 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.210 I-2 heavy industrial district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
 - 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
- D. Conditional uses. Subject to the requirements of the conditional

use standards and procedures of this title, the following uses may be permitted:

*** *** ***

- 8. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
- Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

*** *** ***

(GAAB 21.05.050.P; AO No. 77-355; AO No. 85-91, 10-1-85; AO No. 87-32; AO No. 91-184; AO No. 93-148, § 4, 11-16-93; AO No. 96-60, § 1, 8-6-96; AO No. 96-125, § 1, 11-12-96; AO No. 97-78, § 2, 6-3-97; AO No. 99-62, § 25, 5-11-99; AO No. 2001-80, § 9, 5-8-01; AO No. 2005-185(S), § 24, 2-28-06; AO No. 2005-124(S-1A), § 26, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 23.</u> Anchorage Municipal Code subsection 21.40.240 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.240 T transition district.

*** *** ***

D. Conditional uses. Subject to the requirements of the conditional use and site plan standards and procedures of this title, the following uses may be permitted only as a conditional use:

*** *** ***

- 12. Small wind energy conversion systems, subject to the requirements of section 21.50.470.
- 13. Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

*** *** ***

(GAAB 21.05.050.S; AO No. 77-355; AO No. 79-25; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 88-59(S); AO No. 88-171(S-1), 12-31-88; AO No. 98-160, § 10, 12-8-98; AO No. 99-62, § 28, 5-11-99; AO No. 2005-185(S), § 26, 2-28-06; AO No. 2005-124(S-1A), § 28, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 12, 10-23-07)

<u>Section 24.</u> Anchorage Municipal Code subsection 21.40.260 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

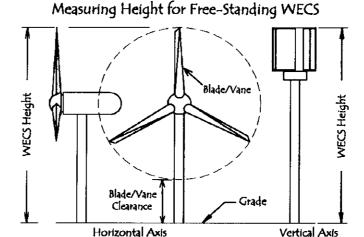
- A. *Purpose*. The purpose of this section is to regulate and provide standards for small wind energy conversion systems (WECS) as defined in this Code, and to encourage the development of small wind energy systems.
- B. Approval Process. Generally, s[8]mall WECS are subject to an administrative site plan review. Sufficient information shall be provided with the application to show that the standards below have been met. The planning director shall grant approval if the standards of this section have been met, and that the applicant has sized and sited the system to reduce impacts on surrounding properties to the maximum extent feasible. Structural stability of the foundation will be assured through the building permit process.
- C. Submittal Requirements.
 - 1. A description of the project, including the maximum rated power output capacity of the WECS.
 - 2. The make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, the support structure, and method of attachment to the ground and/or structure.
 - 3. Elevation drawing of the WECS showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
 - 4. If the WECS is not certified as meeting the IEEE 1547 standard (Institute of Electrical and Electronic Engineers), then an assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication is required.
 - 5. Applications shall include a visual impact analysis of the proposed WECS as installed, which shall include color photographs of the proposed site from at least two locations accurately depicting the existing conditions. A computerized photographic simulation, demonstrating any visual impacts from strategic vantage points, is desirable and may be required at the director's discretion. The applicant shall indicate any visual screening proposed to be incorporated into the project that is intended to lessen the system's visual prominence.

- D. <u>Approval Criteria</u>. In addition to meeting the standards of this section, small WECS shall meet the following approval criteria:
 - 1. The applicant shall obtain written consent from the simple majority of property owners of all abutting residentially-zoned properties. If no response is received within 60 days, the applicant may assume tacit consent. Such written consent shall be submitted with the small WECS application.
 - 2. The applicant shall demonstrate in their application materials that the small WECS' visual impacts are minimized or mitigated for surrounding neighbors and the community. This may include, but is not limited to, information regarding site selection, turbine design or appearance, buffering, and screening of ground mounted equipment.

E. Building-Mounted WECS.

- 1. Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- 2. In residential districts on lots less than 20,000 square feet, a building mounted WECS shall not exceed the maximum height for principal structures of the underlying zoning district by more than 10 feet.
- 3. On buildings of 60 feet or less in height, building mounted WECS shall be no taller than 10 feet.
- 4. On buildings over 60 feet in height, building mounted WECS shall be set back from the structure edge by at least two feet for every one foot of height greater than 10 feet.
- 5. Building-mounted WECS shall meet the design standards for free-standing WECS in subsection F[E].6. below, with the exception of F[E].6.e.
- 6. Building-mounted WECS shall be located at least 1.1 times the height of the system (rooftop to top of WECS) from all overhead power and telecommunication lines, and any telecommunication towers.

- Number of WECS. Only one small WECS per lot is allowed in residential zoning districts. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- 2. Power Capacity. Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- 3. [MINIMUM LOT AREA AND] Maximum Height.
 - a. [THE MINIMUM LOT AREA FOR A SMALL WECS IS 40,000 SQUARE FEET.]
 - B.] The height of a small WECS shall be determined by compliance with the setback provisions of subsection E.5[4]. below. In no instance shall a small WECS exceed 95 feet in height.
 - **b[C]**. Height shall be measured as depicted in the illustration. Structures shall not interfere with Federal Aviation Administration Regulations on airport approaches. In no case shall the height exceed manufacturer's specifications.



4. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 25 feet above grade. No blades may extend over public sidewalks/trails.

Setbacks.

- a. WECS shall be set back at least 1.5 times the height of the system from property lines abutting residentially-zoned lots. [EXCEPT AS ALLOWED IN 5.8. BELOW, ALL WECS SHALL BE SETBACK FROM ALL PROPERTY LINES AT LEAST 1.1 TIMES THE HEIGHT OF SYSTEM]
- b. WECS shall be set back at least 1.1 times the height of the system from property lines abutting rights-of-way and nonresidentially-zoned lots.
- C. [ON LOTS ABUTTING WATER BODIES SUCH AS LAKES OR PONDS, THE] WECS shall be setback at least 25 [15] feet from a [THE] water body edge[, BUTTHE SETBACK DISTANCE REQUIRED IN 5.A. ABOVE MAY EXTEND INTO THE WATER BODY, provided that the full extent of the applicable setback distance of 5.a. or 5.b. above falls within the water body or the applicant's property [WATER BODY].
- <u>d</u>[C]. All systems shall be setback at least 1.1 times the height of the system from all overhead power and telecommunication lines, and any telecommunication towers.
- 6. Design Standards.
 - a. Operational noise shall not exceed 50dBH at property line except for short-term high wind speed events such as storms.
 - All systems shall be equipped with manual and automatic (mechanical or electrical) over-speed controls to limit the blade rotation speed to within the design limits of the system.
 - c. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
 - d. Lattice type towers and towers using guy wires are prohibited.
 - e. All power transmission and telemetry lines from the

tower to any building or other structure shall be placed underground.

- f. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- g. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.
- h. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner.
- <u>G</u>[F]. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

<u>Section 28.</u> Anchorage Municipal Code chapter 21.50 is hereby amended to add new sections to read as follows:

21.50.470 Small wind energy conversion systems—multiple free-standing towers.

- A. Purpose. The purpose of this section is to provide standards for multiple free-standing small WECS in industrial districts and in the PLI district.
- B. Submittal Requirements. Multiple free-standing small WECS in industrial districts and in the PLI districts shall provide the minimum application information required by section 21.50.480B.
- C. Maximum number of WECS. No more than three WECS shall be allowed on any one lot. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- D. Standards. Multiple free-standing small WECS shall meet the standards of section 21.45.410F[6].
- E. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

21.50.480 Utility wind energy conversion systems.

- A. *Purpose*. The purpose of this section is to provide standards for utility scale wind energy conversion systems (WECS) generally utilizing multiple towers designed to produce electric power as a public or private utility.
- B. Submittal Requirements. In addition to the minimum application information set forth in 21.15.030.C, the following shall be provided:
 - 1. For each WECS model proposed, the make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, and drawings of the support structure stamped by a structural engineer registered in the State of Alaska.
 - 2. Elevation drawing of each WECS model showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
 - 3. An assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication.
 - 4. An analysis of impacts on local wildlife shall be prepared, regarding impacts anticipated during construction, reconstruction, modification or operation of WECS. Wildlife impacts to be considered shall include, at a minimum, anticipated impacts on birds.
 - 5. If any habitable building is located within 1,300 feet of any proposed Utility WECS unit, then the applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECS and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with habitable buildings and describe measures that shall be taken to eliminate or mitigate the problems. The applicant has the burden of proving that shadow flicker will not negatively impact neighboring uses.
 - 6. Applications shall include a visual impact analysis of the proposed WECS as installed, which may include a

computerized photographic simulation, demonstrating any visual impacts from strategic vantage points. Color photographs of the proposed site from at least two locations accurately depicting the existing conditions shall be included. The visual analysis shall also indicate the color treatment of the system's components and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.

- 7. A noise analysis by a competent acoustical consultant documenting the noise levels associated with the proposed WECS. The study shall document projected noise levels at property lines. The noise analysis shall include low frequency noise.
- C. Height. The height as measured from grade to the highest point of the fully operational system, including the turbine vane(s), shall not exceed 450 feet in the AF, W, T, and PLI zoning districts, or 200 feet in any other district in which a Utility WECS may be approved. A Utility WECS shall not interfere with Federal Aviation Administration Regulations in the vicinity of an airport. In no case shall the height exceed manufacturer's specifications.
- D. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 30 feet above grade.
- E. Setbacks.
 - 1. All WECS shall setback from all residential property lines at least 3.0 times the height of system, and from all non-residential property lines a minimum of 2.0 times the height of the system.
 - 2. All systems shall be at least 325 feet from any telecommunications towers.
 - 3. The tower shall maintain a minimum separation distance equal to 1.1 times the height of system from all overhead power and telecommunication lines.
- F. Design Standards.
 - 1. Except for short-term high wind speed events such as storms, operational noise shall not exceed 50dBH at any property line adjacent to a residential zoning district, and 60dBH at any property line adjacent to a nonresidential

zoning district.

- 2. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- 3. Lattice type towers and towers using guy wires are prohibited.
- 4. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground, unless otherwise allowed by the planning and zoning commission.
- 5. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- 6. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.
- 7. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner, as approved by the planning and zoning commission.
- 8. WECS structure shall be designed to prevent unauthorized external access to electrical and mechanical components and shall have access doors that are kept securely locked. No climbing pegs or tower ladders shall be located closer than 12 feet to the ground level at the base of the structure. A fence with a locking portal may be required by the planning and zoning commission to enclose the entire WECS tower site.
- G. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

<u>Section 29.</u> This ordinance shall become effective immediately upon its passage and approval by the Assembly.

PASSED AND APPROVED by the Anchorage Assembly this 3/5± day of Angust, 2010.

Chair of the Assembly

ATTEST:

Honge & Jowenton Municipal Clerk