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STAFF REPORT

DATE: February 8, 2010

TO: Klickitat County Planning Commission

FROM: Klickitat County Planning Department

RE: Energy Overlay Zone – February 16 Public Hearing

- Proposed Clarifications on Project Review Procedures and Mitigation
- Public Comment Pursuant to EOZ Settlement Agreement

1. Proposal

The Klickitat County Planning Department is proposing Energy Overlay Zone (EOZ) revisions to clarify project review and mitigation requirements. At the same time, the County Planning Commission has requested public comment on the EOZ, which may address and re-evaluate development regulations and comprehensive plan policies.

2. Background – EOZ Development

2.1 Klickitat County has extensive wind resources and a supporting electrical transmission infrastructure. Approximately six years ago, the County realized wind developers were increasingly interested in siting projects within the County. To prepare for this development, the County completed extensive up front environmental review.

2.2 The County “borrowed” from the State Environmental Policy Act’s “planned action” strategy used in jurisdictions planning under the Growth Management Act, and drafted a programmatic Environmental Impact Statement (EIS). The EIS evaluated impacts associated with adopting EOZ regulations, and related amendments to the zoning map and comprehensive plan. The County issued a draft EIS in 2003, and a final EIS in 2004. The County then adopted the proposed EOZ legislation.

2.3 The EIS was appealed in 2004. To settle the appeal, the County enhanced EOZ public notice provisions; limited the EOZ to clean energy development; and agreed to not extend the EOZ into the Columbia River Gorge National Scenic Area. The County also agreed to provide an

opportunity for public comment after 1,000 megawatts of wind energy had been constructed. The settlement agreement reads as follows:

In seven years, or after 1000 MW [megawatts] of wind energy is constructed (as calculated from the date of the Agreement) whichever occurs first, the Planning Commission will hold a public hearing. The purpose of the public hearing will be to reevaluate the energy overlay zone and take public comment on the energy overlay development regulations and comprehensive plan policies. Following the Planning Commission public hearing, the Board of County Commissioners will also hold a public hearing for the same purposes. Neither the Planning Commission nor the Board of County Commissioners is required to take any action as a result of these hearings, although it may elect to amend the comprehensive plan policies and/or development regulations.

2.4 Klickitat County now has five years of experience with permitting wind projects per the EOZ process, and has approved building permits for approximately 1,060 megawatts of development. The Planning Commission is holding a public hearing to accept comment consistent with the settlement agreement, and also on the Planning Department's proposed revisions.

2.5 In completing environmental review for projects permitted through the EOZ, Klickitat County coordinates with, and seeks comment from, agencies with expertise. Review includes consultation with the Washington Department of Fish and Wildlife (WDFW). The County also considers the WDFW Wind Power Guidelines, first published in 2003, and then updated in 2009, which provide guidance for wildlife and habitat studies, impact assessment, and mitigation considerations associated with wind power development. After several years of working with various agencies and projects, the County has resolving a variety of permitting questions. The proposed revisions would provide clarification on how various issues should be addressed, and improve the permitting process.

3. Background – Legislative Developments

3.1 Since EOZ adoption, legislation and political support for renewable energy has dramatically increased. And, the County's approach to permitting and siting wind development has been widely recognized as precisely what rural counties should be doing to promote both economic development and responsible project siting.

3.2 Klickitat County is the first and only county in the State of Washington to comprehensively assess wind development potential through an EIS and enact an energy overlay zone. The Washington State Legislature has recognized the value of Klickitat County's process for up front environmental review through the EOZ EIS, by effectively creating a renewable energy

“planned action” process for counties.¹ The legislature passed this bill with a **unanimous** vote. This legislative enactment reinforces the County’s decision to invest in clean energy development, particularly as Klickitat County is the only county in the state the legislation applies to.

3.3 In addition, in 2006, voters approved the Energy Independence Act, Ch. 19.285 RCW;² and, in 2008, the legislature adopted state-wide greenhouse gas emission reduction requirements.³ This legislation, and related enactments, recognize wind development as key to not only reducing emissions, but securing energy independence.⁴ These measures are central to the State’s economic recovery, as well as its ability to compete in global economy, in which economic prosperity is increasingly dependent on efficient, clean energy supplies.⁵ Washington’s rural counties will play an increasingly important role in providing these supplies.

3.4 The County’s EOZ EIS and implementing legislation are consistent with these new developments. The Planning Department’s proposed EOZ clarifications simply improve a process already reviewed in four EIS’s and sanctioned by the Washington State Legislature and Governor.

4. Proposed Amendments.

4.1 Small-Scale Energy Systems – EOZ Sections 19:39:2. Most EOZ projects do not meet the definition of small-scale energy systems. However, there have been questions as to what types of projects this provision covers. The revisions provide clarification. Such facilities are those generating power primarily for on-site use and with a rated power capacity not exceeding 100 kilowatts.

4.2 Micrositing decisions – EOZ Section 19.39:5(C). Developers may need to make decisions during construction to adjust turbine locations, access roads, and other project features. Locations can be impacted by the need to maximize operational efficiency with respect to on-site wind characteristics (e.g. “in the field” analyses indicating higher than expected geographic

¹ Ch. 419, Laws of 2009 (Senate Bill 5107).

² RCW 19.285.010 (“This chapter requires large utilities to obtain fifteen percent of their electricity from new renewable resources such as solar and wind by 2020”)

³ RCW 70.235.020 (“The state shall limit emissions of greenhouse gases to achieve the following emission reductions for Washington state: ... By 2020, reduce overall emissions of greenhouse gases in the state to 1990 levels....”); RCW 80.80.005(1)(d) (“Washington has been a leader in actions to slow the increase of greenhouse gases emissions, such as [by] ... increasing renewable energy sources by electric utilities....”).

⁴ While there are emissions associated with wind development construction, over a project’s life cycle, these “embedded emissions” are a fraction of the emissions associated with more traditional sources. In addition, adding economic value to the rural ranching and agricultural uses cities rely upon, is critical for retaining a sustainable food supply.

⁵ See e.g. Executive Order 09-05 (May – 2009).

interference with wind pattern). Also, unexpected site characteristics, such as discovery of previously unidentified nesting sites or archaeological resources, may warrant revising road access, turbine, and/or utility locations. A micro-siting process is recommended so developers and the public know what types of revisions the Department must review.

4.3 Minor project revisions – EOZ Section 19.39:5(D). After a project is approved, wind developers occasionally secure leases on properties adjacent to the project site. Typically, the additional leases are acquired because they are more favorable to wind turbine operation. If the newly leased area would not increase the total MW permitted, and is within the scope of the project's environmental review, or would reduce impacts, then having a minor amendment process for reviewing the added land area and other minor revisions would be useful. Also, occasionally minor adjustments need to be made to project conditions.

4.4 Setbacks – EOZ Section 19.39:8(A)(1-4); see also 19.39:9 (B)(ff) and (gg); Building Code, Chapter 15. County zoning regulations and building requirements include setbacks from property lines to address public health and safety (e.g. to minimize fire spreading from a structure on one parcel to a structure on a neighboring property). The Planning Department has not calculated setbacks from an energy project's internal lot lines.⁶ However, the methodology should be clarified, given Building Department concerns over setbacks imposed for fire safety purposes. Also, the Planning Department recommends clarifying the setbacks which have been required to address impacts to residential structures, roads, and other sensitive areas for public safety (e.g. ice throw), aesthetic, noise, and other reasons.

4.5 Habitat mitigation – EOZ 19.39:9(A)(4). Developers typically prepare a habitat management plan to address EOZ provisions, as well as the critical areas ordinance and SEPA. The EOZ should acknowledge this.

4.6 TAC formation/role – EOZ 19.39:9(B)(k)(vii). The current EOZ regulations require establishment of a TAC (Technical Advisory Committee) for each project to review new information and recommend mitigation. It can be a burden for the same volunteer TAC members to serve on several TAC's (currently there are 10 TAC's whose meetings are often several hours long). Also, because TAC's have at times developed mitigation independently of the County's review process, this has reduced transparency. Providing for TAC's to serve multiple projects and increasing County involvement would address these concerns.

4.7 Cultural Resources – EOZ 19.39:9(B)(r, s, t, and u). Department of Archaeology and Historic Preservation reviews upwards of 5,000 SEPA documents every year. County assistance in reviewing cultural resource questions can expedite agency review, and lead to a more uniform

⁶ Wind turbines/towers are typically located on large tracts of land committed to resource use rather than standard residential, commercial or industrial uses. Additionally, property lines of large tracts of land committed to resource use are rarely surveyed due to cost or common ownership.

process.

4.8 Visual resources – EOZ Section 19.39:9(B)(z). Most wind projects approved to-date have been located in sparsely populated agricultural areas. Consequently, “shadow flicker,” or the intermittent shadow of blades crossing the landscape has not been a significant issue. However, the EOZ is superimposed over some areas zoned for residential use, and could become an issue. The proposed setbacks standards will in most circumstances address the issue, but this should be confirmed during permitting.

4.9 Visual resources – EOZ Section 19.39:9(B)(aa). Wind projects developed in the same general area have not always consolidated infrastructure where practicable, but have at times pursued construction of separate transmission lines and supporting infrastructure. This is not an efficient use of resources, and can increase project impacts, and complicate mitigation. Providing that common transmission lines and corridors be utilized whenever possible, and that operations and maintenance facilities be centrally located to serve multiple projects in an area would address this.

4.10 Public safety/roads - EOZ Section 19.39:9(B)(jj) and (kk). Questions raised about addressing road impacts have included: 1) Lack of a systematic approach to determining responsibility for damages to roads when different projects use the same roads at different times; 2) unexpected traffic/weights as a result of use of aggregate sites not identified for use during initial permitting; 3) not all routes for delivery of equipment and supplies are necessarily identified during permitting; 4) inability to control road use during cyclic weather conditions that may vary dramatically during a 24-hour period in winter and spring conditions; and 5) failure to schedule construction activities to minimize effects on school bus schedules. Wind developers have generally worked with Public Works to address these issues. However, clarifying requirements for pre and post assessment of road conditions and specifically referencing road haul agreement requirements would be useful.

4.11 Communications Interference – EOZ Section 19.39:9(B)(ll). Conditions are typically included in projects to ensure any communications interference issues which arise are addressed. The suggested revisions recognize this.

4.12 Undeveloped “phantom” turbine sites and permit transfer– EOZ Section 19.39:9(C). Not all projects are fully built out due to varying reasons (e.g. energy market conditions, financing frameworks, lack of satisfactory wind resources, etc.). This results in confusion from landowners and surrounding residents as to whether the turbines will ever be constructed. In some instances, landowners have signed leases expecting turbines or other project related facilities to be constructed on their property and they are not able to consider leasing land to new developers due to lease constraints. Providing a time period, or sunset clause, for completing full build out would help address these questions.

Staff Report – February 8, 2010

EOZ: Clarification of Project Review and Mitigation Procedures

Page 6

Also, the County typically requires approval when a project is transferred to a new owner, to ensure both a smooth transition and continued compliance with project conditions. Recognizing this standard practice is appropriate.

5. Conclusion

The attached, proposed EOZ revisions would assist the Department in processing permit applications by addressing questions which have arisen since the County first adopted the EOZ legislation. They clarify certain permit review procedures and enhance both mitigation and public notice provisions.

**ENERGY OVERLAY ZONE REVISIONS
CLARIFICATION OF PROJECT REVIEW AND MITIGATION PROCEDURES**

19.39 **Energy Overlay Zone**

19.39:1 **Purpose**

A. To provide areas suitable for the establishment of energy resource operations based on the availability of energy resources, existing infrastructure, and locations where energy projects can be sensitively sited and mitigated.

B. To provide siting criteria for the utilization of wind and solar energy resources. Each energy resource project will be subjected to individualized review and the imposition of conditions based on site specific information which will be tailored to address project impacts in accordance with the siting criteria. The ultimate goal is to achieve a predictable but sensitive siting process which effectively and efficiently addresses project impacts.

19.39:2 **Application-Applicability**

A. The Energy Overlay zone is an overlay over existing zones. Projects permitted through the Energy Overlay zone shall comply with the standards of this chapter rather than the standards of the existing zone.

B. The Energy Overlay zone applies to the area demarcated on the zoning map. ~~The area demarcated for wind and solar energy is the same.~~ The Energy Overlay does not apply to lands within the Columbia River Gorge National Scenic Area, except ~~for that~~ lands within the urban areas designated by 16 U.S.C. § 544b(e), may utilize the provisions in section E below for siting small-scale energy systems. ~~In the event of a conflict between this provision and a County zoning map, this provision shall control.~~

C. Any applicant who has applied for a conditional use permit for an energy project authorized by this chapter, may, in the alternative, elect to be sited through the procedures in this chapter. The applicant need not re-apply for a permit under this chapter. However, the County may require any supplementary information needed to complete review under this chapter and comply with its requirements.

D. Energy systems listed in KCC 19.39:4, ~~which can generate more than 25kw, or wind turbines greater than 120 feet in height,~~ are subject to the requirements of this chapter.

E. Small-Scale Energy Systems. ~~An Energy systems-energy system listed in KCC 19.39:4 with a rated capacity of not more than 100 kilowatts (kW) and which is intended to primarily generate power for on-site consumption that can generate no more than 25kw, solar panels attached to a building or providing energy primarily for on-site use, and wind turbines 120 feet in height or less are~~ is permitted outright by KCC 19.39:4, but ~~are~~ is not subject to ~~the additional requirements of this chapter 19.39:6-9(B) or 20.08.080.~~ Wind turbines exceeding 140 feet in height, as measured from the uppermost point, shall not be considered a small-scale energy system. ~~However, t~~The Mitigation Summary developed in the Klickitat County Energy Overlay

Environmental Impact Statement, and the conditions listed in this chapter, may shall be used as a guide by the county to develop conditions that ~~may be~~ are appropriate and reasonable to mitigate project impacts. Conditions shall include setbacks from property lines, public right-of-ways, and public utility lines to address public safety, noise, aesthetics, and compatibility among land uses. All other code requirements still apply.

19.39:3 **Other Applicable Requirements**

A. Project applicants will need to comply with other applicable county requirements, such as the critical areas ordinance, environmental review regulations, and building code requirements.

19.39:4 **Principal Uses Permitted Uses Permitted Outright**

A. Wind turbines

B. Solar energy facilities

C. Accessory and Temporary Uses.

1. Accessory buildings, uses, and structures needed for operation of the above permitted uses, including utilities and utility infrastructure needed for the principal use. For purposes of this chapter, accessory uses include the mining, crushing, processing and utilization of on-site gravel for on-site-use development of the permitted energy resource operation only, as necessary for the energy development, ~~such as for the construction of internal roads.~~

2. Minimally invasive (e.g. uses involving minimal ground disturbance and other impacts). Temporary uses associated with investigatory work to determine the suitability of the site for wind and solar energy development, such as meteorological towers. The placement of meteorological towers and other such equipment need not obtain a permit through this chapter. However, all other applicable code requirements apply.

19.39:5 **Review Process for Energy Resource Operations**

A. Energy resource operations listed in KCC 19.39:4 are permitted outright. However, a permit is required for all energy resource operations, including small-scale energy systems, under this chapter to ensure compliance with mitigation conditions developed in accordance with the requirements of this chapter.

B. All energy resource operations will be reviewed by the Klickitat County Planning Department and project conditions will be developed and imposed by the Klickitat County Planning Department.

C. Micro-Siting.

1. All terrestrial habitat, critical area assessments, and cultural resource studies required shall be conducted within identified study corridors of sufficient width and dimension to enable comprehensive environmental assessment while allowing flexibility in the final layout.

2. Actual final locations of wind turbine generators, below-ground electrical cables, and above-ground electrical transmission towers will be established during the micro-siting process, occurring after permit review and prior to actual construction. During the micro-siting process (when the final, exact locations of the turbines and other project elements and equipment are determined) the applicant will typically balance a number of technical and engineering factors, including limitations imposed by the terrain, wind data (speed, wind shear, etc.), wake effects of turbines on others, feasibility of access, setbacks (internally established or based on permit requirements), geotechnical considerations (subsurface conditions), environmental restrictions (avoidance of sensitive habitat), cultural/archaeological restrictions, telecommunications constraints (line of sight microwave paths), FAA requirements, and other site-specific criteria that are not fully resolved until final engineering is completed.

3. The Planning Department shall review final project lay-out, which must be completed before construction activities occur. If final turbine lay-out extends beyond the initial corridors approved in the EOZ permit, before completing review, the Department shall provide at least two weeks notice to parties who have requested notice with respect to the project. The lay-out must be consistent with the permit conditions and all other applicable County requirements.

D. The Planning Department may approve minor revisions to EOZ permit text or project area. Minor revisions are revisions which are within the scope of previous environmental review, are generally consistent with permit conditions, and do not constitute a major deviation from the EOZ permit. Minor revisions include the addition of property to a project which does not exceed 160 acres of leased property and would not increase the number of permitted turbines or permitted power output. A survey may be required to confirm the acreage. If multiple requests for minor revisions to the same project are submitted, they shall be considered cumulatively. The total acreage outside the originally approved project area for all minor revisions approved for a single project shall not exceed 160 acres of leased property. Any parties who have requested notice with respect to the project shall be sent e-mail notification at least 14 days before the revision review is completed. In addition, if the revision involves an expansion of project area, all owners of land adjacent to newly included parcels shall be mailed notice at least 14 days before the review is completed. Any minor revision that involves expansion of the project area which may impact wildlife/habitat values, shall include WDFW consultation.

E. The Planning Department shall review final turbine layout before building permits are issued to ensure compliance with permit conditions.

19.39:6 **Public Notice Requirements**

A. When an application is deemed complete, the County will post a notice of application on its website.

B. The project applicant is responsible for holding at least one informal community meeting within the County to inform the public about the proposed energy facility. ~~The meeting may be held before the project application is deemed complete, and must be held a minimum of two weeks before the SEPA responsible official issues a SEPA determination. The project applicant will provide public notice of the community meeting through written and electronic notification~~

~~as described in 20.08.080. The project applicant will also provide newspaper publication in a paper of general circulation. The community meeting must be held after the project application is deemed complete and at least two weeks before SEPA review is completed. If an EIS is being prepared, notice shall be provided in the same manner used for issuing either the scoping notice or draft EIS. The community meeting notice may be combined with the SEPA notice. If a DNS is being prepared, community meeting notice procedures shall include: (1) mailed notice to property owners within 300 feet of the project; (2) posted notice on the County's website; and (3) e-mailed notice to individuals who have notified the County they wish to be on the County's energy resource operation e-mail notification list.~~

C. Additional public notice specific to energy resource operations is required by the County's SEPA regulations. See 20.08.080.

19.39:7 Application Requirements

A. Expanded Checklist.

1. An Expanded Checklist shall be submitted to the Klickitat County Planning Department. The Expanded Checklist may be submitted simultaneously with any other permit applications that may be required from the county.

2. The Expanded Checklist shall (in addition to being consistent with the SEPA Checklist required under Title 20) provide analysis ~~on~~ of impacts to elements of the environment as noted in the SEPA Checklist required by Title 20 and Chapter 197-11 WAC, and explain the mitigation proposed to minimize those impacts.

3. Site specific studies for impacts to habitat/wildlife impacts (including avian impacts), ~~a road impact assessment~~, cultural resource impacts, and a grading and stormwater management plan complying with state best management practices stormwater quality standards, shall be attached to the Expanded Checklist.

4. Because additional studies may be required by the Planning Director for effective review and sensitive siting, a pre-application meeting with a representative from the Planning Department is recommended. The level of detail and analysis necessary is dependent on the type of project proposed, its location, and the currently available environmental review relevant to the proposal. In general, smaller projects will require less analysis than larger, more complex ones.

5. In drafting the Expanded Checklist the applicant may review Klickitat County's Energy Overlay Environmental Impact Statement ("Energy Overlay EIS"). The Energy Overlay EIS provides information on environmental conditions within the county and suggested mitigation for addressing energy development impacts.

6. The Expanded Checklist shall include sufficient information, including a preliminary site lay-out map, to adequately describe the proposal and its impacts, including but not limited to, information on the maximum megawatts of the project, the total square footage of buildings to be constructed, probable sources/quantities of aggregate to be used in construction, the maximum height and number of wind turbines and solar panels (if applicable), expected noise generation levels, the length and widths of new roads and the lengths of power lines,

sources of water (for dust suppression, concrete batch plant, etc.) and transportation impacts. Survey corridor locations shall be described and included on the preliminary site layout map.

7. An application for review under this Chapter shall not be deemed complete until the identified reports are provided. Except for site specific studies for impacts to habitat/wildlife, upon a clear showing by the applicant that the study is not applicable or is unnecessary, the Planning Director may waive specific application requirements. Such a determination shall be documented in writing in the project file. ~~Should the applicant prepare an EIS, the Planning Director may waive all requirements for the submittal of individual studies at the time of application.~~

8. Should the applicant prepare an EIS, the Expanded Checklist is not required, as this information will be provided as part of the EIS. The Department may defer preparation of the grading and stormwater management plan.

B. Other Application Requirements.

1. Project applicants shall comply with all other applicable county application requirements.

2. For projects with an estimated value of over \$1 million, KCC 19.08.110 shall be complied with before review under this Chapter may commence.

19.39:8 Development Standards

A. Setbacks

1. ~~Wind Energy resource-operations turbines~~ shall be sited a minimum of ~~200~~ four (4) times turbine height, as measured from the uppermost point, but in no event less than 2,500 feet away from existing residential structures. The Planning Department may reduce the setback in limited instances for residences which are part of the project (meaning they have agreements, such as leases or easements with the project applicant, and the subject turbine is included in that agreement), following consultation with the owner of the residence, but in no event shall setbacks be less than 2x turbine height and less than 1,200 feet. Solar energy resource operations shall be sited a minimum of 500-1,500 feet from existing residential structures. The setback shall be determined during permitting based upon factors including aesthetic impacts, geography, and project size. The location and density of residential uses in the vicinity and the nature of the project may require increased setback requirements.

2. External and Internal Property Line Setbacks

i. There shall be a minimum setback of no less than 1.1 times turbine height (as measured from the outermost blade tip) from the project's external property lines. ~~of twenty feet between energy resource-operations and the property line.~~ This setback does not apply to power lines and access roads.

ii. A project's external property line is the boundary along legal lot lines surrounding the project, which encompasses all property within the project. A project's internal

lot lines are those property or lot lines which are inside the project's boundaries, and which do not abut property located outside the project area.

3. There shall be a minimum distance of 500 feet from a turbine tower to a public road or private access roads providing access to more than five existing residences.

4. Additional distances for setbacks may be required for the purpose of addressing public safety or based upon other project impacts. Substations, transformers, and other components of energy resource operations shall be set back to provide compatibility with existing uses.

B. Height Limits

1. Height limits are not set for wind turbines, transmission towers, wind data collecting devices such as anemometers, and towers required by the energy resource operation for air emissions. However, the county may place reasonable limitations on height (or impose other alternative mitigation) if necessary to mitigate impacts to existing uses or if necessary to address impacts to public safety.

2. Building structures shall not exceed 65 feet unless additional height is necessary for the energy resource operation and impacts to existing uses can be mitigated to below a level of probable, adverse significance.

19.39:9 Use and Construction Standards

A. Project Conditions Tailored to Energy Resource Operation

1. Permits shall incorporate project specific mitigation measures and conditions to mitigate adverse project impacts. The conditions and mitigation measures shall be based on site specific studies provided by the applicant and other relevant environmental review.

2. Conditions shall be designed to address each element of the environment discussed in the Expanded Checklist (or EIS), including but not limited to surface/groundwater; plants; habitat/wildlife (including avian impacts); cultural resources; health and safety; and traffic/transportation.

3. The Expanded Checklist (or EIS) shall assess habitat type and value, presence of sensitive species, and the relative abundance of vulnerable species. Based on the Expanded Checklist (or EIS), an assessment will be made as to the sensitivity of various areas of the site for impacts to wildlife habitat, and a management plan ("Plan") shall be prepared. The Plan may be utilized to also address critical areas ordinance requirements. The Plan shall describe existing habitat conditions and the project's impacts on the habitat. The Plan shall detail mitigation measures to be implemented for temporary and permanent losses of habitat. Mitigation may include participation in a County habitat banking program, or other County approach to facilitate and better coordinate mitigation strategies among projects.

B. Conditions and Standards Applicable to all Energy Resource Operations

Noise

- (a) Maintain sound levels at project boundaries that are under the maximum levels for the adjacent receiving properties based on the receiving properties' environmental designation for noise abatement per state regulations.
- (b) Comply with applicable noise control regulations.

Air Quality

- (c) All applicable air emission permits shall be obtained and all conditions complied with.
- (d) Revegetate any disturbed areas that are not permanently occupied by the project features.
- (e) Provide a minimum of 15-cm (6-inch) gravel surface on project roads to reduce wind erosion.
- (f) Maintain a water truck on-site during construction for dust-suppression.

Vegetation and Wildlife

- (g) Limit construction disturbance by flagging the limits of construction and conduct ongoing environmental monitoring during construction to assure that flagged areas are avoided.
- (h) Develop a reseeding/restoration and weed management plan in consultation with the Klickitat County Weed Control Board.
- (i) Compliance with all applicable local requirements is required.
- (j) Overhead collector lines and transmission lines should be constructed consistently with the existing Avian Power Line Interaction Committee (APLIC) recommendations for raptor protection on power lines (including minimum conductor spacing and the use of anti-perch guards).
- (k) Additional conditions for wind projects
 - (i) Conduct project pre-assessment studies consistent with the Washington Department of Fish and Wildlife Wind Power Guidelines effective on the date of ordinance adoption. Consultants preparing the studies shall consider any later amendments to the Guidelines. Project applicants are further

advised to consult with WDFW and local habitat/wildlife experts regarding turbine siting before making final siting decisions.

- (ii) Use bird flight deflectors on guyed permanent meteorological towers or use unguyed meteorological towers.
- (iii) Monitor raptor nests on site for activity prior to construction and modify construction timing and activities to avoid impacts to nesting raptors. At a minimum, one raptor nest survey during breeding season within 1-mile of the project site should be conducted to determine the location and species of active nests potentially disturbed by construction activities, and to identify active and potentially active nest sites with the highest likelihood of impacts from the operation of the wind plant. A larger survey area (e.g., a 2-mile buffer) is recommended if there is some likelihood of the occurrence of nesting state and/or federally threatened and endangered raptor species (~~e.g., ferruginous hawk, bald eagle, golden eagle~~), or if empirical data on displacement impacts may be monitored after construction.
- (iv) A minimum of one full season of avian use surveys is recommended following current state-of-the-art protocols to estimate the use of the project area by avian species/groups of interest during the season of most concern (usually spring/early summer). Additional seasonal data (e.g. fall or winter) is recommended in the following cases: 1) use of the site for the avian groups of concern is estimated to be high relative to other projects, 2) there is very little existing data regarding seasonal use of the project site, and/or 3) the project is especially large. This additional avian use data should be collected to refine impact predictions and make decisions on project layout.
- (v) Identify and remove all carcasses of livestock, big game, etc. proximate to turbines ~~from~~ within the project ~~site~~, after project start up that may attract foraging bald eagles or other raptors.
- (vi) Monitor the project for a minimum of one year following project start-up to estimate bird and bat fatality rates using standard protocol. Report bird fatalities observed for the life of the project to WDFW and USFWS on a quarterly basis.
- (vii) The applicant (in consultation with Klickitat County) shall form a Technical Advisory Committee (TAC) before project construction and after all permit appeal periods have closed. Representatives of Washington State Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, landowners, the applicant, the Yakama Nation, and local environmental groups shall be invited to

participate. The Planning Department will review and approve TAC membership as meeting the intent of the EOZ; at the discretion of the Department, TACs may serve more than one project wherein it is more efficient to have one TAC serving several projects (such as in the situation where a developer has several separate wind projects with the same landowners or other situations). TAC consolidation does not alter each project owner's independent monitoring obligations. The TAC will consider problems and impact mitigation issues and will serve for the life of the project. TAC will examine information relevant to assessing project impacts to avian and bat species. TAC will determine whether further mitigation measures would be appropriate, considering factors such as the species involved, the nature of the impact, monitoring trends, and new scientific findings regionally or at a nearby wind power facility. If appropriate in the TAC's judgment with respect to the significance of the impact identified, and the County concurs with the recommendation, or takes no position, the TAC shall recommend mitigation measures to the developer. The ultimate authority to implement additional mitigation measures, including any recommended by the project TAC, will reside with the project owner. The TAC's participation is intended to ensure that monitoring data is considered in a forum in which independent and informed parties can collaborate with the owner to develop appropriate responses.

Stormwater

- (l) Design and implement stormwater drainage systems in consultation with a professional engineer to ensure that minimal erosion will occur.
- (m) After construction, monitor the site for erosion on a weekly basis and after large rainfall or snowmelt events, and take corrective action as necessary.

Geologic and Flood Hazards

- (n) Design structural foundations and buildings in accordance with **Uniform International** Building Code requirements for appropriate seismic zone ~~2B~~.
- (o) Compliance with all applicable local requirements is required.

Water Resources

- (p) Except for wind projects, water availability shall be demonstrated as needed for the project.
- (q) For all projects, water required for onsite use (~~restroom facilities and general maintenance~~) shall be obtained in accordance with state and local requirements.

Cultural Resources

- (r) Complete a cultural resource survey of areas of the project site that will be disturbed temporarily or permanently.
- (s) During construction, flag and avoid cultural resources [according to SEPA conditions](#), and monitor construction activities to ensure that flagged cultural properties are avoided.
- (t) Train construction workers on the need to avoid cultural properties and procedures to follow if previously unidentified cultural properties, including Indian graves, are encountered during construction.
- (u) If any previously unidentified cultural resource properties are encountered during construction, cease construction activities in the immediate vicinity of the site pending evaluation by a [qualified professional](#) archeologist and consultation with ~~the State Office of Archaeology and Historic Reservation~~ [the County Planning Department](#) to identify appropriate mitigation measures such as avoidance or scientific data recovery. [All projects shall develop a Cultural Resources Management Plan.](#)

Visual Resources

- (v) Lighting for security shall be minimized and lighting fixtures shall be directed away from adjacent properties.
- (w) Provide a clean looking facility free of debris and unused or broken down equipment by: storing equipment and supplies off site, promptly removing damaged or unusable equipment from the site
- (x) Coordinate paint colors and use non-reflective paints to reduce glare.
- (y) A bond, letter, or other security acceptable to the county is required to ensure proper decommissioning of [each turbine and all solar panels energy resource facilities, including turbines and solar panels](#). The amount of the security shall be determined on the basis of the site-specific conditions affecting the costs of decommissioning, access, depth of foundation, terrain, etc., to include credit for salvage value of the equipment. [Security shall be coupled with a decommissioning plan approved by the County Planning Department.](#)
- (z) [Effects of “shadow flicker” to surrounding existing residential uses and potential residential uses in areas \(with residential zoning such as GR, RR, SR or RC\) may need to be assessed. “Shadow flicker” can be minimized by a combination of strategic placement of turbines and/or cessation of blade rotation/operation with relation to key times of daybreak, sunset or seasonal fluctuations of sunlight angles. Consult with the Planning](#)

Department to confirm whether residential buffering will address this issue.

- (aa) Where practical and feasible, developers shall use common transmission easements and facilities.

Public Safety

- (bb) Develop and maintain an on-site health and safety plan that informs employees and others on site what to do in case of emergencies, including the locations of fire extinguishers and nearby hospitals, telephone numbers for emergency responders, and first aid techniques. Employees shall be trained to address healthy and safety emergencies, and to safely operate and maintain the turbines and other mechanical equipment.
- (cc) For projects in which hazardous substances are stored or used, a Spill Prevention and Emergency Cleanup Plan will be designed to assist on-site workers with accidental releases. Any large spill will require emergency response through the local fire department or designated contractor.
- (dd) During project construction and all project welding operations, have a readily accessible water truck and chemical fire suppression materials available on site to allow immediate fire response.
- (ee) Provide project staff with cellular or on-site phones to enable timely communication with the Fire Department and other emergency services.
- (ff) Fence site as appropriate and post signs warning of electrical dangers/with emergency contact numbers e.g. phone numbers of emergency responders.
- (gg) Monitor the site for evidence of unauthorized use and provide additional security as appropriate.
- (hh) Design an ice throw monitoring plan to protect against ice throw into public and private rights-of-way; to protect project workers; and nearby properties.

Roads

- (ii) A Road Impact Assessment shall be prepared for roads to be used by the project. The Assessment shall include an analysis of project-related traffic routes to be used during phases of construction, project operation and decommissioning (i.e. traffic volumes, weights, frequency, time of year of use, etc.); the Plan shall include an assessment of existing road conditions (e.g. pavement width, intersection designs, subgrade condition, surface conditions, existing traffic use/volumes). The Assessment should also address project-related developments of new surface aggregate mines and batch plants necessary for road construction.

- (jj) A Road Haul Agreement shall be prepared in consultation with the County Public Works Department. The Agreement shall address impacts to county-maintained roads.

Communication Interference

- (kk) For wind turbines, determine location and frequency of existing tight beam directional communications transmitters and receivers when siting turbine strings to avoid any material signal interference. Should the project create electromagnetic interference which interferes with reception, the project will eliminate such interference, reach an agreement with the property owner experiencing the interference, or prepare a mitigation plan and submit it to the Planning Department for approval.

Mitigation conditions shall also be developed, as appropriate, based on the Mitigation Summary developed in the Klickitat County Energy Overlay Environmental Impact Statement. For wind power projects, the County shall consider recommended conditions listed in the current, and as amended, Washington State Department of Fish and Wildlife Wind Power Guidelines. ~~However, any recommendations taken from the Guidelines and imposed as a project condition must address project impacts be reasonable.~~

C. Compliance with Project Conditions

1. County officials shall have the right to enter the project site to verify compliance with project conditions.

2. Compliance with project conditions and code requirements is required. In addition to such other remedies available under law, any county department or other decision maker issuing any decision, environmental determination (such as a mitigated determination of non-significance), approval, authorization, or other determination, including a determination on the conditions to apply to a particular project under this chapter (“authorization”), has the authority to rescind such authorization for failure to substantially comply with any required condition, mitigation, or code requirement.

3. The number of megawatts and number of turbines approved per the EOZ permit will be reduced by the number of megawatts and number of turbines not completed at the end of five (5) years from the date of approval, except that the Planning Department may approve a period up to ten (10) years for a wind energy project exceeding 200 megawatts, and for which a phased development plan is provided in the draft and final environmental impact statements issued in connection with the EOZ permit. If the permit is appealed, the five years shall be counted from when the appeal is resolved. If the litigation ceases to be diligently pursued, the five years shall count from when such diligent pursuit ceases. The Planning Department may grant extensions not exceeding two (2) years in total, upon demonstration of progress, and may condition the extension on bonding being obtained to ensure work is completed. For energy resource operations permitted prior to adoption of this ordinance, whether through an EOZ permit or conditional use permit, the five years shall be counted from the date of adoption of this ordinance.

4. Transferring an EOZ permit to a new permit holder requires County Planning Department approval, which requires confirmation of compliance with project conditions, and may require re-execution of agreements or other documents entered into during and after project permitting to address impacts or related issues. The Department may also confirm the new permittee has the ability (financial or otherwise) to comply with project conditions. Approval shall not be unreasonably withheld.

19.39:9

A. Appeals may be filed to the ~~Board of Adjustment~~ Klickitat County Hearing Examiner within 20 days of the decision on project consistency with this chapter, which shall be heard consistent with applicable procedures in chapter 19.60 as provided in chapter 19.60.

B. If other appeal hearings are provided or available, then all appeal hearings shall be consolidated before a single hearing body. If more than one appeal hearing is provided or available and is before a hearing body other than the ~~board of adjustment~~ the Klickitat County Hearing Examiner, then the energy resource permit appeal hearing shall be before the board of county commissioners or to such hearing officer as may be designated by the board. The decision of the board of county commissioners shall be final unless appealed to superior court within twenty-one days of issuance.

NEW SECTION 15.08.030 (D) The definition for “Fire Separation Distance” found in Section 702 shall be amended to read as follows:

FIRE SEPARATION DISTANCE. The distance measured from the building face to one of the following:

1. The closest interior lot line;
2. To the center of a street, an alley or public way;
3. To an imaginary line between two buildings on the property; or
4. In the case of projects permitted through the Energy Overlay Zone under KCC 19.39, the distance shall be measured from a wind turbine’s outermost blade tip in a horizontal position to a project’s external property line as defined in KCC 19.39:8(A)(2). Meteorological tower Fire Separation Distance shall be measured from the outermost projection of the tower to the project’s external property line. For structures such as job shacks, Operation and Maintenance buildings, and similar structures, the Fire Separation Distance shall be measured pursuant to KCC 15.08.030(D) 1-3. (Setbacks do not apply to transmission lines or access roads).