

**CITY OF BELLEVUE  
ENVIRONMENTAL CHECKLIST  
(Integrated SEPA/GMA Process)**

**A. BACKGROUND INFORMATION**

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**PROPOSAL TITLE:** Utilities Element for Electrical Facilities Comprehensive Plan Amendment (05-114985 AC) and Land Use Code Amendment (07-132926 AD).

**PROPERTY OWNERS' NAME:** N/A

**PROPOSAL LOCATION (street address and nearest cross street or intersection as well as a legal description if available):** The Utilities Element of the Comprehensive Plan covers the entire area of the city as served by PSE's Electrical Facilities System Plan for King County Serving Bellevue.

**PROPONENT'S NAME:** City of Bellevue, Department of Planning and Community Development

**CONTACT PERSON'S NAME:** Paul Inghram, AICP, Comprehensive Planning Manager

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**BRIEF DESCRIPTION OF THE PROPOSAL'S SCOPE AND NATURE:**

**1. General description:**

The project proposes amendments to the Utilities Element of the Comprehensive Plan, and amendments to the text of the Land Use Code, both for the siting and/or expansion of electrical substation and transmission line facilities, to adopt and implement the direction of the City Council as contained in Resolution No. 7107 adopted December 6, 2004. With the direction established in Resolution No. 7107 the City Council sought to balance two equally important objectives:

- Protection of residential neighborhoods from incompatible electrical facilities; and
- The needs of Puget Sound Energy (PSE) to provide sufficient electrical energy to service the growing demand of Downtown Bellevue and other commercial areas

The Utilities Element policies establish a new framework to clarify the roles and expectations for each of the city, PSE, and community, when siting electrical facilities. The process of siting such facilities remains a balancing act between neighborhood impacts and the need for adequate and reliable power.

The policies and new maps:

- Keep intact PSE's primary responsibility in implementing its electrical service system.
- Identify those new and expanded electrical facilities, proposed in sensitive locations.
- Introduce alternative siting analyses for these sensitive facilities.
- Support the development of regulations that address specific site mitigation.
- Continue a focus on meeting community needs through state-of-the-art reliability.

The policies also address the need for appropriate site mitigation (e.g. technology, facility design, screening, landscaping) to minimize visual impacts and make facilities compatible with their neighborhood context for all these various classes of substation siting or expansion.

How the process would work:

1. PSE makes decisions about implementing its Electrical Facilities System Plan
2. The city's Growth Management Act (GMA) obligations identifying the locations and capacity of electrical utility facilities are realized in the Electrical Facilities maps in the Utilities Element at Figure UT.5 and UT.5a;

An underpinning of the work is the City's responsibility under the GMA to work with utility providers to plan for the system capacity to adequately serve the city's Comprehensive Plan. Bellevue implements this responsibility by schematically mapping the serving utility's existing and planned system build out, and incorporating this into the Utilities Element of the Comprehensive Plan. The Comprehensive Plan is thus a record of the overall planned expansion and specific anticipated facilities.

To address the neighborhood character issues at the heart of Resolution No. 7107, primarily issues of visual impacts, Figure UT-5a is added:

- For existing substation facilities identified by PSE for expansion, the Comprehensive Plan map shows those that are anticipated to have potentially significant issues of neighborhood compatibility, and those that apparently do not present compatibility issues. This compatibility assessment would have important regulatory implications, as described below. Incompatibilities may arise either from the location of the substation itself, or from the siting of associated transmission lines needed to feed the facility.

While the maps identify existing and proposed electrical facilities in relation to the Comprehensive Plan, they further identify locations of planned new or expanded facilities with greater sensitivity. This sensitivity identifies potential incompatibilities as proximity to residential neighborhoods, visual access to the facility, and expansion within or beyond an existing facility border. The sensitivity of these potential incompatibilities has been analyzed in a site assessment screening matrix. The site assessment matrix includes facility-specific determinations.

- The screening matrix in Attachment 1 to this Checklist is the basis for the compatibility ratings that have been translated into this Comprehensive Plan map.
- For new substation facilities, the Comprehensive Plan map shows a potential siting area rather than, as in the current Plan, an apparent specific point location. This approach would clarify that within the identified siting area, a range of alternative substation locations should be evaluated.

In summary, these Comprehensive Plan refinements identify which facilities are likely to require higher levels of siting analysis and mitigation. They will also provide the community with information about site selection and facility need, and assure that appropriate mitigation will be required to reduce visual impacts.

3. The LUC directs the type of permitting action based on the type of facility.
4. For new substations, transmission lines, and for expansion of substation facilities that, per the Utilities Element map, may present issues of site sensitivity, a process of alternative siting analysis would be required. The utility would need to identify a number of alternative sites that meet its system needs, review these sites for system functionality and neighborhood compatibility, “show it’s work,” and select a feasible site that minimizes these neighborhood impacts.

For facilities that, per the Comprehensive Plan map, are not anticipated to present sensitivity issues, this alternative siting process would not be required. In both cases, the regulatory process would address appropriate mitigation, consistent with the policy framework described above.

5. Once the permit application is made, conditional use or administrative conditional use permit review happens, and design and performance standards specific to electrical utility facilities are applied during review.
6. The permit approval is conditioned to reflect its surrounding context.

**Utilities Element map and policy amendments:**

Subarea Plan map and policy amendments that have been identified include:

- Add four new policies under Non City-Managed Utilities - Additional Electrical Facilities;
- Amend and add text under Non City-Managed Utilities – Electrical Service, Natural Gas Service;
- Amend Figure UT.5 to create a new Figure UT.5 – Existing Electrical Facilities and a new Figure UT.5A – New or Expanded Electrical Facilities.
- Amend Figure UT.7 to reflect current locations of PSE Gas Mains serving Bellevue, specifically in the Downtown.

**Amendments to the Land Use Code:**

Land Use Code amendments that have been identified include:

- Amend E, L, and U Definitions at 20.50.018, .032, and .0XX to amend the definition of Electrical Utility Facility, Local Utility System, and Utility Facility;
- Amend 20.20.650 Public Utilities – Design and Performance Standards;
- Amend 20.20.520(F)(2)(a) Landscape development;
- Amend 20.10.440 Land Use Charts;
- Create a new section 20.20.255 Electrical Utility Facilities;

2. **Site acreage:** N/A
3. **Number of dwelling units/buildings to be demolished:** N/A
4. **Number of dwelling units/buildings to be constructed:** N/A
5. **Square footage of buildings to be demolished:** N/A
6. **Square footage of buildings to be constructed:** N/A
7. **Quantity of earth movement (in cubic yards):** N/A
8. **Proposed land use:** Land Use designations would remain unchanged.
9. **Design features, including building height, number of stories and proposed exterior materials:** N/A. These Comprehensive Plan and Land Use Code refinements identify which facilities are likely to require higher levels of siting analysis and mitigation. They will also provide the community with information about site selection and facility need, and assure them that appropriate mitigation will be required to reduce visual impacts through the use of land use regulations and performance standards that address siting considerations, architectural design, site screening, landscaping, maintenance, best available technologies, and other appropriate measures.
10. **Other:**

**Proposed timing or schedule (including phasing, if applicable):**

The Utilities Element for Electrical Facilities CPA is being reviewed as part of the 2007 Annual Comprehensive Plan Amendments (CPA) work program. The Land Use Code Amendments are linked to this work program review.

**Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

Specific facilities proposed in the future will require environmental review in accordance with WAC 197-11. Future review may result in a Determination of Non-Significance (DNS), a Mitigated Determination of Non-Significance (MDNS), a Determination of Significance (DS), preparation of a Supplemental EIS (SEIS), or preparation of new environmental documents.

**List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

- Draft Environmental Impact Statement – Comprehensive Plan Utilities Element – Electrical Utility – December 1992
- Technical Appendices (Draft Environmental Impact Statement) – Comprehensive Plan Utilities Element – Electrical Utility – December 1992
- Final Environmental Impact Statement – Comprehensive Plan Utilities Element – Electrical Utility – March 1993
- Determination of Non-Significance – Comprehensive Plan Update (Bellevue) – fall 2004

Other documentation in the environmental record:

- Electrical Facilities Plan for King County Serving Bellevue aka the System Plan - January 1993
- Update to the System Plan - March 1998
- Update to the System Plan - November 2006
- Electrical Facilities Visual Impacts Site Assessment Matrix - September 2007
- Status of Health Research on Electric and Magnetic Fields (EMF) and Implications for Public Policy (Exponent, Inc. – Draft - October 2007)
- City of Bellevue Comprehensive Plan

**Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.**

- Factoria Substation Upgrade: Land Use Approval Amendment (07-132236 LD); Variance (07-132331); Design Review (07-132332 LD)
- Other proposed facilities as outlined in the November 2006 System Plan Update are expected for permitting in 2008. These include the Phantom Lake-Lake Hills 115kV transmission line and the siting and construction of the Ardmore substation.

**List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.**

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Ordinance action by the City Council for:

- Electrical Facilities – Utilities Element CPA (05-114985 AC)
- Electrical Substation Regulations LUCA (07-132926 AD)

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**B. Environmental Elements**

No discussion of the individual Environmental Elements is required for GMA actions per WAC 197-11-235.3.b.

**C. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (do not use this sheet for project actions)**

**SUMMARY**

Project Summary: Proposed amendments to the Comprehensive Plan, including the Utilities Element, and proposed amendments to the text of the Land Use Code. The project is described in more detail under #1, General Description, on page 1.

Environmental Summary per WAC 197-11-235(3)(b):

State the proposal's objectives: To comply with the requirements of the GMA by amending the Comprehensive Plan and adopting development regulations that implement and are consistent with such amendment and consistent with the balancing of two equally important objectives: the protection of residential neighborhoods from incompatible electrical facilities and the needs of Puget Sound Energy (PSE) to provide sufficient electrical energy to service the growing demand of Downtown Bellevue and other commercial areas.

Specify the purpose and need to which the proposal is responding While it is critically important to meet growing demand and further develop the reliability of Bellevue's electrical system, it is also important to ensure that new and expanding electrical facilities are compatible with neighborhood character.

State the major conclusions, significant areas of controversy and uncertainty: There are four major conclusions that frame this proposal and its potential environmental impacts:

- The **Growth Management Act** gives Bellevue the responsibility to work with utility providers to plan for utility capacity to adequately serve the Land Use Plan. Bellevue implements this responsibility by schematically mapping the serving utility's existing and planned system build out. A map is key to creating a physical understanding of the application of policies to influence both system-wide and individual project siting and expansion decisions. The city's authority regulates the impacts of the siting, expansion, and maintenance of electrical system facilities.
- Under its **obligations to provide service**, PSE has plans for system improvements that include expansions of existing facilities and new substations and transmission lines that will be constructed over the course of the comprehensive planning period.

- The city manages review of new and expanded facilities to regulate **impacts to neighborhoods** of planned facilities. Policies support an idealized structure for such facilities that includes both review of siting decisions and review of construction.
- The **regulatory structure** is strengthened to increase transparency and equality in performance standards applied to facilities siting during review.

Although there are no significant areas of controversy and/or uncertainty, this issue of compatibility first arose during the 2004 Comprehensive Plan Update. It was uncertain, once the permitting stage had been reached, how siting and capacity decisions were being addressed. The focus was on visual impacts of facilities especially when they were already located in or were planned to be located in residentially-zoned areas. The proposal here sets the city's framework for review within its GMA obligations, identifies facilities that may be sensitive to residentially-zoned areas including alternative siting analysis, and consistently regulates the classes of facilities identified as sensitive through performance standards.

State the issues to be resolved, including the environmental choices to be made among alternative courses of action: Recognizing the environmental impacts that might occur with a proposed facility, additional environmental analysis will be needed when a proposal is made for such development as regulated by the Land Use Code.

State the impacts of the proposal, including any significant adverse impacts that cannot be mitigated: The proposal is a non-project action to update the Utilities Element of the Comprehensive Plan in accordance with Growth Management Act provisions, and to adopt Land Use Code amendments implementing new electrical utility facilities policy direction. There are no anticipated significant adverse environmental impacts from the proposal.

Describe any proposed mitigation measures and their effectiveness:

No specific development is being approved with this proposal. Future development under the provisions of the regulation will be subject to SEPA review, as well as to the city's development regulations.

**1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

The plan and code amendments proposed will not directly increase discharges to water, emissions to air, produce, store or release toxic or hazardous substances, or produce noise. As new or expanded facilities are proposed for permitting, additional air and noise emissions may occur due to construction and automobile traffic. No additional water discharges, or releases of toxic or hazardous substances are anticipated.

Policy UT-70 was adopted into the Comprehensive Plan as a result of conclusions reached in the 1993 FEIS regarding the potential environmental impacts of Electric and Magnetic Fields (EMF) related to the provision of electric utility infrastructure:

“Review periodically the state of scientific research on EMF and make changes to policies if the situation warrants.”

This policy was implemented for purposes of this proposal by contracting with Exponent Inc., a 3<sup>rd</sup> party consultant familiar with research on the health effects of electrical emissions, to produce an assessment report.

The draft report submitted by the consultant focuses on three areas:

1. Status of health research on EMF in the frequency range associated with electrical transmission and distribution systems and to compare this current assessment to that contained in the [1993] EIS;

#### Conclusions

- There has been a very large amount of scientific research that renders the 1993 summary of health research obsolete.
  - The current body of research does not suggest that there are any long-term, adverse health effects associated with exposure to electric or magnetic fields at the levels that the general public encounters on an everyday basis.
  - The research still suggests a weak association between childhood leukemia and estimates of long-term exposure to high, average magnetic fields; however, the research is not strong enough to conclude that this association is causal in nature.
  - The research continues to support precautionary measures that are based on current risk assessment, namely: a) additional research to seek to resolve uncertainty, b) establishing open communication programs, and c) employing low-cost methods for magnetic field exposure reductions.
  - Although no review panel can ever entirely rule out the possibility that EMF may have some adverse health effect, given the amount and quality of research that has been done so far, the report concludes that the research does not support the idea that EMF are a cause of long-term, adverse health effects.
2. Implications for public policy, including recommendations for precautionary measures

#### Conclusions

- The precautionary principle is a good tool as the basis for measures that can reflect the balance between uncertain health hazards, perceived level of risk, and cost and benefit trade-offs between the two.
- Prudent avoidance—a variant of the precautionary principle—can be realized in the form of “simple, easily achievable, low to modest cost measures to reduce individual or public EMF

exposure, even in the absence of certainty that the measures would reduce risk.” Examples of specific measures of potential application by local governments are shown in **bold** on pp. 20-21 of the report, and Exponent comments on those in the Conclusions Section 3 below.

- Measures should not normally lead to consideration of exposure limits:

“There is scientific uncertainty as to whether chronic exposure to ELF magnetic fields causes an increased risk of childhood leukemia...it is unlikely that the implementation of an exposure limit based on the childhood leukemia data and aimed at reducing average exposure to ELF magnetic fields...would be of overall benefit to society.”

3. Adequacy of the [Bellevue Comprehensive Plan] Utilities Element with regard to consistency with the current state of the science;

#### Conclusions

- Existing policies contained in the Utilities Element are still consistent with both the status of scientific research regarding EMF and precautionary measures approaches recommended by the World Health Organization (WHO).
- Because the WHO review concluded that the current body of research does not suggest that there are any long-term, adverse health effects associated with exposure to electric or magnetic fields at the levels the general public encounters on an everyday basis, the types of existing transmission lines or even those proposed as far out into the future as 2030 would not be expected to produce field levels approaching scientific guidelines for setting public exposure levels.

#### **Proposed measures to avoid or reduce such increases are:**

This checklist does not identify specific EMF associated with proposed plan and regulatory amendments, and thus does not comment on mitigation, although as identified in the consultant EMF report, the city is already engaged in reasonable prudent avoidance measures to anticipate impacts from EMF should the state of the science ever warrant such mitigation. In the meantime, Policy UT-70 should remain in the Comprehensive Plan.

#### **2. How would the proposal be likely to affect plants, animals, fish or marine life?**

There are no known direct impacts to plants, animals, fish or marine life that will result from the proposal.

#### **Proposed measures to protect or conserve plants, animals, fish or marine life are:**

N/A

**3. How would the proposal be likely to deplete energy or natural resources?**

An electrical utility system distributes electricity that is generated elsewhere. In the Northwest this electrical generation is predominately from hydropower, although other sources are also used including other conventional generating sources and including alternative energy generation sources such as wind and conservation. The proposal itself does not deplete these resources per se; rather it supports the efficient use of such energy resources by encouraging an efficient and reliable electrical utility distribution system.

**Proposed measures to project or conserve energy and natural resources are:**

N/A.

**4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

There are no known direct impacts to sensitive areas, habitat, historic sites or other protected areas that will result from the proposal. Existing Utilities Element policies and Land Use Code regulations already regulate the placement of electrical utility facilities with regard to these environmentally sensitive areas or areas designated for government protection; the issue of sensitivity addressed in this proposal relates primarily to the visual impacts of facilities implementing the System Plan.

**Proposed measures to protect such resources or to avoid or reduce impacts are:**

N/A.

**5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

The proposal includes a policy amendment to support working with Puget Sound Energy to implement the electrical service system serving Bellevue in such a manner that new and expanded transmission and substation facilities are compatible and consistent with the land use pattern established in the Comprehensive Plan. It accomplishes this by directing that, where feasible, electrical facilities should be sited within the area requiring additional service. Electrical facilities primarily serving commercial and mixed use areas should be located in commercial and mixed use areas, and not in areas that are primarily residential.

**Proposed measures to avoid or reduce shoreline and land use impacts are:**

N/A.

**6. How would the proposal be likely to increase demands on transportation or public services and utilities?**

The proposal itself does not increase demands on transportation or public services and utilities.

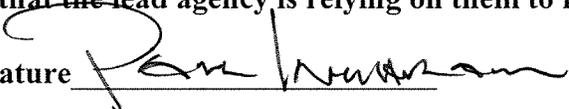
**Proposed measures to reduce or respond to such demand(s) are:** N/A

N/A.

**7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

No conflicts are known or anticipated.

**D. The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.**

Signature 

Date Submitted 10-30-2007