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cense

Notebook Summary Memorandum

I. INTRODUCTION.

In this public hearing, Puget Sound Energy, a privately owned electric company, seeks approval for a 3.3 mile transmission line within Bellevue city limits, consisting of new poles between 75 and 100 feet high and new wires capable of transmitting electricity at 230 kV. The 3.3 mile South Bellevue Segment, together with new line strung in Newcastle and Renton, would connect one substation in Renton (Talbot Hill) with a substation in Bellevue (Lakeside/Richards Creek), which line will be referred to herein as the Talbot Hill to Lakeside Transmission Line, or THLTL.¹ The present application only addresses that part of the THLTL proposal in Bellevue; other applications have been filed in Newcastle and Renton, but hearings on those proposals have not been scheduled as of this writing. No applications have been made for any lines north of I-90 in either Bellevue or Redmond.

¹Originally, PSE proposed a longer line, branded as “Energize Eastside” (EE), which was 18 miles in length. However, PSE has not applied for approval of the EE line, saying that it may in the future, but has no timetable for doing so.

PSE claims that new transmission lines are needed because certain electric transformers may overload and not operate due to the amount of electricity transmitted during rare events, mostly associated with high consumption of electricity during winter cold spells.

PSE's transmission proposal requires a conditional use permit under the Bellevue Land Use Code (LUC) 20.30B.140. In 2008, the Bellevue City Council added regulations for "electric utility facilities" such as transmission lines, establishing a separate review particular to electrical facilities, including a requirement for proof that such facilities are needed and would provide reliability in the area they are proposed, and imposing requirements for an "alternative siting analysis" including a "locational selection hierarchy" prioritizing locations in commercial and industrial areas, not residential areas. See LUC 20.20.255, referenced herein as "Section 255."

The Coalition of Eastside Neighbors for Sensible Energy, CENSE, was formed in 2014 to respond to PSE's transmission proposal. Its members reside in the several communities through which the intended transmission is proposed. See Notebook Section 1.

CENSE has prepared a Hearing Notebook to consolidate hearing testimony in a single document. The Notebook addresses information and evidence that reference the code criteria, as described in its Table of Contents. In this summary, we will provide a summary of the Notebook contents, citing to the chapters found in the CENSE notebook. These materials include detailed reports compiled by local residents as well as reports from recognized experts in the field of electric transmission and alternatives

thereto.

The City has prepared a record that purports to contain material prepared for this application and public comments. Over the past several years, CENSE has provided comments to the city on various issues, including the draft and final environmental impact statements. Because of the volume of these communications, CENSE adopts and incorporates by reference these materials and comments found in the record, including comments and letters previously submitted by the undersigned.² In addition, CENSE adopts, and incorporates by reference, materials presented by CSEE to the City, including materials presented during the hearing. CENSE reserves the right to cite and rely upon any portion of the record previously assembled by the City or other materials that may be submitted during the public hearing.

II. THE GENERATION AND DISTRIBUTION OF ELECTRICITY.

Transmission lines (such as the THLTL) allow the transmission of electricity from where it is generated to its place of use. The primary source of electricity in the Northwest comes from hydroelectric facilities located east of the Cascade Mountains. Long distance power lines are usually higher voltages, from 230 to 500 kV; local transmission lines to substations are typically 115 kV; distribution lines to homes and businesses are much lower voltage, 12.5 kV. Electricity is converted, or “transformed” from one voltage to another by “transformers.” See this general discussion of electrical generation and distribution in Section 1 of the Notebook.

²Includes letters found at DSD 004913-4914, 4945-4958, 4962-4978, 5093-5106, 5107-5111, 5139-5161, 5164-5176, 5350-62, 5363-5365, 5366-5374, 5375-5383, 011827-829, 011830-841, 011847-851.

The amount of electrical use is referenced as the “load.” Loads vary by the amount of electricity that is called for by customers. Accordingly loads are higher during the morning and evening when residential users need electricity for heating, cooking and other electronic uses; loads drop during the night. In addition, particularly in cooler climates, loads may increase because of colder temperatures. Power needed during higher usage times is referenced as “peak power loads” and utilities must have the “capacity” to meet these peak loads. Notebook Section 1.

As described herein, and in the several reports provided in the Notebook, electrical providers generally adopt plans to meet peak load subject to certain established standards. One of the standards identified in the Staff Report is NERC TPL-001-4, which became effective January 1, 2015. Staff Report at page 108. This standard requires planning assessments for potential unanticipated events when one or more system features, including electrical generation, transmission or switching, is not operating. These events are extraordinarily rare. In the case of PSE, the possible system issues usually arise only in the event of an extreme cold spell (temperatures less than 23 degrees) during peak electric usage hours. See Notebook Section 1.

The planning described above is separate from planning for the frequent power outages from weather, trees striking lines or similar events that occur in the PSE service area. As stated in Appendix J to the FEIS (page J1-8) (DSD 006050):

Because the majority of power outages on the Eastside are related to the electrical distribution system and the Energize Eastside project will affect only the reliability of the transmission system, the project would have limited impact on overall electrical reliability.

(Emphasis supplied). PSE has not cited to any outages related to its current

application, nor has it cited to any situation where the system came close to not meeting load.

III. DESCRIPTION OF APPLICANT, CLAIMED PROBLEM AND PROPOSAL BEFORE THE HEARING EXAMINER.

3.1 APPLICANT. The applicant for the proposal is Puget Sound Energy (PSE), a wholly owned subsidiary of Puget Holdings LLC. Puget Holdings is entirely owned by foreign corporations. A detailed discussion of the company is found in Notebook Section 3.

Recently, an application was approved before the Washington Utilities and Transportation Commission (WUTC) to allow the transfer of interest in Puget Holdings to several foreign corporations from Canada and the Netherlands. In their applications to the WUTC these corporations indicated they seek to acquire PSE because it provides “steady income” to its owners. See Notebook Section 3. As will be described in the Notebook at Subsection 5.6, these foreign owners have hired public relations experts to promote the “Energize Eastside” application as a political campaign, with various broadcast and media saturation programs designed to “elect” its project.

PSE is regulated by the WUTC, which must approve their rates and other business practices, but does not approve capital projects in advance. Notebook Section 3. However, in ordinary course, the cost of this project will be included in PSE’s requests for electric rate increases, such that ratepayers – not the foreign owners – will pay the cost of improvements. The WUTC allows the addition of 9.8% of the actual cost of capital projects to provide a rate of return (profit) to the investors.

3.2 CLAIMED PROBLEM OR DEFICIENCY. PSE claims that the usage of electricity during rare and extreme peak periods (as described above) is increasing, based on their internal forecasts. See Notebook Subsection 5.2. In turn, it claims that the possible peak demand will overload the existing transformers, especially during winter periods of low temperatures (23 degrees or less). See Notebook Section 5.2, Lauckhart/Schiffman Report. This is analogous to overheating of circuits in a home, a problem usually addressed by turning off one or two electrical appliances.

Regarding PSE lines in Bellevue, the applicant has not identified an actual overload of this nature at the transformers in question, though electric service interruptions are frequent on PSE lines due to downed limbs or trees, animal incursions, vehicular collisions with poles, or other events. During recent cold and snow events in February, many PSE customers were without power for days because of such interruption events, but the company has not identified any overloads which occurred because of overheating transformers. Particularly important to these proceedings, the applicant has not described any event that might have brought the system close to reaching its limits.

As described in the staff report, there are established standards to determine how an electrical system will operate, including making provisions for extreme events, unanticipated outages or problems with the system. Presently those standards are found in TPL-001-4.

3.3 PROPOSAL TO RESOLVE DEFICIENCY. Originally, PSE's solution to this predicted overload was to string new wires on new poles between two substations

eighteen miles apart: Sammamish in the north (in Redmond) and Talbot Hill in the south (in Renton), with a new substation midway, called Richards Creek (just north of I-90). See Notebook Section 5.3. Though the eighteen mile line with associated substations was the subject of two draft environmental impact statements, PSE abruptly reduced the scope of the project in August, 2017, when it applied for only the south part of the line, south of the proposed Richards Creek substation.³ Though it initially said that applications for the northerly segment would be forthcoming by the end of 2017, a few months later it said the north application would be filed in early 2018. More recently, a declaration by PSE's Director of Electric Operations, dated February 11, 2019 says:

PSE has not yet completed an application for the transmission line segment running from the proposed Richards Creek substation north and cannot accurately estimate the timing of this submittal until additional work permitting the Project's south half is complete.

The cost of the proposed "Energize Eastside" project is as much as \$300,000,000, though precise estimates are lacking. See Notebook Section 4. As indicated in Subsection 4.1, the lifetime cost for the facility over 55 years is \$1,740,000,000. As noted above, the present application is only for the THLTL, a much shorter line than the EE, though no cost estimates for this shorter proposal have been provided. PSE claims it will someday finish the EE project, but Bellevue's Staff Report says (page 111):

PSE's analysis supported and demonstrated that operationally the Project

³PSE has also applied for permits in Newcastle and Renton, but no hearings have been scheduled in either jurisdiction.

must include 230kV transmission lines connecting the Talbot Hill substation in the south to a new transformer in central Bellevue. The full buildout of the Energize Eastside project will include a similar connection from the Sammamish substation in the north to provide redundancy, but the south portion of the Project that is the subject of PSE's current proposal can function independently.

(Emphasis supplied). However, no citation to “analysis” for the THLTL is provided and CENSE believes none of the technical studies presented support this claim.

Cost has significance for this proceeding because it provides a basis for the amount of money available for the construction and operation of available alternatives and/or technologies.

IV. REGULATORY FRAMEWORK IN BELLEVUE.

Bellevue requires a conditional use permit for transmission lines under LUC 20.30B.140. Subsection (E) of the approval criteria requires: *“The conditional use complies with the applicable requirements of this Code.”*

As relates to the pending transmission line proposal, in 2008 the City Council passed Ordinance 5805, thereafter codified as LUC 20.20.255 (Section 255) which establishes new, discrete criteria for just electric facilities. The full text of Section 255 is Attachment A to this submission. Because PSE is the only electric utility that serves load in the city, Section 255 was naturally directed at it. As a part of the passage of Ordinance 5805, the Council specifically included “transmission lines” as one of the electric facilities covered by the ordinance. PSE did not challenge the adoption of Section 255 as inappropriate or illegal regulations as applied to them, even though it impacted their plans for transmission expansion in effect in 2008 when Section 255 was adopted. The burden of proof to show that the terms of the ordinance are met is on the

applicant.

LUC 20.20.255 is an unusual ordinance in two respects.

First, ordinarily in land use regulation the question of need is not included as a code criterion. For example, the LUC does not require the developer of a residential high-rise condominium to demonstrate that the project is “needed;” the same is true of office and commercial proposals. “Need” is ordinarily considered in how much land should be set aside for certain uses consistent with the Growth Management Act and growth targets found in RCW 36.70A.115. However, for transmission lines and substations covered by Section 255, the code requires the applicant to prove the proposals are needed and that they improve electric reliability.

Second, the Land Use Code has a set of “land use charts” which indicate which uses are allowable in each of the city’s land use districts. In each district, some uses are permitted outright, some are “special uses,” some are administrative conditional uses, and others are more traditional conditional uses, like electric transmission facilities. For certain uses in certain zones, “Notes” are provided to address specific conditions, e.g. offices permitted only as an accessory use in a manufacturing zone. For uses that might be allowed in several different zones, the code does not state a preference for that development to occur in a particular zone. On application, no code provisions permit the city to tell residential, commercial or industrial developers that their project might be better located on some other site in the City.

However, in Section 255, the code establishes a unique “location selection hierarchy” for electric lines as follows:

The following location selection hierarchy shall be considered during identification of the preferred site alternative: (i) nonresidential land use districts not providing transition, (ii) nonresidential Transition Areas (including the BelRed Office/Residential Transition (BR-ORT), and (iii) residential areas. The applicant may identify a preferred site alternative in a Residential Land Use District or Transition Area (including the BelRed Office/Residential Transition (BR-ORT) upon demonstration that the location has fewer site compatibility impacts than a nonresidential land use district location.

As noted, the “hierarchy” clearly indicates that electric utilities should not be in residential zones unless the impacts are worse in a nonresidential zone.

The specific inclusion of need and alternatives criteria regarding electrical facilities like transmission comes from the Council’s knowledge that PSE is a private, foreignly owned company that operates from a different business and political model than other utilities or businesses. This is described more fully in Notebook Section 3. Unlike the residential condominium or office developer, who will not file applications for a project unless it “pencils out”, i.e., will make a profit, the PSE business model is different. PSE is allowed to include all of the costs of its infrastructure projects in its rate structure; its ratepayers pay for the projects, without regard to whether they are profitable or useful. The regulator of PSE, the WUTC, also allows a 9.8% rate of return to be added in for projects like the current \$300 million transmission proposal.

PSE has a heavy burden to demonstrate that its project is indeed “needed” and – if it passes that threshold – that it would be sited in residential, not commercial areas.

V. SELLING ENERGIZE EASTSIDE: THE CAMPAIGN TO ELECT “ENERGIZE EASTSIDE.”

As noted above, PSE is a private company with a private profit motive. Any funds spent on permitting or building this project would be paid by PSE’s

customers, together with a handsome profit (rate of return), currently 9.8%.

PSE early on decided that it would promote its transmission project through an aggressive public relations campaign in an apparent effort to gain community support. PSE hired PRW Communications and its principal Mark Williamson to run a substantial public relations effort when the project was just getting underway. This is described in Notebook Subsection 5.6. Mr. Williamson's specialty was utility infrastructure work, as reflected on his website. *Id.* As described in the Notebook, his website references his proffered ability to overcome "significant opposition" to get permits for transmission projects. *Id.* Mr. Williamson's strategy is summarized, by him, as follows:

These projects have been successful because they were approached from the beginning as political campaigns.
"Electing transmission lines, power plants and pipelines to public office" is a metaphor we use at PRW for approaching these projects as an elected candidate would.
Using election techniques - polling, town meetings, open houses, advertising, door-to-door visits - can dramatically change the debate about a project's merits. We bring first-hand experience to bring the winning play book to these projects.

As seen in Notebook Subsection 5.6, Mr. Williamson's campaign techniques have been employed in the promotion of this transmission project, including the selection of a "brand" for the proposal, "Energize Eastside." Mr. Williamson has placed full color ads in local newspapers and on websites which employed slick Madison Avenue techniques employing slogans and "sound bites," not technical discussion. As seen, nowhere did this campaign indicate that it was only the south part of the line that was a "must," or that the north part only "provided redundancy."

Each of these full color ads will be charged back to ratepayers as part of the

project costs. Ironically, the ratepayers, including residents impacted by the miles of transmission lines, will be paying the expenses of the political-style campaign launched to convince them to support the project.

PSE's hiring of a campaign manager for its project demonstrates that it intends to pursue the project for the sake of profit to its foreign owners.

VI. ISSUE #1: PROJECT DOES NOT MEET CRITERIA OF LUC 20.20.255: NEED AND RELIABILITY.

6.1 CODE REQUIREMENTS AND PROJECT PROPOSAL.

As described above, the code requires that PSE "shall comply" with certain threshold issues for new EUFs like this transmission project. These include the following:

- Section 255.E.3: The applicant shall demonstrate that an operational need exists that requires the location or expansion at the proposed site;
- Section 255.E.4: The applicant shall demonstrate that the proposed electrical utility facility improves reliability to the customers served and reliability of the system as a whole, as certified by the applicant's licensed engineer[.]

LUC 20.20.255 (emphasis added).

PSE does not contend there are operational needs or reliability improvements for its new transmission on a normal operational basis. Rather the "operational need" and "reliability improvements" claimed by the applicant relate solely to extreme weather events, generally during extreme and unusual cold spells, defined as "temperatures less than 23 degrees". See Notebook Subsection 5.2. Indeed, PSE has not cited any circumstance in this millennium (since year 2000) when its equipment actually overloaded during a cold event. Despite repeated efforts to obtain and examine data

from PSE substations that might indicate whether electric loads were even getting close to reaching levels of concern, PSE has steadfastly refused to provide such information. This is described in Notebook Subsection 5.2.

Though the issue is more complicated, PSE's claim boils down to this: "we expect there will be more demand for electricity in the upcoming years and if it materializes, the additional 'juice' could possibly impact certain transformers and arrangements to work around those problems may be required."

Because of the importance of this issue to the Hearing Examiner's decision, an entire section of the CENSE Notebook (Section 5) is devoted to the question of need. The following summarizes the principal points made in Section 5.

6.2 OUT OF DATE AND INCOMPLETE STUDIES.

CENSE explained in its Hearing Brief that the applicant has not met the threshold requirement to demonstrate need and reliability because its load flow studies do not meet NERC criteria. See Memorandum of CENSE in Opposition to PSE Application for Transmission Line Approval, March 18, 2019. This deficiency arose for two reasons.

First, the studies utilized by PSE to support need for the project are outdated, i.e. more than five years old. This violates the applicable transmission analysis standard in TPL-001-4. On a common sense basis, there has been a sea change from all quarters regarding the future of electric consumption, going from substantial yearly increases in consumption to either flat or declining.

As an example of this change, in 2017, the Bonneville Power Administration

canceled a seventy mile transmission line along I-5 based partly on declining need. See Notebook Subsection 6.3. BPA's I-5 Reinforcement Project was a 79-mile-long, 500-kilovolt transmission line that would have run from Castle Rock, Washington to Troutdale, Oregon, costing nearly \$720 million. One of the reasons it was cancelled was that: "recent trends indicate that load growth has generally slowed relative to what was assumed in prior studies." *Id.* In addition, BPA, like Bellevue in its Comprehensive Plan, discussed "non-wire alternatives":

Non-wires measure to manage generation and loads to reduce peak congestion will launch this summer. We will also look to use cutting edge grid technologies such as battery storage and flow control devices to proactively manage congestion and further extend operational capacity of the existing system.

Reassessment of old studies and old technologies is required, but has not been undertaken by PSE consistent with established criteria, even as "recent trends" for lower peak flows are inescapable.

Second, the flow studies PSE relies on were done for the entire 18 mile line, but the current application is limited to only the shortened THLTL, a material change from the original plan for the "Energize Eastside" project. PSE claims that it will someday finish the line to its original length, though there is no timetable for such an application. There appears to be no evidence that independent assessment of the THLTL proposal has been undertaken. Accordingly, the Hearing Examiner cannot evaluate need and reliability for the future completion of the original "Energize Eastside" project when there is no time line for it and no analysis in support. See Notebook Subsections 5.1 (McCullough), 5.4 (Marsh), and 6.1 (Nichols).

The Hearing Examiner should deny the application until up-to-date studies are provided by the applicant that address the subject application, i.e. the transmission line that ends just north of I-90 at the Lakeside substation.

6.3 NO OPERATIONAL NEED OR RELIABILITY IMPROVEMENTS OF SUBSTANCE WILL BE PROVIDED BY THE PROPOSAL.

6.3.1 DECLINING ELECTRIC LOADS.

PSE's application does not provide any evidence of actual past exceedance of established standards or any disruptions in service; if there is evidence of "close calls" it has not been provided by PSE. Indeed, PSE works obsessively to keep anyone from seeing the actual flows on Bellevue substations that might provide data on actual conditions.

Despite this, PSE's public relations assertions and the statements made in its application claim the community is close to an electrical shutdown. See Notebook Section 5.6. Indeed, PSE indicated that standards might be exceeded in the winter of 2017-18, or the summer of 2018, but nothing happened. See Staff Report at page 109. No information has been offered indicating that any problems developed this past winter (2018-19) or that the system was close to failure. Again, PSE refuses to provide information to the community regarding real time events and conditions. Given the claims repeatedly and publicly made, this is a fatal – and reversible – error, especially where PSE has relied on slogans and sound bites (Notebook Subsection 5.6) to make its case.

Given the lack of problems with the system, PSE points to future problems tied to their claims that its peak loads are increasing.

To address PSE's repeated claims of increasing loads, CENSE has consulted recognized experts to determine whether the pending proposal, consisting of miles and miles of electric wires through residential neighborhoods, at a cost of between \$150,000,000 and \$300,000,000 to be paid by local residents, is necessary to resolve a problem that has never occurred in the distant or even immediate past.

As explained in CENSE's expert reports from Mr. McCullough (Notebook Subsection 5.1) and Mr. Nichols (Notebook Subsection 6.1), the predicate question is whether electric peak load forecasts indeed demonstrate increases in peak loads into the future. Resumés showing their long record in electrical planning are attached to their reports.

The evidence here is overwhelming: on a local, regional and national basis, electric loads are declining, not increasing. Why? Because efforts by responsible electric utilities to reduce electrical consumption have worked, through both reduction of use and the installation of energy efficient fixtures, such as LED lighting. See Subsection 5.1. Indeed, as described above, the Bonneville Power Administration, the purveyor of federal power, just cancelled a major transmission project because of slowing load growth and the availability of new tools to manage load, including generation re-dispatch, new technologies and non-wire measures. Notebook Subsection 6.3.

Our experts go into greater detail (as described below), but the experience of the city of Seattle stands out. See Subsections 5.3 and 5.4. Right across Lake Washington, Seattle has nearly identical climate and demographic circumstances as Bellevue and

both are impacted by growth in tech industries (e.g. Amazon, Google). But Seattle City Light's 2018 forecast shows electric consumption is declining. That forecast is attached to the February 12, 2019, CENSE Motion to Compel at Attachment C. And per capita consumption is declining as well. *Id.* As noted in these materials, the decline in electric consumption is creating a set of "unintended consequences:" as electric consumption declines, so do revenues, resulting in serious financial issues for many utilities. PSE's contention that the electrical customer demand will increase at a rate of 2.4% per year through 2024 is completely unsupported.

Indeed, the Northwest Power Planning Council indicates in a recent report (January 23, 2019) entitled "Declining Carbon Emissions in the Pacific Northwest" (<https://www.nwcouncil.org/news/declining-carbon-emissions-pacific-northwest>):

Electricity demand in 2018 between January and October was down 3 percent compared to the same period in 2017, and the water flow appears to be above average (although not as good as 2017).

The report prepared by Robert McCullough, a well established industry expert, demonstrates that declines in load are a national phenomenon. See Subsection 5.1 of the Notebook. Indeed, his report, and that of Mr. Nichols, indicates the tendency of PSE to overstate its load forecasts, a practice that goes back many years. In fact, the Washington Utilities and Transportation Commission (WUTC) called PSE out on this issue when its 2013 forecast showed substantial increases in consumption, but the actual load figures showed declines. See Notebook Subsections 5.3 and 5.4.

A world where electric growth continues to increase and increase and increase is now an anachronism.

6.3.2 MANIPULATION OF DATA TO SUPPORT CLAIMS.

As noted in the Lauckhart reports, the standard base cases submitted to FERC do not show overloads on PSE facilities even during peak load periods. Unsatisfied with this result, PSE decided to hire its own consultant (Quanta) in 2013 to redo the analysis for these proceedings.

However, the evidence from multiple sources presented in the CENSE Notebook demonstrates that there is no need for the project.

6.3.2.1 POWER TO CANADA

A predicate need for the project is partially based on regional power flows that PSE claims must be accommodated on its new lines. PSE's load flow studies assumed that PSE and other utilities are required to provide for power flows of up to 1,500 MW to Canada arising from the Columbia River Treaty (CRT). The Lauckhart/Schiffman Report (Notebook Subsection 5.2) specifically addresses this issue. Under the CRT, the Canadian-built storage reservoirs in Canada provide flow at federal dams on the Columbia River and were to be paid for by electricity generated by these increased flows. See Notebook Subsection 5.1. However, the CRT requires that if Canada wants to take delivery of this power, it would need to build and pay for the transmission lines to carry this power to Canada. But the Canadians, seeking to avoid this expense, have instead simply arranged to sell the power back to Americans who take delivery in central Washington.

Moreover, Mr. McCullough (Notebook Subsection 5.1) describes that legislation has been recently adopted in British Columbia that requires the Province to be energy

self-sufficient and not rely on power from the US to meet its needs. Though power flows back and forth across the border based on utility contracts are commonplace, such as California utilities buying Canadian power to meet summer air conditioning load, PSE has no obligation to include 1,500 MW flows to Canada. Reliance on such flows by PSE to support its transmission project are in error.

6.3.2.2 REMOVING EXISTING GENERATION.

Messrs. Lauckhart and Schiffman, both qualified electric systems experts, have examined the PSE proposal. See Section 5.2 of the notebook. In looking at the load forecasts submitted to the Federal Energy Regulatory Commission (FERC), there are no overflows or issues that would require stringing miles of transmission lines. But they noted the flow models were changed by PSE after they hired Quanta, a specially selected contractor, to do their own load flow study. *Id.* The Lauckhart/Schiffman report concluded that modifications to the flow models prepared by Quanta were not justified.⁴

To create the flow patterns that they claim will result in the transformer overloads, Quanta changed the model in two ways. First, they added 1,500 MW loads on the transmission system based on the claim that the system must accommodate flows to Canada of that magnitude, as discussed above. This is an extraordinary addition given that the entire peak load for the Bellevue area is less than 600 MW. As described by Mr. McCullough and by the Lauckhart/Schiffman report, this addition is not justified because of the lack of a legal obligation to transfer to this power and because

⁴No flow studies have been prepared that appear of record that analyze the electrical utility of the THLTL.

Canadian law that requires it be energy self-sufficient.

Second, Quanta’s study took several existing peaking plants owned by PSE off line for their study, amounting to 1,400 MW of generation. The claim was that such plants might be “down for planned maintenance. . .” FEIS Vol. 2, Appendix J, page J1-15 (DSD 006057).⁵ As described by Mr. Lauckhart, these peaking plants were constructed, at significant cost, precisely to address peak demand for power. The FEIS admits that if 1,000 MW of that 1,400 MW of (existing) generation was turned on, “transmission line overloads were relieved”, yet PSE still claims that “transformer overloads were not relieved for the full 10-year planning period.” *Id.* (Emphasis supplied). Certainly the removal of substantial overloads may lead to alternatives other than miles of wire with a huge price tag.

The evidence shows that PSE’s modeling which takes these plants off line is contrary to the very reason the plants were built and cannot support claims of operational need and increased reliability.

PSE has concocted a mythical “Perfect Storm” for its system that it claims established the need for the project. And, like a good publisher of fiction, it hired expert promoters to sell the product to assure that the public will pay its \$300 million price tag. The Examiner should not buy in.

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⁵One does wonder about an electric company that would conduct “planned maintenance” during a time when peak loads on its system might be anticipated.

VII. ISSUE #2A: THE CITY AND PSE HAVE FAILED TO ANALYZE ANY REASONABLE ALTERNATIVES UNDER SEPA AND LUC 20.20.255.

7.1 BACKGROUND.

The consideration of alternatives is a key element in environmental and land use review. In the present case, alternatives must be considered both under Section 255 and under SEPA. As will be described herein, commercially reasonable and viable alternatives to the transmission plan were not considered and reviewed. This failure requires that further consideration of the proposal not proceed until these alternatives have been thoroughly considered.

Under Section 255, the requirements for an “Alternative Siting Analysis” (“ASA”) are found in Subsection D. The purpose of the ASA is defined as follows:

the applicant shall identify alternative sites, provide required content showing analysis relating to identified sites, describe technologies considered, and describe community outreach conducted for proposals relating to new or expanding electrical utility facilities on sensitive sites as described in this section.

Subsection D.1 requires a minimum of “three alternate site options” be identified, one of which must be in the land use district “primarily served by the proposed electricity utility facility.” If one of the sites is in a residential or transition area, Subsection D.2.c addresses two additional criteria. First, the applicant must describe whether the location of the facility is: “a consequence of needs or demands from customers located within the district or area;” second, “whether the operational needs of the applicant require the location of the facility in the district or area.” In short, the code requires the demonstration of a clear nexus between the location of the facility and the customers served.

Additionally, City Council requirements for an ASA go beyond just looking at alternate sites for an electric facility, but also relate to employing new technology. As indicated at page 127 of the 2015 Bellevue Comprehensive Plan, the City Council has recognized the need to carefully examine emerging concepts and technologies:

A future reliable electric grid may include emerging concepts such as non-wire, microgrid, or alternative technology solutions to the existing overhead system that better address the community's interest in mitigating impacts.⁶

The Council's directive to consider "alternative technology" is implemented by Section 255. As noted, the code requires each applicant for electric facilities to present the "Technology Considered for the Preferred Site Alternative" in Subsection D.3. Here the applicant "shall":

- a. Describe the range of technologies considered for the proposed electrical utility facility;
- b. Describe how the proposed electrical utility facility provides reliability to customers served;
- c. Describe components of the proposed electrical utility facility that relate to system reliability; and
- d. Describe how the proposed facility includes technology best suited to mitigate impacts on surrounding properties.

(Emphasis supplied.) The City Council carefully and specifically required that "the applicant shall demonstrate "[c]ompliance with the alternative siting analysis requirements of subsection D of this section" as a decision criterion for Section 255. In addition, "where feasible. . ." the preferred site alternative "is located within the land use

⁶One cannot avoid the correlation between this provision of the Bellevue Comprehensive Plan with the real-time decision of BPA to cancel its transmission project, as described in Notebook Subsection 6.3, based in part on "cutting edge grid technologies. . ."

district requiring additional service *and* residential land use districts are avoided when the proposed new or expanded electrical utility facility serves a nonresidential land use district” (Emphasis supplied).

7.2 FAILURE OF THE APPLICATION TO MEET BASIC THRESHOLD REQUIREMENTS.

In reviewing compliance with the ASA requirements, the applicant has failed to meet the minimum requirements of LUC Section 255 for three reasons.

FIRST, the applicant has failed, and refused, despite repeated requests from CENSE and other interested parties, to disclose its studies and flow models. When CENSE requested formally in their motion to the Hearing Examiner that these materials be turned over, PSE objected. Though the Hearing Examiner has denied the CENSE motion, the failure to disclose this information is a fatal defect in the current application that may require correction on further review. PSE’s recalcitrance may well create unfortunate delays in resolution of their application on additional review.⁷

SECOND, though the applicant began the process with its “Energize Eastside” proposal many years ago, in August, 2017, PSE limited its application to only the THLTL proposal. But no load studies were ever prepared for that limited proposal. Even so, the Staff Report now claims that the THLTL has “independent utility.” PSE cannot assert its current proposal is to meet an “operational need” when it lacks the technical studies to support it. Once again, this is an issue that will likely need to be

⁷ In more traditional land use analysis, this is equivalent to trying to assess future traffic impacts and consistency with Level of Service Standards without the existing “peak hour” traffic volumes on the road segment under review.

resolved on further review.

THIRD, the studies advanced for the proposal are now out of date. This issue is more fully discussed in the Hearing Brief filed with the Examiner on March 18, 2019. The applicant is using out of date load flow models and information contrary to the requirements of TPL-001-4, Paragraph 2.6. In addition, the Quanta and other studies were not run based on the THLTL proposal only recently introduced by PSE.

The failure of the applicant to meet established standards and provide basic up-to-date information requires denial of the application by the Examiner.

7.3 THERE ARE FEASIBLE ALTERNATIVES TO STRINGING WIRES.

As described above, current circumstances indicate that the applicant cannot demonstrate need for or reliability improvements from the proposal and as such, there is no need to address alternatives and the application must be denied. Even if PSE was able to meet these threshold criteria, there are alternatives available that meet the mandates of Section 255 other than PSE's wires proposal.

The applicant's preferred alternative is to string many miles of new wires along what has been identified by the City in its comprehensive plan as a "sensitive site." This designation was added by the City Council with the 2015 update of the Bellevue Comprehensive Plan when it adopted Map UT7. As indicated at page 131 of the Utilities Element:

While it is critically important to meet growing demand for utility services and further develop the reliability of Bellevue's utility systems, it is also important to ensure that new and expanding utility facilities are sensitive to neighborhood character. Map UT7 identifies planned electrical facilities that have the potential to create significant incompatibilities with Bellevue neighborhoods. It reflects an analysis of planned facility locations and

manner of expansion anticipated by Puget Sound Energy's system plan. Such sensitivity factors as proximity to residential neighborhoods, visual access, and expansion within or beyond an existing facility border were considered in identifying potential incompatibilities.

(Emphasis supplied.) Map UT7 replaced Figure UT5a in the former plan, the update showing PSE's selected corridor as a "sensitive site."

As noted in Notebook Section 9, the wires alternative proposed by the applicant is almost entirely in residential areas identified by Section 255 as the last option for location of new electric facilities.

The report presented by Ken Nichols in Notebook Subsection 6.1 shows that the "emerging concepts" and "alternative technology solutions" discussed in the 2015 Comprehensive Plan have gone from "emerging" to reality. See Notebook Subsection 6.1. The wires alternative is now fully outmoded, not only because of its environmental impacts and its cost (up to \$300 million), but also because more efficient 21st Century solutions are now feasible and environmentally acceptable. *Id.*

Alternatives analysis must also address project cost. As pointed out in the costs section of this notebook (Section 4), the applicant has not provided detailed project costs, though the project has been under consideration for over five years. While project cost, and developer profits, may not be relevant to a garden-variety commercial project or high-rise condominium in the City, this project cost will be borne by Bellevue residents. There is no question project cost is important to determine which project alternatives are reasonable, i.e. what project alternatives are feasible within the available funds. The only figure provided by the applicant is that project cost may be between \$150,000,000 and \$300,000,000. This figure is, however, for the original 18-

mile “Energize Eastside” line, not the reduced THLTL line, which has no cost estimate. As will be described herein, this massive cost is not justified, even if some adjustments to PSE operations are merited.

Mr. Nichols identifies suitable and feasible alternatives, as do Mr. Marsh and Mr. Lauckhart. See Notebook Subsections 6.1, 5.2 (attachment) and Marsh documents. Each of the alternatives discussed below are not only feasible for PSE, but also compliant with Section 255 because they avoid residential areas. In addition, they may be located closer to the area that PSE identifies as the portion of Bellevue that is growing (downtown and Spring District), in keeping with the obligation to locate electric facilities within the land use districts they are intended to serve.

7.3.1 PEAKING PLANTS WERE EXCLUDED WITHOUT ANY ANALYSIS OR CONSIDERATION.

A peaking plant generates electricity during peak periods to assure the customer demand is met, including periods likelier for potential outages in transmission or generation. See Expert Report prepared by Richard Lauckhart on Alternatives, pages 3-4, attached to Notebook subsection 5.2. As identified in the Lauckhart/Schiffman report, PSE already has several gas fired peaking plants.

A peaking plant ordinarily operates during peak periods of power demand or where system limitations occur. See Lauckhart alternatives report. As discussed here, a peaking plant scaled to provide relief for PSE’s peak load concerns would only operate during times when the transmission lines would be subject to extreme stress. Indeed, PSE concedes “adding generation capacity within the Eastside could alleviate some of the transmission capacity deficiency.” FEIS Appendix J, page J1-13 (DSD

006055).

Peaking plants have been identified in the 7th Pacific Northwest Power plan as a mechanism to meet load not met by other alternatives. See Lauckhart Alternatives Report in subsection 5.2. Though peaking plants have some adverse impact when they operate, a peaking plant filling the need identified by PSE to address unusual, weather related impacts (a cold snap) would operate only on rare occasions. Of course, PSE has not identified any time, ever, a peaking plant might have been needed to fill the peak demand gap.

Incredibly, even the study of a peaking plant was rejected by PSE for both ASA and SEPA purposes when the review process for this project was initiated in 2015. Notwithstanding that peaking plants are accepted technology and have been for many years, this summary dismissal violates the ASA provisions of Section 255 and SEPA.

7.3.2 USE OF SEATTLE CITY LIGHT 230 kV LINES.

The Lauckhart Alternatives Report also addresses the use of another existing set of 230 kV lines that are located to the west of the corridor proposed by PSE. See subsection 5.2 attachment, page 3, together with its Attachments 2 and 3. The SCL line is shown on Comprehensive Plan Map UT7. Mr. Lauckhart demonstrates that the use of that existing line will resolve the problems that PSE contends exists – *and PSE agrees*. See Notebook Subsection 6.4.

However, the problem raised by PSE is not electrical, but procedural. PSE contends the SCL 230 kV line is not an alternative because SCL doesn't want PSE to use their lines. However, as Mr. Lauckhart points out, federal law requires that

transmission be open for use by all utilities if feasible (“Open Season” requirements). But PSE has never even gone through the required procedure to determine the feasibility of that option and has never formally asked SCL to approve use of their lines.
Id.

As with peaking plants, the use of existing lines was discarded by PSE because of corporate preferences, not electrical engineering reasons. Such summary dismissal violates the ASA and SEPA.

7.3.3 NON-WIRE ALTERNATIVES.

As noted above, the Bellevue Council has recognized that multiple alternatives are emerging to address electric power service, including non-wire alternatives (NWA). As Mr. Nichols’ report summarizes, there are many examples of how power providers across the county are acquiring and employing NWAs to address power demand, including Consolidated Edison (ConEd) in New York.

7.3.3.1 DEMAND RESPONSE

Keep in mind that PSE is not a public utility, but a private business. But PSE is not subject to free market forces in its construction decisions. It is allowed to charge back capital costs to the ratepayers and the owners are able to recover profit on such construction, called a rate of return, that is substantial. Though PSE prefers the larger, more expensive construction for these reasons, multiple smaller, less expensive and less intrusive options and alternatives exist that save ratepayers money and are consistent with Bellevue regulations.

Demand response is a mechanism to simply ask customers to voluntarily reduce

energy consumption during times of stress on the grid. In the case of addressing extreme cold weather events, retail users would defer use of certain electrical devices until the stress on the system is relieved.

Mr. Nichols' report describes demand response in detail at pages 23-24 (Notebook Subsection 6.1). He cites to the Northwest Power Planning Council's (NPPCC) 7th Power Plan for the Northwest that indicates there is 4,300 MW of regional demand that can be eliminated through the use of Demand Response techniques. The capital cost of this potential load reduction is indicated as cost effective.

Indeed, as Mr. Nichols indicates at pages 23-24, and as shown in Notebook Subsection 6.2, the United States Supreme Court has even addressed the use of demand response in a recent opinion. Justice Kagan's majority opinion provides a careful analysis of the merits of demand response in a wholesale setting.

The demand response alternative would eliminate the need for miles of wires and in turn meet the criteria of the code to not impact residential areas. Section 255 allows electrical facilities in residential areas only "upon demonstration that the location has fewer site compatibility impacts than a nonresidential land use district location." The demand response alternative would be employed on a meter by meter level and not have disproportionate impact on residential areas. Bellevue residents have shown time and again that they support measures to conserve electricity. As the WUTC acknowledgment letter to PSE for its 2017 Integrated Resource Plan (Attachment B to CENSE's Motion to Compel Modeling Information) indicates:

The 2017 IRP projects flat to negative annual growth rates for the first 10 years of the plan when there is projective aggressive energy conservation.

[FN omitted] PSE models the first 10 years of conservation by applying 20 years of retrofit conservation measures from the conservation potential assessment (CPA) into the first 10 years of the IRP.

See page 11 of the WUTC Document.

But demand response is not a desired alternative by PSE because it does not require a significant capital outlay and does not increase the potential for additional revenue. The essence of demand response – to have electrical users defer use until any stress on the system is relieved – has the tendency to reduce electric sales revenues.

7.3.3.2 ENERGY STORAGE.

Energy storage essentially involves the use of batteries which are charged during periods of low electric demand and discharged during periods of high electric demand. See Nichols report (Notebook Subsection 6.1). These systems are particularly adopted along with renewable resources such as wind and solar energy because batteries can be charged during periods when these facilities are operating. As applied to the current situation, electric energy would flow from batteries during periods of electric system peaking. Mr. Marsh's report identifies the numerous circumstances where energy storage is being employed as a substitute for more traditional facilities such as gas fired generators. His reports indicate that the prices for these facilities are dropping rapidly and that they can be employed quickly.

An energy storage facility is naturally, when discharging, a source of "generation" that the FEIS admits "could alleviate some of the transmission capacity deficiency." Appendix J, page J1-13 (DSD 006055).

Again, energy storage is consistent with the terms of Section 255. Energy storage would be located in areas close to load and does not require, or benefit from, location in residential areas.

7.4 IN VIOLATION OF SEPA, THE ENVIRONMENTAL IMPACT STATEMENT PREPARED FOR THE PROJECT DOES NOT ADEQUATELY CONSIDER ALTERNATIVES.

Alternatives are at the heart of SEPA analysis and “reasonable alternatives” must be evaluated. A reasonable alternative is one that is capable of attaining or approximating the proposal’s objective, but at a “lower environmental cost or decreased level of environmental degradation.” See WAC 197-11-786. As stated in the premier source on SEPA:

Open-minded, imaginative design and consideration of alternative courses of agency action is crucial to SEPA ultimate quest -environmentally enlightened governmental decision making. Unless agencies venture beyond their traditional modes of operation, the mere preparation of impact statement environmentally analyzing customary agency conduct would be little more than costly ritual without practical effect.

Richard Settle, The Washington State Environmental Policy Act, Section 14.01[2][b] (2013).

The failure of the City and PSE to address the alternatives described above indicates not only the inadequacy of the ASA analysis under Section 255, but also under SEPA.

7.5 THE PROPOSAL IS NOT CONSISTENT WITH THE CRITERIA FOR CONDITIONAL USE PERMITS.

7.5.1 CODE CRITERIA.

The proposed wires project requires a conditional use permit that must meet the

criteria of LUC 20.30B.140, as follows:

- A. The conditional use is consistent with the Comprehensive Plan; and
- B. The design is compatible with and responds to the existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity; and
- C. The conditional use will be served by adequate public facilities including streets, fire protection, and utilities; and
- D. The conditional use will not be materially detrimental to uses or property in the immediate vicinity of the subject property; and
- E. The conditional use complies with the applicable requirements of this Code.

As noted, the applicant must demonstrate each criterion is met before a conditional use permit is approved. As will be demonstrated herein, the proposal fails several of the criteria.

7.5.2. THE PROPOSAL IS NOT CONSISTENT WITH THE APPLICABLE REQUIREMENTS OF THE CODE REGULATING CONDITIONAL USE PERMITS.

7.5.2.1 Subsection E, Other Code Sections.

LUC 20.30B.140(E) requires that the proposal comply with applicable requirements of the Code. For electric wires, the provisions of Section 255 specifically apply to the subject proposal. As described above, the applicant does not meet any of the requirements of Section 255 and thus does not meet this requirement.

7.5.2.2 Subsection A, Consistency with Comprehensive Plan.

The consistency of the proposal with portions of the 2015 Comprehensive Plan

(CP) was addressed above at pages 24-25. However the proposal is also not consistent with other sections of the CP.

The 2015 Bellevue Comprehensive Plan Utilities Element was based on the 2013 PSE Integrated Resource Plan as stated on page 126:

As of the end of 2014, Puget Sound Energy served more than 63,900 electric customers within the City of Bellevue. Puget Sound Energy's 2013 Integrated Resource Plan forecasts growth in electric peak hour capacity 'need' (the gap between the effective capacity of existing resources and the peak hour capacity needed) to increase to 12 MW by 2017, 100 MW by 2020 and 2,194 MW by 2033.

As noted, the plan relies on out-of-date forecasts. As indicated in the Nichols and McCullough materials (Notebook Subsections 5.1 and 6.1), forecasts have changed dramatically since the 2013 IRP, now overwhelmingly demonstrating that the load forecasts for United States utilities now show stable or declining electric loads due to a variety of measures to reduce consumption.

Of specific interest to this proceeding is the recognition that "historically, PSE's load forecasts have been overly optimistic." See WUTC's Acknowledgment Letter Attachment to 2017 PSE IRP, at page 11 (DSD 005156). WUTC's letter includes Figure 2, showing that for the period 2012-2014, PSE projected a growth rate of 1.90%, but the actual PSE's growth rates were actually -1.19%, a drop in the yearly projected load of more than three percent (-3%).

As noted above, Bellevue's 2015 Comprehensive Plan Utilities element relied on the 2013 PSE IRP, however, as described by the WUTC, PSE's 2017 IRP gave a completely different projection:

The 2017 IRP projects flat to negative annual growth rates for the first 10 years of the Plan when there is projected aggressive energy conservation.

See page 11 (emphasis supplied). This is wholly at odds with the 2013 IRP that was discussed in the Utilities Element of the Comprehensive Plan, which referenced significant *increases* in electric consumption. The recent information is entirely consistent with the predictions of essentially every expert that electric consumption is declining. PSE's claims that electric consumption are increasing by 2.4% per year can only be considered fanciful. Bellevue's Comprehensive Plan makes clear that the City should rely on "actual load growth" in making its decisions:

Actual load growth could vary from projections due to economic cycles, land use zoning changes and other drivers.

Utilities Element, page 127. The refusal by PSE to document its actual load growth not only prevents it from meeting code requirements, it also constitutes reversible error.

As indicated in the Comprehensive Plan, the expressed desire of the council is to protect residential areas from new electric facilities that create adverse impacts, as implemented by Section 255. The current proposal, employing wires to meet the need instead of alternate measures, is contrary to the terms of the Comprehensive Plan.

7.5.2.3 Subsections B and D: Proposal incompatible with existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity and materially incompatible with uses or property in the vicinity of the project.

The Comprehensive Plan makes clear that the electric permitting process must "ensure that new and expanding utility facilities are sensitive to neighborhood character." Page 131. Indeed, as described above, the Council has already determined that the very route chosen by PSE and shown on Comprehensive Plan Map

UT7 is a “sensitive site:”

Map UT7 identifies planned electrical facilities that have the potential to create significant incompatibilities with Bellevue neighborhoods. It reflects an analysis of planned facility locations and manner of expansion anticipated by Puget Sound Energy’s system plan. Such sensitivity factors as proximity to residential neighborhoods, visual access, and expansion within or beyond an existing facility border were considered in identifying potential incompatibilities.

(Emphasis supplied.) The “location selection hierarchy” requires location of new facilities in nonresidential areas unless there is a “demonstration that the (residential) location has fewer site compatibility impacts than a nonresidential land use district location.” Section 255.D.2.d. No such demonstration has been made.

The compatibility issues the Council expressed for a route along the “sensitive site” are confirmed in the reports from Dean Apostol and Karen Esayian. See Notebook Subsections 8.1, 8.2 and 8.3. Mr. Apostol, a confirmed expert in visual impact analysis, demonstrates the plain adverse impacts in the residential communities that would be impacted by the THLTL.⁸ Ms. Esayian has documented the extensive tree loss that will result from the construction of the line as well as impacts on public street right of ways.

In addition to the foregoing, documented appraisal reports indicate that electric lines have significant impacts on property values. See Notebook Subsection 9.2.

⁸As no application has been received from PSE for the additional line to the north, and no timetable for such an application exists, the adverse impacts for a possible extension of the THLTL cannot be presently considered. Under these circumstances, the Hearing Examiner cannot reach any conclusions regarding the consistency of the full line with either Section 255 or conditional use permit criteria.

VIII. CONCLUSION.

Because it is inconsistent with both Section 255 and conditional use permit requirements, the proposal to construct the THLTL must be denied. Declines in electric consumption, together with a failure to demonstrate current problems delivering electricity, indicate the proposal does not meet the need or reliability criteria of Section 255. Even if PSE could meet its burden of proof, there are numerous reasonably available alternatives to address concerns without impacting residential land use districts. A denial of the current application will allow the applicant to move forward with 21st Century grid management solutions.

Dated this 28th day of March, 2019.



J. Richard Aramburu, WSBA #466

Attorney for Coalition of Eastside Neighborhoods for Sensible Energy

Attachment A

20.20.255 Electrical utility facilities.

A. Purpose.

The purpose of this section is to regulate proposals for new or expanding electrical utility facilities and to minimize impacts associated with such facilities on surrounding areas through siting, design, screening, and fencing requirements.

B. Applicability.

This section applies to all proposals for new or expanding electrical utility facilities as defined in LUC [20.50.018](#).

C. Required Review.

For new or expanding electrical utility facilities proposed on sensitive sites as described by Figure UT.5a of the Utilities Element of the Comprehensive Plan, the applicant shall obtain Conditional Use Permit approval under Part [20.30B](#) LUC. For expansions of electrical utility facilities not proposed on sensitive sites as described by Figure UT.5a, the applicant shall obtain Administrative Conditional Use Permit approval under Part [20.30E](#) LUC.

1. Conditional Use Permit. In addition to the requirements set forth in Part [20.30B](#) LUC and Part [20.25B](#) LUC (if applicable), the applicant shall:
 - a. Complete the alternative siting analysis as set forth in subsection [D](#) of this section;
 - b. Hold an informational public meeting prior to the public hearing required by LUC [20.35.137](#) and in addition to the informational public meeting required in LUC [20.35.127](#); and
 - c. Comply with all applicable decision criteria and design standards set forth in this section.
2. Administrative Conditional Use. In addition to the requirements set forth in Part [20.30E](#) LUC and Part [20.25B](#) LUC (if applicable), the applicant shall comply with all decision criteria and design standards set forth in this section, provided the applicant is not required to complete the alternative siting analysis set forth in subsection [D](#) of this section.

D. Alternative Siting Analysis.

In addition to the requirements set forth in Part [20.30B](#) LUC, Part [20.25B](#) LUC (if applicable), and the decision criteria and design standards set forth in this section, the applicant shall identify alternative sites, provide required content showing analysis relating to identified sites, describe technologies considered, and describe community outreach conducted for proposals relating to new or expanding electrical utility facilities on sensitive sites as described in this section.

1. **Alternative Sites Analyzed.** Prior to submittal of the application for Conditional Use Permit required pursuant to subsection [C](#) of this section, the applicant shall identify not less than three alternative site options to meet the system needs for the proposed new or expanding electrical utility facility. At least one of the alternative sites identified by the applicant shall be located in the land use district to be primarily served by the proposed electrical utility facility.
2. **Content of Alternative Siting Analysis.** Upon submittal of the Conditional Use Permit application required pursuant to subsection [C](#) of this section, the applicant shall submit results of the siting analysis which:
 - a. Describe the sites identified in subsection [D.1](#) of this section and the land use districts within which the sites are located.
 - b. Map the location of the sites identified in subsection [D.1](#) of this section and depict the proximity of the sites to Neighborhood Business Land Use Districts, Residential Land Use Districts, and Transition Areas.
 - c. Describe which of the sites analyzed are considered practical or feasible alternatives by the applicant, and which of the sites analyzed are not considered practical or feasible, together with supporting information that justifies the conclusions reached. For sites located within a Neighborhood Business Land Use District, Residential Land Use District, and/or Transition Area (including the Bel-Red Office/Residential Transition (BR-ORT), the applicant shall:
 - i. Describe whether the electrical utility facility location is a consequence of needs or demands from customers located within the district or area; and
 - ii. Describe whether the operational needs of the applicant require location of the electrical utility facility in the district or area.
 - d. Identify a preferred site from the alternative locations considered for the proposed new or expanding electrical utility facility. The following location

selection hierarchy shall be considered during identification of the preferred site alternative: (i) nonresidential land use districts not providing transition, (ii) nonresidential Transition Areas (including the Bel-Red Office/Residential Transition (BR-ORT), and (iii) residential areas. The applicant may identify a preferred site alternative in a Residential Land Use District or Transition Area (including the Bel-Red Office/Residential Transition (BR-ORT) upon demonstration that the location has fewer site compatibility impacts than a nonresidential land use district location.

3. Technology Considered for the Preferred Site Alternative. Upon submittal of the Conditional Use Permit application required pursuant to subsection [C](#) of this section, the applicant shall:

- a. Describe the range of technologies considered for the proposed electrical utility facility;
- b. Describe how the proposed electrical utility facility provides reliability to customers served;
- c. Describe components of the proposed electrical utility facility that relate to system reliability; and
- d. Describe how the proposed facility includes technology best suited to mitigate impacts on surrounding properties.

4. Community Outreach Conducted. Upon submittal of the Conditional Use Permit application required pursuant to subsection [C](#) of this section, the applicant shall provide a description of all methods of community outreach or involvement conducted by the applicant prior to selecting a preferred site for the proposed electrical utility facility.

E. Decision Criteria.

In addition to the requirements set forth in Part [20.30B](#) LUC, Part [20.30E](#) LUC, Part [20.25B](#) LUC (if applicable), and other applicable provisions of this section, all proposals to locate or expand electrical utility facilities shall comply with the following:

1. The proposal is consistent with Puget Sound Energy's System Plan;

2. The design, use, and operation of the electrical utility facility complies with applicable guidelines, rules, regulations or statutes adopted by state law, or any agency or jurisdiction with authority;
3. The applicant shall demonstrate that an operational need exists that requires the location or expansion at the proposed site;
4. The applicant shall demonstrate that the proposed electrical utility facility improves reliability to the customers served and reliability of the system as a whole, as certified by the applicant's licensed engineer;
5. For proposals located on sensitive sites as referenced in Figure UT.5a of the Utility Element of the Comprehensive Plan, the applicant shall demonstrate:
 - a. Compliance with the alternative siting analysis requirements of subsection [D](#) of this section;
 - b. Where feasible, the preferred site alternative identified in subsection [D.2.d](#) of this section is located within the land use district requiring additional service and residential land use districts are avoided when the proposed new or expanded electrical utility facility serves a nonresidential land use district;
6. The proposal shall provide mitigation sufficient to eliminate or minimize long-term impacts to properties located near an electrical utility facility.

F. **Design Standards.**

In addition to the requirements set forth in Part [20.30B](#) LUC, Part [20.30E](#) LUC, Part [20.25B](#) LUC (if applicable), and other applicable provisions of this section, all proposals to locate or expand an electrical utility facility shall comply with the following:

1. **Site Landscaping.** Electrical utility facilities shall be sight-screened as specified in LUC [20.20.520.F.2](#) or as required for the applicable land use district. Alternatively, the provisions of LUC [20.20.520.J](#) may be used, provided this subsection does not apply to transmission lines as defined in LUC [20.50.018](#);
2. **Fencing.** Electrical utility facilities shall be screened by a site-obscuring fence not less than eight feet in height, provided this subsection does not apply to transmission lines as defined in LUC [20.50.018](#). This requirement may be modified by the City if the site is not considered sensitive as referenced in Figure UT.5a of the Utility Element of the Comprehensive Plan, is adequately screened by topography and/or existing or

added vegetation, or if the facility is fully enclosed within a structure. To the maximum extent possible, all electrical utility facility components, excluding transmission lines, shall be screened by either a site-obscuring fence or alternative screening;

3. Required Setback. The proposal (including required fencing) shall conform to the setback requirement for structures in the land use district; and

4. Height Limitations. For all electrical utility facility components, including transmission lines, the City may approve a request to exceed the height limit for the underlying land use district if the applicant demonstrates that:

- a. The requested increase is the minimum necessary for the effective functioning of the electrical utility facility; and
- b. Impacts associated with the electrical utility facility have been mitigated to the greatest extent technically feasible.

G. Mitigation Measures.

The City may impose conditions relating to the location, development, design, use, or operation of an electrical utility facility to mitigate environmental, public safety, or other identifiable impacts. Mitigation measures may include, but are not limited to, natural features that may serve as buffers, or other site design elements such as fencing and site landscaping as provided for in subsection [E](#) of this section.

H. Independent Technical Review.

The City may require the applicant pay for independent technical review by a consultant retained by the City for review of materials submitted by the applicant to demonstrate compliance with the requirements of the alternative siting analysis contained in subsection [D](#) of this section, the decision criteria contained in subsection [E](#) of this section and the design standards contained in subsection [E](#) of this section. (Ord. 5876, 5-18-09, § 11; Ord. 5805, 3-3-08, § 8)

The Bellevue Land Use Code is current through Ordinance 6390, passed December 4, 2017.

Disclaimer: The City Clerk's Office has the official version of the Bellevue Land Use Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

[City Website: www.bellevuewa.gov](http://www.bellevuewa.gov)

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