

## LESLIE ROAD SUBSTATION

Richland Energy Services Benton Public Utility District Collocation



## **QUESTIONS & ANSWERS**

Why are you building a new substation? The substation is needed to support the growing Richland Energy Services (RES) load in the Leslie Road area and to provide backup reliability to neighboring RES substations. It will serve new and existing loads in the Leslie Road area. Benton PUD also continues to experience significant customer growth in the Badger Canyon and Dallas Road areas, as well as in the areas in west Kennewick along Clodfelter Road and West Clearwater Avenue. The collocated substation project will provide RES and Benton PUD with strategically located electrical capacity.

*Will this project affect my rates?* There will be no associated rate increase from either utility relative to the new Leslie Road substation.

Will this project affect my property value? There is no direct answer for this question as there are many different considerations that determine property value. The value of a property is in part based on the perception of a buyer weighing the pros and cons of a home in comparison to the market value determined on a given date. A determination of property value is always best done by a professional licensed appraiser who will look at sales of comparable properties to formulate an opinion of value. The property in question is zoned Neighborhood Retail Business (C-1), and a given buyer could find other uses allowed under City code to be more or less desirable than a substation. Some examples of the types of uses allowed include a service/gas station, car wash, equipment rentals, health club, small retail shops, business offices, bars, and restaurants. In comparison, a substation is a relatively passive use once constructed. It will not generate extra vehicle or foot traffic nor draw additional people into the neighborhood like other commercial developments and provides the positive benefit of increasing the reliability of the local power grid.

## What are the noise/health/visual impacts of the new substation?

Construction Noise: Construction of the substation would generate short-term, temporary noise impacts caused primarily by equipment operation associated with excavation, installation of infrastructure, pouring of the transformer pad, sound wall installation, and related activities. Noise during construction will be comparable to noise at other similar-sized site development projects, and activities will be limited to hours and noise levels as dictated by the Richland Municipal Code.

Operational Noise: The transformers of substations emit a low level "hum" or "buzz." The noise level depends in part on the types of transformers that will be used at the substation. Although neither utility has completed facility design or specifications for their transformers (1 for each utility), anticipated noise levels can be based on a typical transformer used by both utilities. Noise can be attenuated by distance, reducing the sounds of the transformers at 100 feet away to a level similar to light traffic, such as what is experienced with Leslie Road. Noticeable noise, if any, at nearby businesses and residences can be further attenuated by a sound wall around the facility or by using lower noise generating transformers. The City is considering an 8-foot cinderblock wall around the substation equipment area, and both utilities are evaluating the use of low noise transformers.

Electric and Magnetic Fields (EMF): EMF is present in our environment wherever electricity is generated or used. EMF is produced by commonly used items in our homes and at work. Some examples include a vacuum cleaner, dishwasher, microwave, computers, and fluorescent lights. Even Mother Nature creates EMF through thunderstorms and the magnetic field of the earth's core.

Transmission lines and substations also produce EMF. The issue of whether or not EMF from power lines causes health concerns has been studied for more than 30 years and the balance of scientific evidence indicates that exposure to EMF does not cause health concerns or disease. The typical exposure to EMF from transmission lines is lower than that of the commonly used household and office items noted above. As with noise, exposure to EMF can also be reduced by distance – the further away, the lower the EMF exposure which drops rapidly with minimal distance. There are no federal standards limiting residential or occupational exposure to EMF. For more information regarding EMF: The National Institute of Environmental Health Services "Electric & Magnetic Fields" at <a href="http://bit.ly/2aGsg6R">http://bit.ly/2aGsg6R</a> or "Electromagnetic fields and public health – Exposure to extremely low frequency fields" World Health Organization fact sheet, <a href="http://bit.ly/2aGrN4W">http://bit.ly/2aGrN4W</a>.

Lighting: Lighting for the substation will be minimal for security and to the extent it will allow staff to safely navigate through the facility for emergency maintenance during non-daylight hours. It will be consistent with the Richland Municipal Code for commercial sites in that it will be "shielded or arranged so as not to reflect or cause glare to extend into any residential districts, or to interfere with the safe operation of motor vehicles."

Landscaping: Substations, in general, are built with very little landscaping in order to not attract animals or birds which could lead to more frequent outages. Landscaping features are detrimental to the ground grid system which is loosely packed gravel in order to protect personnel within the substation. Discussions relating to landscaping along Leslie Road and around the fenced area will occur during the design phase of the project.

**What are the options instead of building the new substation?** There are no practical alternatives to building the new substation. It is required both to address reliability of existing electrical distribution systems and to service new growth electric needs.

What would happen if the new substation is not constructed? At the current rate of growth, six RES substation transformers are projected to be overloaded in about ten years. These limiting conditions result in temporary outages in order to shift loads from one location to another. The growing development and pressure on the load capacity in the Leslie Road area could eventually lead to increased planned power outages due to system overload.

How does building a single, collocated substation instead of two separate substations benefit ratepayers? Collocating RES and Benton PUD equipment in a single substation will save ratepayers money due to shared equipment, facilities, and labor.

**Who will own the parcel and facilities for the substation?** The City of Richland will own the parcel and RES constructed accessory facilities. Each utility will own and maintain their own equipment within the perimeter of the substation.

**Who will maintain the substation grounds?** The City of Richland will maintain the grounds of the substation.

For more information, contact:

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