Electrical Utility Services Plan

Draft: August 2022
ELECTRICAL UTILITY SERVICES PLAN

Electrical utility services include facilities that generate, transmit, distribute, and/or store power. The need for facilities accelerates commensurate with development. As the need for sites for facilities increases, so does the scarcity of appropriate land for their construction. The policies and action strategies set forth in this plan provide guidance on siting and design issues and are to be used in evaluating land use applications. They should not be interpreted as superseding or amending any requirements of the Zoning Ordinance or other local, state, and federal laws pertaining to these facilities.

POLICY EU-1

Locate electrical facilities to provide maximum service levels as unobtrusively as possible.

ACTION STRATEGIES

EU-1.1 Plan for existing and future needs of facilities in conjunction with emerging development designs. All future electric utility lines of 230 kilovolts or more should be located as identified on EU Figure 1.

EU-1.2 Continue to improve coordination with utility providers in identifying future facility needs. Work with electrical utility providers to update EU Figure 1 through the Public Facility Review (PFR) process. During the PFR process the utility provider should provide justification for the proposed facility's need, specify alternative actions, and justify why the proposed location and type of facility is the least disruptive.

EU-1.3 Locate new facilities required to support electrical utility services in areas of commercial or industrial land uses. Locate in residential areas only when other, non-residential areas are not available and on parcels which afford natural screening adjacent to nearby structures or planned land uses. Avoid areas of environmental and cultural sensitivity.

EU-1.4 Locate future above-ground transmission lines along railroad rights-of-way and industrial corridors, where possible. Placement of transmission lines should not compromise other objectives of the Comprehensive Plan. Visual impact should be a key element in the evaluation of proposed transmission line locations.

EU-1.5 Construct underground transmission and distribution lines, whenever possible. Locate new lines along existing or planned utility or road rights-of-way, preferably on lot lines which will least disturb future development of the site.

EU-1.6 Utilize existing towers and poles to support electrical utility services, whenever possible, to reduce the need for new towers and poles. However, avoid overloading existing towers and poles with related equipment.

EU-1.7 Design and site proposed facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.
EU Figure 1: High Voltage Transmission Lines
(showing existing lines and approved corridors of 230kV or greater)
POLICY EU-2

Design electrical facilities to minimize negative impacts on existing and future communities.

ACTION STRATEGIES

EU-2.1 Collocate facilities such as electrical generation, distribution and transmission infrastructure, electrical substations, and electrical storage, where possible, to minimize visual and community impacts. This should include screening of structures and, where appropriate, the undergrounding of distribution and transmission infrastructure.

EU-2.2 Locate future electrical substations and electrical storage on sites which shield nearby residences from noise, while affording privacy and safety. Provide adequate acreage for expansion of substations and maintain levels of screening to accommodate expansion.

EU-2.3 Mitigate the visual impact of electrical substations and electrical storage from adjacent development and major roadways by providing appropriate screening and buffering of the proposed facilities. Land with existing mature vegetation is preferable, as are access roads which obscure entrances, berms which provide screening, and slopes that provide localized lower elevations.

EU-2.4 Innovative design for substations and electrical storage located in or near existing communities is encouraged. This includes improved and enhanced screening using architectural features and built design. Ground infrastructure should be fully screened from view of pedestrians.

EU-2.5 Develop Design and Construction Standards Manual standards for the proper screening of electrical substations.

POLICY EU-3

Support and encourage alternative green energy infrastructure.

ACTION STRATEGIES

EU-3.1 Develop policies and/or ordinances related to the general development and decommissioning of electrical storage facilities; and the fire safety of these facilities.

EU-3.2 Research opportunities and develop policies for collocation of solar or small-scale wind systems on new and existing structures.

EU-3.3 Work to retrofit existing county and school facilities with green energy infrastructure, like solar and small-scale wind generators.

EU-3.4 When designing new county and school facilities encourage green energy infrastructure, like solar and small-scale wind generators.