

New Jersey Clean Energy Corridor

Jersey Central Power & Light (JCP&L)

Clarksville-Lawrence

Township of Lawrence

Project Narrative

Project Background

The New Jersey Board of Public Utilities (NJBPU), in coordination with regional grid operator PJM Interconnection (PJM), awarded Jersey Central Power and Light (JCP&L) several onshore transmission upgrade projects utilizing existing rights-of-way (ROW). These projects are collectively referred to as the New Jersey Clean Energy Corridor (NJCEC) by JCP&L.

The projects were carefully designed to maximize existing grid infrastructure and minimize disruption to the way New Jersey residents live and enjoy their communities. JCP&L will utilize existing power line corridors for the upgrades, and the projects will not require any new construction on undeveloped land outside of JCP&L's owned property or existing ROW.

Through its NJCEC projects, JCP&L is helping modernize New Jersey's energy grid by upgrading existing high voltage transmission infrastructure and enabling the state to handle the growing demand for electricity now and for years to come. The work will enhance JCP&L's ability to deliver power efficiently and reliably and connect new sources of clean, renewable energy to the grid.

Scope of Work

As part of the NJCEC projects, JCP&L will be upgrading a section of the Clarksville-Lawrence 230-kV transmission line and rebuilding a section of the Hopewell-Lawrence 230-kV transmission line within its existing ROW. The ROW for this project is approximately 0.8 miles in length, has an average width of 240 feet, and is located outside of the Lawrence Substation in Lawrence Township.

The scope of work within Lawrence Township includes the installation of five (5) new steel monopole structures on concrete foundations within the existing public utility transmission corridor. All proposed corridor work will occur within JCP&L's existing ROW. Currently, portions of JCP&L's existing ROW are wooded and will need to be cleared to allow for compliant installation and use of the upgraded transmission facilities. Structure heights for the new monopoles are proposed to range from approximately 146 feet to 161 feet. The existing steel lattice towers in the utility corridor are scheduled to remain.

Corridor Selection, Tower Location Design and Alternates Considered

The NJBPU awarded this project specifically to JCP&L so that it could utilize its existing transmission ROW, in lieu of having to procure additional land or rights to build this necessary infrastructure. Because concurrent 230-kV outages are not permitted, the installation of new structures is required. The existing lattice towers within JCP&L's ROW in Lawrence Township carry two (2) 230-kV transmission circuits into the Lawrence Substation, which prevents simultaneous outages and necessitates the installation of supplemental structures to maintain system integrity during construction. As a result of these operational constraints, alternative design options are limited. The locations of the new structures have been carefully selected to minimize environmental impacts and to ensure that all required electrical clearances and safety standards are fully maintained.

Construction Access

Construction access to JCP&L's ROW will be obtained through PSE&G's existing transmission ROW and routed around the Lawrence Switching Station. No access is proposed through adjoining residential, school, or commercial properties.