

Duke Energy 4306 E CR 462, Bldg. F Wildwood, FL 34785 Mail Code: WW16 (352) 689-5446 Amy.Finney@duke-energy.com

August 15, 2020

Clermont Public Services Attn: Mark Griffin 3335 Hancock Rd Clermont, FL 34711 352-241-0178 mgriffin@clermontfl.org

| Re: | Duke Energy Transmission Line Easement Plan Review Conditional Approval | |
|----------|---|--|
| Project: | Clermont Publix Works Facility Storm Drain Crossing | |
| Line: | Avalon – Clermont East (CET-1) 69kV, CET-21 through Str. CET-22 | |
| | Avalon – Camp Lake (CFW-2) 230kV, Central FL- Clermont East (CFW-4) 230kV; Str. CFW-109 | |

Dear Mr. Griffin,

This office has reviewed the proposed Clermont Publix Works Facility Storm Drain Crossing site plan (attached separately via email) and referred to herein as Attachment "A". We find the plans as shown on the referenced drawings to be acceptable and in compliance with the attached Use Guidelines for Encroachments involving Transmission Easements. Therefore, Duke Energy Transmission ("DET") approves the referenced plans, insofar as its transmission easement rights are concerned, subject to the conditions detailed below. If this project construction has not commenced by a period of 12 months from the date of this letter, this approval by DET shall expire, and additional plan review will be required by DET at that time.

In summary, the following details DET's comments:

- No stockpiling or storage of materials, dirt, or equipment of any kind is permitted within the DET easement area, nor may any combustible materials be placed within the easement area.
- Contractors operating any and all equipment should be instructed not to operate within 25' of the poles, towers, or other electrical structures including guy anchors. All slopes shall be 4:1 or less. No spoil dirt is to be placed within the easement limits unless previously approved by DET.
- Any proposed easements must not cross closer than 25' to DET's electrical structures including, but not limited to poles, towers, and guy anchors.
- All underground facilities, such as, but not limited to, storm water pipes and domestic water line pipes, must be capable of a heavy equipment load bearing weight of 80,000 lbs. DET will not be responsible for damages to these installed facilities.
- All plats, plans, renderings and representations of lots, parcels, designated spaces and/or designated areas having and including area within a DET easement cannot represent, with setbacks or other means, buildable areas(s) within a DET easement.
- Any damage to the transmission line or its associated structures, related to this project, and/or claims due to the damage, is the responsibility of the developer/owner.
- Any vegetation within or outside of the transmission easement that will pose a grow-in, fall-in, or blowing together threat (typical maximum mature height greater than 15' within the transmission easement depending up voltage), limit or block access, limit the safe and reliable operation, emergency restoration, or maintenance of the

transmission facilities, or limit the full use of the easement for its intended purposes, is incompatible with the high voltage transmission power lines and therefore could be subject to removal by DET.

- This approval by DET is always subject to the paramount right of DET to make use of its entire easement area for the construction, maintenance, reconstruction, and operation of electric lines.
- This letter only addresses issues related to the DET's transmission line easement. Additional easements, approvals, or permits from the underlying property owner(s) or other applicable agencies may be required in order for you to proceed with this project.

DET also offers these additional comments to ensure that other potential conflicts are not created during or after construction:

- If there are design changes to any drawings that involve the transmission easements, DET requires a review of the changes for compliance with the Use Guidelines for Encroachments involving Transmission Easements.
- Proper clearances must always be maintained. If any transmission line modification by DET is required to maintain proper clearances, the cost will be the responsibility of the developer/owner. Any such line modifications must be approved and scheduled, through DET well in advance of the project start date.
- All current and future property owners are required to adhere to the most current version of the DET transmission right-of-way guidelines and restrictions. (attached separately via email)
- DET heavy equipment access must not be restricted during construction of this project due to grading or any other activity.
- Please contact me prior to the start of this project to attend any pre-construction meetings.

In not objecting to the use of the transmission easement for use as shown on the drawings, DET is not relinquishing the right to control and maintain the rights-of-way as specified in the recorded easement documents. Any damages to the transmission lines or its associated structures, and claims caused by the damage, is the responsibility of the developer/contractor/owner. It is the responsibility of the developer/contractor/owner to ensure that all work performed in the proximity of the transmission lines complies with all applicable laws and regulations, including but not limited to the National Electric Safety Code ("**NESC**"), the Overhead High-Voltage Line Safety Act ("**OHVLSA**"), and the Occupational Safety and Health Act ("**OSHA**"), and that all persons working near the electric power lines are made aware of the inherent safety hazards associated with these lines.

Please note that this approval is based in part on the accuracy of the information you have supplied on the site plans (Attachment A). You are responsible for indicating the correct location of the DET right of way and its associated electrical structures along with the correct width of the DET easement limits.

Thank you for the opportunity to work with you on this project. If you have any questions, please feel free to contact me at (386) 681-8908.

Sincerely,

Amy M. Finnuf

Amy M. Finney Asset Protection Specialist Transmission Asset Protection

Attachments: Attachment "A", Referenced Site Plans, Duke Energy Use Guidelines for Encroachments involving Transmission Easements, and the Duke Energy "Look Up & Live" Brochure. Cc Mark Griffin – Duke Energy (via email with enclosures).

Attachment "A":

Referenced Site Plans:

BENTLEY 651 W. Warren Ave. Suite 200 Longwood, FL 32750 407-331-6116 www.baeonline.com

CLERMONT PUBLIC WORKS FACILITY City of Clermont, Lake County, Florida

C-202 (14 of 76) ENLARGED GRADING PLAN (2 OF 2) Dated 06-22-2020 | Project 2017.072

Additional Notes - Conditions:

-1. In not objecting to the use of the transmission easement for use as shown on the drawings, DET is not relinquishing any of its vegetation management rights as afforded it within its recorded easement documents

-2. Provide the below attached Duke Energy "Look Up and Live" Brochure to all those working in proximity to the high voltage transmission power lines.





USE GUIDELINES FOR ENCROACHMENTS INVOLVING TRANSMISSION EASEMENTS

Duke Energy has a property interest called an easement (or sometimes a right-of-way) in land that you own or are considering purchasing. This easement grants Duke Energy the right to use the easement area for purposes described in the easement document that is filed and recorded in the county's recorder office. This property interest stays with the land when it is bought and sold and generally is perpetual in duration. A series of easements often form a corridor in which the transmission facilities are located and access up and down the corridor is part of the reason Duke Energy obtains these rights.

Broadly stated, easements allow Duke Energy to use another person's property to construct, operate, maintain, repair, and replace electrical facilities for the transmission of high voltage power. The landowner may continue to use the easement area so long as the use is not inconsistent with the easement document or Duke Energy's use of the easement. Any incompatible use by the landowner is called an encroachment. Where an encroachment is under construction, Duke Energy will request that it be stopped and removed; where an encroachment is already installed, Duke Energy will request that it be removed. Where a landowner fails to cooperate, Duke Energy will seek legal recourse to remove the encroachment.

Electricity is a public service and subject to state and federal regulations with which Duke Energy must comply. Any use by the landowner that does or could create regulatory issues is an encroachment. Power lines in the transmission easement are uninsulated and electricity is a dangerous instrumentality. Any landowner use that increases the danger to the landowner, the public or Duke Energy in its use of the easement is also an encroachment.

Over years of designing, constructing, operating, repairing, upgrading and maintaining electric facilities in transmission easements, Duke Energy has developed an understanding of the types of uses by landowners that do, or potentially can, interfere with the easement's purposes and Duke Energy's ability to provide safe and reliable service. This guidance, which supersedes all prior versions, provides a brief overview of types of things that do, or can, interfere with Duke Energy's easement rights and thereby create encroachments.

This overview cannot address all possible situations and is intended to provide general guidance. Please contact the Asset Protection Specialist if you have additional questions or concerns about the use of the easements. Please discuss any proposed activity in the transmission easements with Duke Energy to avoid creating an encroachment or interference. The Asset Protection Specialist can assist and help avoid a subsequent need by the landowner to revise plans or remove obstructions from the easements. Engineering plans may be required by Duke Energy to fully understand any proposed use by the landowner.

By providing these guidelines, Duke Energy does not waive any rights it has in its easements or under the law. Duke Energy's concurrence that a proposed use does not constitute an interference with its easement rights does not mean that requirements of local, county, state or federal governments or other agencies with governing authority have been met.

The following are not permitted in Duke Energy's transmission easements as they interfere with Duke Energy's use of the easements for transmission of electricity by, among other things, interfering with full use the easement, interfering with existing facilities, interfering with access to the facilities, interfering with future expansion in the easement, increasing the danger to the public or those who may be required to work in the easement, creating regulatory violations and generally, making the transmission of electricity more dangerous, costly and/or unreliable: Examples include but are not limited to:

- Permanent or temporary structures and buildings, including for example, permanent or manufactured/mobile homes (and home additions and extensions), garages, sheds, satellite systems, intersections, cul-de-sacs, entrances, streets, swimming pools (any associated equipment and decking), playground equipment, graves, billboards, dumpsters, signs, wells, deer stands, retaining walls, septic systems or tanks (whether above or below ground).
- Mounding or stockpiling any material, such as spoils, dirt, logs, construction or building material, wrecked or disabled vehicles, (e.g. may create clearance and access issues and/or increases dangers in using the easement).
- Transformers, telephone/cable pedestals and associated equipment (unless specifically addressed in a joint use agreement), fire hydrants, manholes, water valves, water meters, backflow preventers & irrigation heads, (e.g. may increase the likelihood of safety hazards & access issues).



- Attachments to Duke Energy structures in the easement; (unless specifically addressed in a joint use agreement).
- Streets, roads, driveways, sewer/water lines, other utility lines or any underground facilities that run in parallel to the centerline in the easement or cross in one contiguous segment from outside edge of easement to opposing outside edge of easement, at any angle that is less than 30 degrees or greater than 90 degrees as measured from the centerline. No portion of such facility shall be located within 25 feet of Duke Energy's facilities (unless specifically addressed in a joint use agreement.)
- Fences or utilities that cross the easement in multiple segments in a non-continuous alignment from outside edge of easement to opposing outside edge of easement at any angle of less than 30 degrees or greater than 90 degrees as measured from the centerline. This generally creates an interference as the ability to access and utilize the full easement and reach facilities in the easement is substantially impaired. If a fence crosses the easement at an angle greater than or equal to 30 degrees and less than or equal to 90 degrees with the centerline, a gate (16 feet wide at each crossing) shall be installed by the landowner, per Duke Energy's specifications. Duke Energy will supply a lock. The landowner is required to install the Duke Energy lock on the gate to ensure access. The lock can be interlocked with the landowner's lock. Fences and gates that exceed 10 feet in height are prohibited because they create a clearance issue and are an interference. Fences that inhibit Duke Energy's access because they lack a gate that is at least 16 feet wide, interfere with Duke Energy's easement use.
- Grading (cuts or fill) in the easement that is closer than 25 feet to transmission facilities i.e. poles, towers, guys and anchors and/or slopes greater than 4:1 no matter where located or that otherwise change clearances or topography.
- Parking or lighting facilities which affect clearances, access or Duke Energy's ability to make full use of its easement.
- Placement of combustible materials and/or the purposeful burning of anything within the easement are inconsistent with electric facilities, the transmission of power and create safety hazards and system reliability issues.
- Any water feature in the easement, such as a detention and retention pond, stream or lake. Where a structure outside the easement causes erosion or directs storm water toward the easement or the electric facilities or access to or around the electric facilities, such structure will interfere with Duke Energy's use and must be altered to eliminate that effect.
- Incompatible vegetation above ground transmission lines Vegetation within or outside of the transmission easement that will mature to a height or size that will pose a grow-in, fall-in, or blowing-together threat to the transmission conductor (typical maximum mature height greater than 15 feet within the transmission easement depending on location and voltage).
- Incompatible vegetation underground transmission lines Vegetation within or outside of the transmission easement that is capable of posing a threat (e.g., root systems, etc.) to the underground transmission conductor by **a**) causing damage to the underground pipes / cables or **b**) reducing the moisture in the soil, thus altering the thermal properties of the surrounding soil / backfill and thereby negatively impacting the cable ampacity rating (typical maximum mature height within the easement greater than 3 feet depending on location and voltage).
- Incompatible vegetation for safe and reliable operation and access on all transmission lines Vegetation that will limit or block access, limit the safe and reliable operation, emergency restoration, or maintenance of the transmission facilities, limit the full use of the transmission easement for its intended purposes or vegetation which is typically within a horizontal distance of 25 feet of any Duke Energy facilities (towers, poles, guy wires, guy anchors, manholes, dip-poles, substation equipment, etc.).

As discussed, these guidelines are not exhaustive and there may be other interferences on a case-by-case basis depending on individual circumstances. Certain conditions such as line voltage, line criticality, frequency of required access and structure type may require heightened restrictions in the easements to provide safe and reliable service.

If you have additional questions or plan any activity not mentioned above, please contact customer service and ask for your local Transmission Asset Protection Specialist.



Your safety is our priority

We have a goal at Duke Energy – to eliminate injury and death from needless power line contacts. We want to provide you with the information you need to stay safe at work.

Important OSHA minimum approach regulation

The following table is from OSHA 1910.333 and applies to nonqualified persons working in proximity to energized power lines. The minimum approach distance is to be maintained for nonqualified workers. When using equipment classified as a crane or derrick, OSHA 29 CFR 1926.1407-1411 must be followed.

| OSHA - 1910.333 Applies to NonQualified Persons Minimum Approach Distance | | | |
|--|--------------------|--|--|
| Up to 50 kV | 10 Feet | | |
| 50 kV up to 200 kV | 15 Feet | | |
| 200 kV up to 350 | 20 Feet | | |
| 350 to 500 kV | 25 Feet | | |
| 500 kV to 750 kV | 35 Feet | | |
| 350 to 500 kV 500 kV to 750 kV | 25 Feet 35 Feet | | |

Important OSHA crane regulation

Cranes and derricks near transmission power lines – OSHA 29 CFR 1926.1407-1411

This regulation applies to power-operated equipment used in construction that can hoist, lower and horizontally move a suspended load. Such equipment includes, but is not limited to:

If any part of equipment, load line or load could get closer than 20 feet to less than 350 kV power lines or 50 feet for greater than 350 kV power lines, you must speak with a Duke Energy representative before beginning work.

Such equipment includes, but is not limited to:

- Articulating cranes (such as knuckle boom cranes)
- Floating cranes
- Locomotive cranes
- Multipurpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load
- Industrial cranes (such as carry deck cranes)
- Pedestal cranes
- Straddle cranes
- Derricks
- Overhead bridge and gantry cranes NOT permanently installed

- Crawler cranes
- Cranes on barges
- Side boom tractors
- Base-mounted drum hoists only when used with derricks
- Tower cranes
- Portal cranes
- Service/mechanic trucks with a hoisting device
- Dedicated pile drivers
- Mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted and boom truck cranes)
- Variations of these types of equipment





Contact us

For more information, please visit duke-energy.com/safety or call:

Duke Energy Carolinas 800.777.9898 or 800.POWERON

Duke Energy Indiana 800.521.2232

Duke Energy Kentucky or Ohio 800.544.6900

Duke Energy Progress 800.452.2777

Duke Energy Florida 800.700.8744

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Look up and live.

Working around high-voltage transmission lines



Know how to protect yourself, your crew and the public when working around transmission lines.

Duke Energy cares about your safety. This brochure contains important information for:

- Anyone working around power lines
- Grading contractors
- Forklift operators
- Crane operators
- Developers (residential, commercial, industrial)
- Architects and engineers
- Dump truck operators

550 South Tryon Street Charlotte, NC 28202

Know your voltage, know your clearance

Federal law requires that all contractors maintain at least a 10-foot clearance from overhead power lines up to 50 kV. Greater clearance is required for higher-voltage power lines and cranes and derricks in construction.

Contact Duke Energy at least three working days before you start working near overhead power lines and equipment so that safety recommendations can be made.

Treat all transmission lines, regardless of their operating voltage, with caution:

- 44 kV and 100 kV lines look similar.
- Never assume a voltage based on the illustration.
- Minimum clearance includes maximum sag, which must be calculated for each instance.
- Injury or death can occur without touching power lines.
- Assume all overhead power lines are energized.
- Contact Duke Energy if you are in doubt about safe operating distances.

Fact 1.

Power lines that serve your homes and businesses are not insulated like home appliance cords.

Fact 2.

Power lines carry 4,000 to 500,000 volts of electricity that can seriously injure or kill on contact.

Fact 3.

The simplest way to stay safe is to know where your power lines are located and stay away.

A planned project is a safe project

Check the job site for hazards and know the location of all overhead power lines and electric equipment, including poles and guy wires.

Consider all overhead lines as energized. Mark the work site boundaries to keep workers, vehicles, tools and equipment a safe distance from electric lines and equipment.

Hold a pre-work safety meeting, pointing out areas where overhead lines and electric equipment are located.

We can help you:

- Confirm voltage
- Confirm clearance
- Confirm wire height under peak conditions
- Provide safety guidance around power lines
- Review and approve drawings for:
 - Compliance with right-of-way restrictions
 - Compliance to National Electric Safety Code
- Identify the best, safe solution

Emergency situations

If your equipment makes contact with an overhead power line, notify Duke Energy immediately and take these precautions:

- Have someone call 911.
- Do not attempt to turn off engines or generators.
- Move equipment away from the line only if it is safe to do so.
- Remain on equipment until utility workers arrive and de-energize the line.
- Warn others to stay away. Those on the ground can be injured or killed if they make contact with the equipment.
- If you must leave the equipment because of fire or other dangers, jump off with your feet together. Never touch the ground and equipment at the same time. Keeping your feet together, shuffle or hop away until you are clear of the area.











Duke Energy Florida Transmission Line Structures

For more information, visit duke-energy.com/safety.