

Working with Duke Energy

Transmission ROW 101 for Trail Development



ROW 101 for Trails - Overview

- Public Safety & Recreation Planning Strategy Services Responsibilities
- What our Team is Responsible For
- What our Team Provides
- ROW 101 for Trail Development
 - Transmission VS Distribution
 - Easement VS Fee Simple
 - Development within ROW corridors
 - ROW Guidelines
- Duke Energy Foundation Grants
- Top 10 Ways to work with Duke Energy
- Questions

Public Safety & Recreation Planning Strategy Services

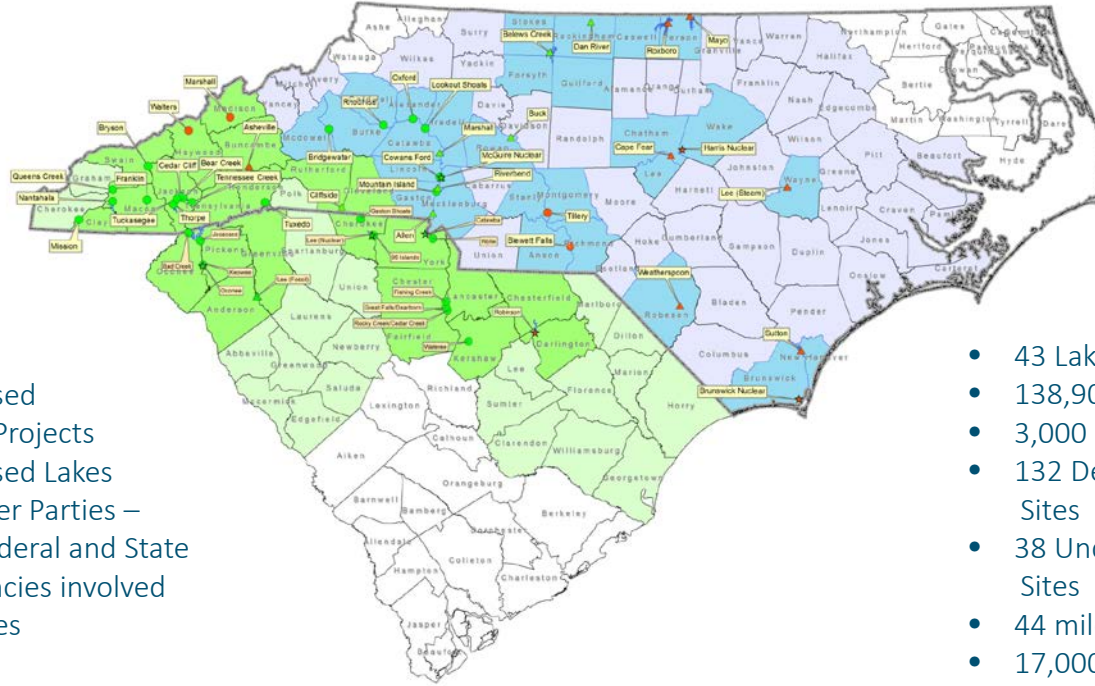


Public Safety & Recreation Strategy Planning Services Lead Responsibilities



Stakeholder Involvement and Interaction

Public Safety & Recreation Planning Strategy Services

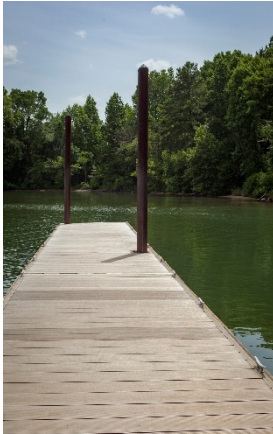


- 16 FERC Licensed Hydroelectric Projects
- 33 FERC Licensed Lakes
- 134 Stakeholder Parties – includes 11 Federal and State Resource Agencies involved with all Licenses
- 43 Lakes
- 138,900 acres of water
- 3,000 miles of shoreline
- 132 Developed Public Recreation Sites
- 38 Undeveloped Public Recreation Sites
- 44 mile Foothills Trail
- 17,000,000 visitors / year

Public Safety & Recreation Planning Strategy Services

- 16 Licensed Hydroelectric Projects regulated by the Federal Energy Regulatory Commission (FERC)
- 33 FERC Licensed Lakes
- Part 8 of Federal Licenses requires Licensees to provide recreation and water access to all members of the public for their use and enjoyment
- Providing recreation opportunities based on use and needs studies, Stakeholder requests, and License requirements is a COMPLIANCE function of Hydroelectric Projects
- 134 Stakeholder Parties – includes 11 Federal and State Resource Agencies involved with all Licenses
- The relicensing process includes all stakeholder parties, is highly regulated and takes many years to come to what is known as 'Relicensing Agreements'
- Our 3 biggest Licenses were issued in the last 3 years and we are now beginning work on all of the recreation components of the compliance agreements
- Catawba-Wateree License alone has 89 Recreation Commitments including anything from land donations, monetary donations, and construction of new parks large and small throughout North and South Carolina

Public Safety & Recreation Planning Strategy Services



- Water Based Recreation
- Recreation Flow Releases on 7 Lakes and Rivers
- Fishing Platforms, Trails, & Docks
- Boat Ramps – Motorized & Non-Motorized
- Trails including dam portage trails
- Beaches
- Camping, RV, tent, and primitive
- Wildlife Viewing
- Picnic Facilities



ROW 101 for Trail Development – Distribution

Distribution lines carry electricity from local substations to homes and businesses that we serve. These electrical conductors can be located underground or overhead on utility poles. A distribution right-of-way agreement gives access to a strip of land (corridor) so that utilities (electric, telephone, cable, water and/or gas) may build, operate and maintain service lines. This right-of-way corridor helps us deliver reliable electricity.



ROW 101 for Trail Development – Distribution

Our distribution rights of way are typically 30 feet wide – or 15 feet on each side of the right-of-way centerline.



ROW 101 for Trail Development – Transmission

Transmission lines are our higher-voltage power lines. Duke Energy Carolinas has transmission lines that carry voltages as high as 525,000 volts. These transmission lines are comparable to the interstates of a road system, carrying electricity across great distances, from power plants to the towns and communities that we serve. Each transmission line serves thousands of customers.



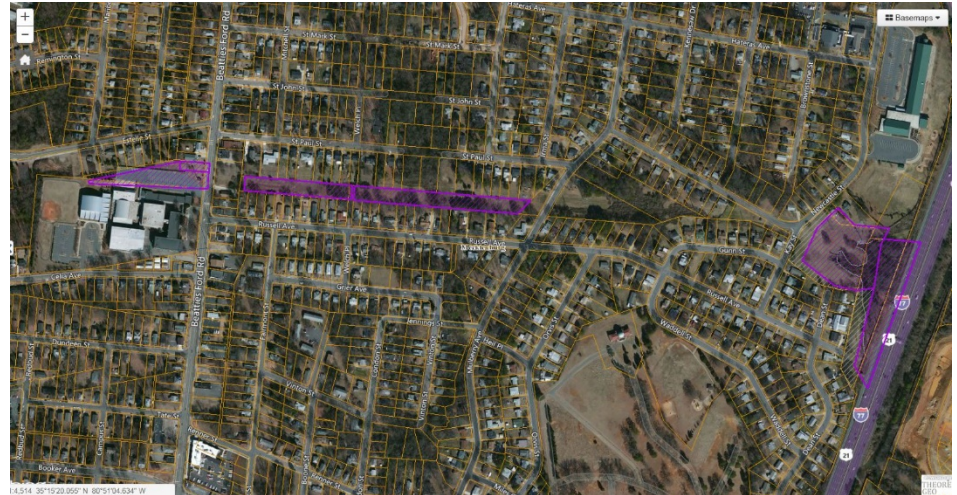
ROW 101 for Trails - Transmission

- 44,000- to 115,000-volt lines typically require a 68- to 100-foot corridor
- 230,000-volt lines typically require a 125- to 150-foot corridor
- 500,000- to 525,000-volt lines typically require a 180- to 200-foot corridor



ROW 101 for Trails – Easements vs Ownership

- Many of Duke's ROW's are easements and not owned by the company. Access to the land is controlled in the deed and may not allow uses beyond those needed for electrical transmission and maintenance.
- If access for the purpose of trails can be secured from the landowner, Duke is typically agreeable to allowing a trail easement for that purpose within our Transmission ROW.
- Most County GIS Database sites will provide you the ownership information of ROW corridors.
- Check ownership before contacting Duke Energy.



ROW 101 for Trails – Development within ROW Corridors - Transmission

- Shared-Use Paths and Trails Guideline Highlights
 - Guidelines available on the Duke Energy website
- Trail may run parallel with the Transmission ROW
- 12' wide maximum regardless of surface material
- 25' separation from electrical facilities (poles, towers, guys, equipment, etc)
- Trail owner is responsible for safety, liability, and maintenance
- Bollards are allowed per Duke standards (80,000 lb design rating)
- Culverts are allowed per Duke standards (80,000 lb design rating)
- No signs, benches, exercise equipment, etc. allowed
- Vegetation must adhere to Duke guidelines



ROW 101 for Trails – Development within ROW Corridors

- Trails will require a Trail Encroachment Agreement
- Duke Energy approval will be required from the Asset Protection group
- Access the ‘contact’ form on the Duke Energy website Right of Way pages to get connected to the specialist for your zone

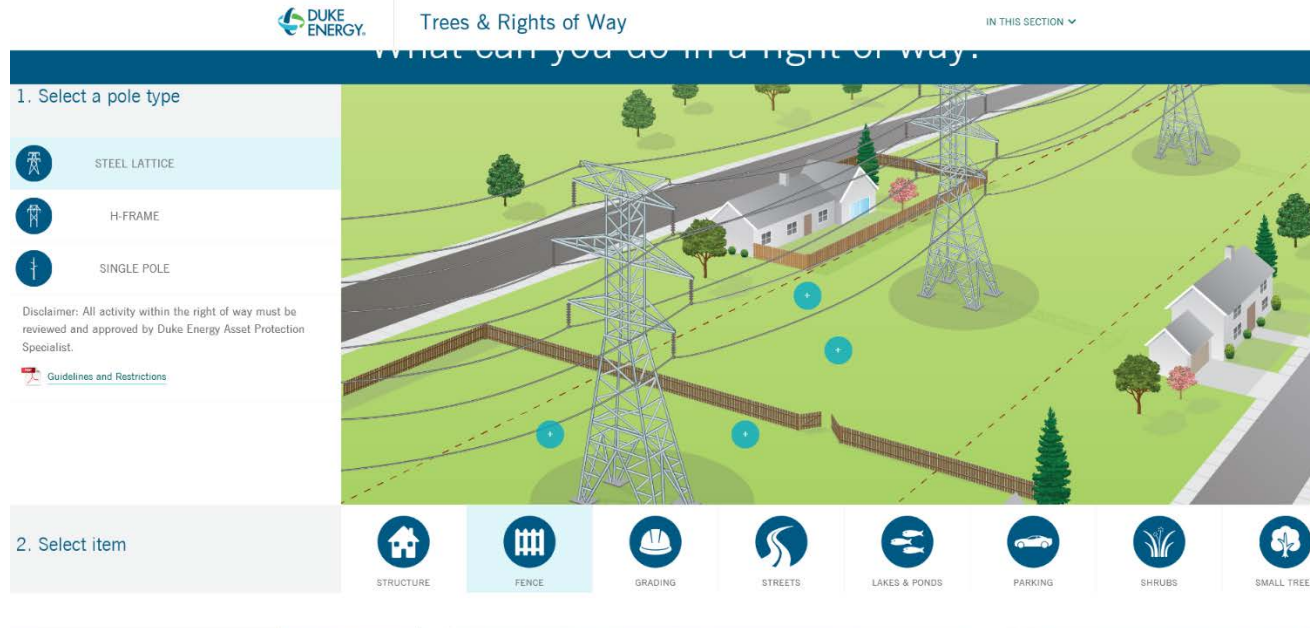
Duke Energy North Carolina and South Carolina
Transmission Asset Protection Zones



Asset Protection Right-of-Way Specialist Zones

ROW 101 for Trails – Development within ROW Corridors

- <https://www.duke-energy.com/community/trees-and-rights-of-way/what-can-you-do-in-right-of-way>



ROW 101 for Trails – Other Development within ROW Corridors

- Fences have a 10' max height and MAY cross the ROW at 30-90 degree angles
- Parallel fencing is not allowed inside the ROW
- 16' wide gates must be installed in fencing that crosses the ROW
- Fences must be 25'+ away from towers or poles
- No structures of any kind are allowed inside the ROW (decks, sheds, hydrants, communication pedestals, stairs, retaining walls, etc.)
- Grading in the ROW must be limited to 4:1 slope or less and filling requires a clearance check by the asset management specialist for the area
- Grading in the ROW must stay 25'+ away from towers and poles
- Roads may only cross at 30-90 degrees and must be 25'+ away from towers and poles

ROW 101 for Trails – Other Development within ROW Corridors

- Parking is allowed but will require bollards that can withstand 80,000#, 15mph when located 10-25' from towers and poles
- Drive aisles must be 25'+ away from towers and poles
- Light fixtures for parking areas must be approved and must adhere to height restrictions of 12' and 15' based on wire zones
- There are two Wire zones based on voltage and the Asset Specialist will provide this information to you- each zone has different restrictions
- Shrubs and grasses must not exceed 7' at maturity, small trees carry a 12' and 15' mature height max based on wire zone
- Use the NC State Extension website for plant selections and mature height basis <https://plants.ces.ncsu.edu/>

ROW 101 for Trails – Other Development within ROW Corridors

- Clearance between planting groups needs to be 20'+
- Planting in the ROW must stay 25'+ away from towers and poles
- Noncompliant vegetation is subject to removal by Duke Energy
- Duke Energy may cut “danger trees” outside of ROW limits
- Lakes, ponds, retention or detention facilities inside the ROW must be approved the Asset Specialist

ROW 101 for Trails – Duke Energy Foundation Grants

Giving Priorities

We focus our investments on these strategic areas where we can make an impact for our communities.



K-12 Education >

These grants support programs that prevent summer reading loss while also advancing energy, engineering and environmental education.

[LEARN MORE](#)



Workforce >

Through these grants, we're investing in workforce education and training programs that prepare future workers to develop innovative solutions for the energy industry's most pressing challenges.

[LEARN MORE](#)



Nature >

These grants support programs that work to protect and restore the wildlife and natural resources that our communities depend on.

[LEARN MORE](#)



State Strategic Impact >

These grants respond to the unique needs of each of the states in which we operate to maximize impact for our communities.

[LEARN MORE](#)



Local Impact >

These are grants under \$10,000 that address one of our designated strategic initiatives and Power for Students.

[LEARN MORE](#)



Community Initiatives >

These local contributions support a variety of programs that boost the health and vitality of the communities we serve.

[LEARN MORE](#)

ROW 101 for Trails – Duke Energy Foundation Grants

Local programs. Big impact.

Our community initiatives target specific programs that generate long-term, large-scale impact.



WATER RESOURCES FUND
(NC, SC & VA ONLY) ▾



VICTORIES FOR VETERANS
(FL ONLY) ▾



CHARLOTTE COMMUNITY
AFFAIRS ▾



SR TECHNICAL COLLEGE
LINEMAN GRANT
PROGRAM (SC ONLY) ▾



COMMUNITY COLLEGE
APPRENTICESHIP
PROGRAM (NC ONLY) ▾

ROW 101 for Trails – Duke Energy Foundation Grants

Duke Energy provides over \$30 million in charitable grants each year

Powerful Communities: K-12 Education

Application open Nov 1-Jan 31; Decisions by March 30

Powerful Communities: Workforce

Application open Feb 1-April 30; Decisions by June 30

Powerful Communities: Nature

Application open May 1-July 30; Decisions by Sept 30

Water quality, quantity, conservation and access, habitat and forest restoration and conservation and species conservation

Powerful Communities: State Strategic Impact

Priorities Announced June 30; Decisions by Nov 30

Powerful Communities: Local Impact \$10,000 or less

Application open all year

ROW 101 for Trails – Duke Energy Foundation Grants

Water Resources Fund Information

- Managed by the North Carolina Community Foundation
<https://www.nccommunityfoundation.org/apply/grants/corporate-grantmaking-programs/duke-energy-water-resources-fund/duke-energy-water-resource-fund-program-requirements>
- Set up to provide \$10 million in grants benefitting waterways in the Carolinas
- The funding cycle that opened on October 1, 2018 will fulfill Duke Energy's original \$10 million commitment
- Expansion of the fund beyond the \$10 million has not been determined

ROW 101 for Trails – Duke Energy Foundation Grants

- <https://www.duke-energy.com/community/duke-energy-foundation>
- The Foundation receives grant requests for funding cycles specific to each investment priority, reviewing at the regional level and targeting investments where the greatest impacts can be achieved
- To receive funding you must have a tax-exempt status as a public charity under Section 501c(3) and will need to submit an IRS letter of determination
- Must serve communities served by Duke Energy
- Must serve without discrimination against any individual on the basis of race, creed, gender, gender identity, age, sexual orientation or national origin
- Must have a method by which to measure, track and report one or more program outcomes and specific results that demonstrate measurable community impact

ROW 101 for Trails – Duke Energy Foundation Grants

Foundation grant support is not available for:

- Churches or evangelical organizations
- Organizations with a substantial purpose of influencing any political, legislative or regulatory cause
- Fraternal, veteran or labor membership organizations serving only the members of that organization
- Organizations offering or providing either Duke Energy Corporation, the Duke Energy Foundation, or their respective officers or employees any benefit from the grant

ROW 101 for Trails – Duke Energy Foundation Grants

The Foundation does not fund grants for programs and projects associated with, but not limited to, the following:

- Individual K-12 schools or organizations that operate within an individual school. We will consider school grants at the district level.
- Sports teams or events, with the exception of Power for Students.
- Religious programs, projects or activities
- Direct cost reduction for electric or natural gas service provided by Duke Energy
- External fundraising campaigns or events
- General operating expenses
- Capital investments and improvements
- Endowments or other foundations

Email: communityaffairs@duke-energy.com

Top 10 ways to work with Duke Energy

1. Understand the difference between ROW easement properties vs fee simple ROW properties and transmission vs distribution ROW
 - Many of DE's ROWs are easements and not owned by the company. Access to the land is controlled in the deed and may not allow uses beyond those needed for electrical transmission and maintenance. If access for a trail can be secured from the landowner, DE is typically amenable to allowing a trail easement within our Transmission ROW.
2. Do your research ahead of time
 - Read up on what is and is not allowed in the ROW easements through documents provided by the utility typically available online, check land ownership, and connectivity.
3. Come with a defined plan and goal in mind as well as a proposed solution (natural surface trail, concrete sidewalk, asphalt, width, etc.)
 - The more specific your plans are the easier it is for a utility company to provide constructive feedback and assistance.
4. Contact the right person for the request
 - Sometimes contacting the wrong person can lead you to a dead end. Look for folks in community relations, district management and recreation planning groups to start your search unless you already know someone. For ROW requests, make contact through the Duke Energy website. Having a trail advocate will go a long way towards getting other needed approvals within the company.

Top 10 ways to work with Duke Energy

5. Contact the right person for the request

- Sometimes contacting the wrong person can lead you to a dead end. Look for folks in community relations, district management and recreation planning groups to start your search unless you already know someone. For ROW requests, make contact through the Duke Energy website. Having a trail advocate will go a long way towards getting other needed approvals within the company.

6. Be open minded and understand the core business obligation of the utility company is to provide safe and reliable electricity

7. Internal departments are unable to provide funding for trails unless it is a required project per our Licenses- apply for grants through the Duke Energy Foundation website, research other grant sources, and reach out to other community partners

8. Know that most utilities employees want to help out and be good stewards to the communities they serve

Top 10 ways to work with Duke Energy

9. Understand that many departments may be involved and your request may take time
 - Asset protection departments, dam safety, water safety, lake management, real estate management, legal, etc.
10. Stay out of the Federal Energy Regulatory Commission (FERC) boundary. This boundary typically sits at the full-pond contour elevation of lakes and rivers which are associated with hydropower projects and such lands are highly regulated and permitting can be complicated, lengthy, and in some cases not even permissible

Involve the utility as early as possible in the planning stages, especially if trail corridor is crossing utility owned property or ROW easements

Resources

- <https://www.duke-energy.com/community>
- <https://www.duke-energy.com/community/duke-energy-foundation>
- Grant Info Email: communityaffairs@duke-energy.com
- <https://www.duke-energy.com/community/trees-and-rights-of-way/>
- <https://www.duke-energy.com/community/trees-and-rights-of-way/contact>
- <https://www.duke-energy.com/community/lakes>
- <https://www.duke-energy.com/customer-service>
- <https://plants.ces.ncsu.edu/>

Questions

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*BUILDING A **SMARTER** ENERGY FUTURESM*