

DUKE ENERGY CAROLINAS, LLC
TECHNICAL CONFERENCE
MYRP PROJECTS - TRANSMISSION

Line No.	MYRP Project Name	Forecasted In-Service Date	Project Description & Scope	Reason for the Project	Total Project Amount (System)			
					Projected In-Service Costs	Projected Annual Net O&M	Projected Installation	Projected O&M
1	Breakers	Oct-23 - Dec-26	The Breaker Replacement project involves replacing degraded transmission circuit breakers, including oil circuit breakers ("OCBs"), typically in conjunction with upgrading the associated protection and control relays.	The new fault interrupting and communication/control capabilities of this modern technology better positions the transmission and distribution systems to effectively respond to electric grid events. These highly reliable gas and vacuum breakers are also better suited for protecting circuits with higher solar and other variable energy resource penetration.	\$ 328,000,327	\$ -	\$ -	\$ -
2	Capacity & Customer Planning	Sep-23 - Dec-26	The DEC Transmission System is required to meet NERC Standards and reliably serve customers. NERC and local standards set requirements for transmission system power flows, voltages, stability, and breaker capability to maintain a safe and reliable transmission grid and avoid widespread grid blackouts, as occurred several times in prior decades.	As demand on the transmission system grows and changes over time, new transmission projects are needed to keep the grid reliable for customers and in compliance with NERC Standards. DEC is also required to connect new transmission delivery points for retail and wholesale customers.	\$ 539,503,867	\$ 120,000	\$ -	\$ -
3	Substation H&R	Oct-23 - Dec-26	The Transmission Substation H&R work includes substation flood mitigation, animal mitigation, physical security, and 3 phase regulators along with ancillary substation equipment upgrades.	The Transmission Substation Hardening & Resiliency (H&R) works to create a stronger and more resilient transmission grid capable of withstanding or quickly recovering from extreme external events, natural or man-made.	\$ 165,929,717	\$ -	\$ -	\$ -
4	System Intelligence	Oct-23 - Dec-26	The Transmission System Intelligence work includes system intelligence and monitoring, electromechanical to digital relays, remote substation monitoring, and remote control switches.	This System Intelligence project is critical to provide grid operators and engineers with enhanced information to respond to changing conditions that threaten reliability. Remote asset monitoring allows proactive decisions to be made when equipment health is threatened, and remote operated switches play a vital part in sectionalizing transmission lines to limit the customer impact of faults from external causes and equipment failures.	\$ 131,163,643	\$ -	\$ -	\$ -
5	T Line H&R	Dec-23 - Dec-26	The Transmission Line H&R work includes cathodic protection, targeted line strengthening for extreme weather, and animal mitigation.	The Transmission Line Hardening & Resiliency (H&R) project works to create a stronger and more resilient transmission grid capable of withstanding or quickly recovering from extreme external events, natural or man-made.	\$ 308,743,580	\$ -	\$ -	\$ 1,650,000
6	Transformers	Jan-24 - Nov-26	The Transformer Bank Replacement project involves replacing degraded transmission transformers, typically in conjunction with upgrading the associated protection and control relays.	Catastrophic failures often result in significant oil spills, requiring expensive cleanup and other mitigation. Proactive replacement also reduces contingent material inventory needed, since replacements have a 12-24-month manufacturing lead time.	\$ 226,937,581	\$ -	\$ -	\$ -
7	Vegetation Management	Jan-24 - Dec-26	Duke Energy Carolinas' (DEC) Transmission Integrated Vegetation Management (IVM) program is focused on ensuring the safe and reliable operation of the transmission system by minimizing vegetation-related interruptions and maintaining adequate conductor-to-vegetation clearances, while maintaining compliance with regulatory, environmental, and safety requirements and standards.	The Transmission vegetation management program works to create a hardened transmission grid capable of withstanding extreme weather events, and reduce the frequency of outages impacting customers.	\$ 57,002,153	\$ -	\$ -	\$ -
TOTALS					\$ 1,757,280,868	\$ 120,000	\$ -	\$ 1,650,000

OFFICIAL COPY

Oct 19 2022