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Ferc Function	Funding project	Funding Project Description	Sum of Activity Cost	Explanation
Distribution Plant - Electric	AMI001	AMI	$ 9,095,988	As part of its comprehensive grid modernization efforts, Liberty Utilities is incorporating a major upgrade of its metering network to an Advanced Metering Infrastructure (AMI), which will enable two-way communication between customer meters and Liberty Utilities. AMI is an essential LU-wide strategic initiative for its 780,000 electric, water and gas customers. The focus of this specific 24 month, -$48M project is on bringing AMI to LU Central Region's 168,000 electric customers; as such, it represents a major AMI deployment for LU and an important early phase of the overall LU AMI Program.
Distribution Plant - Electric	DB0001	Extensions	17,388,526	Budget line item reserved for various small scale projects in which extensions to customers and additional new customer connections as needed. Work scopes dependent in extension policy, customer needs, and design requirements to meet new service request(s). Majority work of Construction Design department is encompassed within this budget line item.
Distribution Plant - Electric	DB0005	Distribution Transformers	1,866,129	Budget line item reserved for various small scale projects in which distribution transformers are replaced and additional new distribution transformers are purchased as needed. Work scopes dependent on policy, customer needs, failure rates throughout the budgeted year, and design requirements to meet service request(s).
Distribution Plant - Electric	DB0006	Customer's Meters	1,334,566	Budget line item reserved for various small scale projects in which customer meters need ordered or replaced. Work scopes dependent on policy, customer needs, and design requirements to meet service request(s). This line item is entirely separate from ongoing AMI efforts.
Distribution Plant - Electric	DB0007	Customer's Services	4,152,279	Budget line item reserved for various small scale projects in which customer services require replacement or installation. The work scope is depend on policy, customer needs, and design requirements to meet service request(s). This line item is entirely separate from ongoing AMI efforts.
Distribution Plant - Electric	DB0010	Misc Dist of OH Lines	4,042,837	Install/remove or replace overhead assets across system as needed. This budget line item reserved for various scale projects in which overhead distribution services to customers are maintained. Work scopes dependent on policy, customer needs, and design requirements to meet service request(s).
Distribution Plant - Electric	DB0011	Misc Dist of UG Lines	1,047,093	Install/remove or replace underground assets across system as needed. Budget line item reserved for various scale projects in which underground distribution services to customers and additional new customer connections are maintained or initiated. Work scopes dependent on policy, customer needs, and design requirements to meet service request(s).
Distribution Plant - Electric	DR0001	Relocate T&D for Hwy Changes	2,359,859	Trended budget item required for city and state road moves. In some years, if there are scoped/known projects, dollars may be budgeted in addition to the trend. Budget line item is reserved for work throughout year relating to roadway projects which require the replacement of Liberty Transmission and Distribution facilities. Projects vary in size and scope throughout year as the Liberty Utilities is typically contacted shortly before a highway project starts and as a result, the Company must adapt to changing timelines and scopes of work in the relocation of electric facilities.

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Distribution Plant - Electric	DR0002	Replace Bad Order Distr Poles	22,101,937	This budget line is designated for the distribution pole inspection and remediation program and regularly reports the findings and replacements to the various PUCs that regulate the company. This capital project is for engineering, procuring and constructing the poles that are determined to be fixable or replaceable through inspection. System reliability and public safety are improved by the identification and replacement of reject poles prior to structural failure.
Distribution Plant - Electric	DR0008	Distr. Reliability Improvement	2,359,147	This budget line is designated for use for reliability improvement on worst-performing distribution circuits. Work includes fusing of lateral taps, coordination and re-fusing of existing fuse locations, coordination and placement of single and three-phase reclosers.
Distribution Plant - Electric	DR0009	Misc Rebuilds/Add to Dist Subs	7,832,608	Trended budget item. Project need for various rebuilds and additions to distribution substation facilities as needed. This budget item is used to replace failed distribution equipment in the substation that occurs during the year. Work scopes dependent on design requirements to meet service request(s).
Distribution Plant - Electric	DR0010	Misc Rebuilds/Add - Dist Lines	1,431,315	Trended budget item. Provide mitigated solutions on our aging infrastrucutre as required throughout the construction year. This budget item is used to rebuild distribution structures and poles identified throughout the year due to failures, discovered potential failures, or other required line moves.
Distribution Plant - Electric	DR0176	Replace SWG at Northpark Mall	1,517,575	Replace dated metering and switchgear at (3) locations at NorthPark Mall due to obsolete equipment and equipment failures.
Distribution Plant - Electric	DR0190	Repl Wood Struct Humansville #308	4,884,000	Replace the aged wood equipment and prepare for future 69kv voltage conversion. Complete overhaul of the substation will become necessary including (2) 4kv breakers, (2) 34.5kv breakers that can be changed to 69kv and a 34.5/69/4 kv transformer.
Distribution Plant - Electric	DR0209	Rebuild/Increase Cap-Branson	4,153,477	Rebuild conductor and increase switching capability in the Branson Area Distribution System.
Distribution Plant - Electric	DR0212	REBUILD/INC CAPACITY-BAXTER	1,605,719	Rebuild conductor and increase switching capability in the Baxter Springs Area Distribution System.
Distribution Plant - Electric	DR0214	Rebuild/Increase Cap-Joplin	2,459,309	Rebuild conductor and increase switching capability in the Kodiak Area Distribution System.
Distribution Plant - Electric	DR0216	Rebuild/Increase Cap-Neosho	1,089,052	Rebuild conductor and increase switching capability in the Neosho Area Distribution System.
Distribution Plant - Electric	DR0217	R&I Capacity Ozark Area DS	1,871,995	Rebuild conductor and increase switching capability in the Ozark Area Distribution System.

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Ferc Function	Funding project	Funding Project Description	Sum of Activity Cost	Explanation
Distribution Plant - Electric	DS0130	Service Center Improv/Addition	11,783,919	This budget line item contains service center improvements and additions across the system. The budget includes an annual amount designated for each area for miscellaneous capital improvements in addition, but not limited to, the following: New service center in Aurora, fencing in Republic and remodel of downtown office in Ozark. The project in Aurora, MO includes a service center to house electric and water functions. This building will serve as base of Operations for the Area-211 line crews and substation crews, water operations, and support staff with offices for construction design, management, and Business and Community Development personnel. Customers will benefit from this project by providing a more efficient layout, increased and improved storage facilities and improved staging areas; this will prove a quicker response from internal crews during storms and outages reducing the outage durations during these times. In addition, the customer service experience will be improved by providing the ability for bill pay for customers in their hometown. The improved traffic flow and reduced backing requirements will reduce the risk of accidents and potential impacts to overall safety metrics that could reduce costs to customers and company. The addition of a storm shelter provide much needed refuge from tornadoes for employees and any community members in/around the facility at times of danger.
Distribution Plant - Electric	TA0927	Install Distribution SCADA	1,015,639	This is an Operation Toughen-Up project. SCADA provides enhanced operational efficiency and the ability to remotely interogate substation real-time status information and control when needed. This information provides operational awareness which improves proactive decisions making and can help reduce SAIDI and SAIFI indices. The objective for this project is to promote reliability/performance and communications for substations. The installation of the RTAC will improve communications and securities due to the built-in logic processor that serves as the system controller and SCADA gateway to collect data and monitor system equipment.
Distribution Plant - Electric	TA0928	Install 161kV Breakers at 421	1,556,595	This is an Operation Toughen-Up Project that will enhance the sectionalization of the 84-0 transmission line, which will improve system reliability and interruption risk. The project consists of installing (3) 161kV Breakers and replace (2) 12kV Breakers at Sub #421 Purcell due to aging assets, excessive maintenance needs, and requirements for system upgrade to better support customers served by this substation.
Distribution Plant - Electric	TA0942	Install 161kV Subst & Retire #291	16,657,109	Build new substation west of Baxter Springs, KS as part of Operation Toughen-Up project. The project includes rebuild of #291 and relocation #291 under our existing 161kV transmission line. The project will improve the substation's resiliency and eliminate the present radially configured source reducing SAIDI in the area while also adding capacity for future growth. The new distrbution to be constructed to integrate the substation with existing infrastructure. These efforts will increase resiliency of the distribution system emanating from the newly constructed substation site increasing system reliability for customers in the Baxter Springs area. The construction for the substation to include (1) 22.4 MVA power transformer 161/12.47kV with LTC,) oil containment pit/pad, (4) 12.47 kV distribution breakers, (4) distribution feeders, (1) control enclosure, 5 acres fenced, (2) 161kv A-frame deadends, (1) D2 distribution structure.

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Ferc Function	Funding project	Funding Project Description	Sum of Activity Cost	Explanation
Distribution Plant - Electric	TR0901	Rebuild 69kV #186 to #388	13,174,920	Project to convert 34.5kV to 69kV at mulitple substations, to inlclude Sub #271, Sub #299, Sub #388, and Sub #186. The project to also includes the build of 69kV ring bus, (4) 69kV breakers, relay enclosure on new property purchased for new Sub #492 which will retire Sub #271. The voltage conversion provides multiple benefits: improved reliability, standardized spare substation equipment, greater power availability, and detiorated assets. The substation and line modifications will allow for improved reliability, communications, and potential for customer growth in the area.
Transmission Plant - Electric	DR0009	Misc Rebuilds/Add to Dist Subs	1,088,527	Trended budget item. Project need for various rebuilds and additions to distribution substation facilities as needed.
Transmission Plant - Electric	DR0196	Repl Bus, Switch, Breaker #312	1,244,000	Replace the 12kv transfer bus, switches and (3) 12kv breakers at Powersite #312 in due to ongoing maintenance issues and improve system reliability.
Transmission Plant - Electric	TA0243	Install DFR per PRC-002 #368	1,192,844	Install Digital Fault Recorder at Sub #368 per PRC-002.
Transmission Plant - Electric	TA0255	BD Health Substn & 69kV insulations	3,029,598	A new substation is to be constructed approximately three miles north of Humansville, MO. This is in response to a proposed customer request for 13MW load. It will be necessary to procure a two to three acre site for this substation. The substation should consisted of a one-bay 69kV transmission box structure and only a single 69kV breaker to be included for transformer protection of a new 22.4MVA 69/12.47kV power transformer. A D-2 distribution structure shall be constructed and contain three 12.47kV breakers, one of which will feed a 12.47kV circuit. A new control enclosure will be required for this project to house the associated relays, controls, and 125VDC battery array as well as allow space for future panel expansion. The construction of this new substation must be coupled wiht the conversion of approximately 14.5 miles of 34.5kV transmission line for Fairplay East Sub #217 to Collins South #318 through Humansville West Sub #308. All three substations will require changes/upgrades to accomodate this line conversion. The 34.5kV transmission line from Stockton Northwest Sub #324 to Caplinger Sub #304 will be energized at 12.47kV. Approximately 0.75 miles of distribution line build will be required from Stocton AEC Tie Sub #418 to the existing transmission line connecting substations #324 and #304. This will effectively retire Stockton Northwest Sub #324. Caplinger Sub #304 will then require a new single-phase transformer..
Transmission Plant - Electric	TA0923	Inst 2-69kV Brkrs #447 & #258	11,730,732	This project consists of expanding the substation footprint to allow the installation of a new two-bay 69kV standard box structure with (4) 69kV circuit breakers, and (5) 69kV PTs. In addition the expansion includes installing a new pre-fabricated control enclosure, relay protection panels, a communications panel, and replacement of AC/DC panels. These upgrades will provide the capability for customer growth and provide adequate protection by reducing transmission line exposure by minimizing momentary and permanent outages which will improve system reliability.
Transmission Plant - Electric	TA0928	Install 161kV Breakers at 421	1,788,181	Install (3) 161kV breakers and replace (2) 12kV breakers at Purcell Sub #421 due to aging assets and ongoing maintenance issues.
Transmission Plant - Electric	TA0941	Install Monett Switch Automation	4,324,132	Operation Toughen-Up project that will improve system reliability for our largest wholesale customer. This project will isolate and restore 69kV transmission service for the City of Monett. Install (3) 1-way 69kv transmission switches, Install (2) 3-way 69kv transmission switches, I/R 69kV transmission structures in an effort to better sectionalize Sub #376 to #311.

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Ferc Function	Funding project	Funding Project Description	Sum of Activity Cost	Explanation
Transmission Plant - Electric	TR0001	Replace BO Trans Poles	4,737,173	Routine annual reliability inspection to replace or restore structurally inadequate poles identified.
Transmission Plant - Electric	TR0009	Misc Rebuilds/Add - Trans Subs	4,375,814	Trended budget item. This budget item is used to replace failed transmission equipment in the substation that occur during the year.
Transmission Plant - Electric	TR0010	Misc Rebuilds/Add-Trans Line	1,888,694	Trended budget item. Rebuild transmission structures and poles identified throughout the year due to failures, discovered potential failures, or other required line moves.
Transmission Plant - Electric	TR0113	MDAR Relay Repl Program	1,969,415	Relay panels with MDAR and REL relaying, mostly installed around 20 years ago have begun to show a notably higher-than-normal rate of failur. A relay replacement program for these devices was requested by Substation Maintenance and Operations. This plan will eventually replace each existing relay panel with an LU standard SEL-421/311L panel.
Transmission Plant - Electric	TR0134	Rebld/Recnd 69kV Riverton to Joplin	3,069,623	This transmission line was built in 1928 and now equipment is nearing 100 years old and is difficult to repair. The present conductor is sagged beyond it's useful life and has experienced clearance issues that have been addressed individuall over the years.
Transmission Plant - Electric	TR0152	String OPGW 161kV Noel to Decatur	12,989,217	Install OPGW on Existing 161kV line from Noel #435 to Decatur South #392 to Flint Creek to improve communications for area and system reliability.
Transmission Plant - Electric	TR0154	OPGW on 161kV Neosho to Noel	13,261,718	This project is a portion of Operation Toughen-Up. This project will replace all aged wood structures to adhere to 2018 NESC Grade B construction. There is currently no communications to the areas south of the Neosho area which inhibits the ability to properly clear transmission line faults, obtain loading data, and System Operations' SCADA during system events. This capital expenditure will mitigate these issues.
Transmission Plant - Electric	TR0910	Rebuild 69kV Boston to Greenfield	15,013,209	This is a multiphase project to rebuild 69kV transmission line at 33-0 from Sub #614 to Sub #400, Boston Sub #249 to Golden City Sub #251, Golden City Sub #251 to Boston Sub #400 and install automated switch at Boston Sub #400. The 33-0 line has to be upgraded to meet NESC Grade B construction and mitigate integrity of line and structures due to average age of line being around 70+ years.
Grand Total			**$ 218,484,473**	