Capital Improvement Program

FY 2016/17 – 2021/22

Lincoln Electric System

CITY OF LINCOLN NEBRASKA

Lincoln Electric System

0679 G:LES Operations Center

Description:

Continue construction of a second LES operations facility (LOC) at 98th & Rokeby Rd. Upon completion, allocate a portion of existing staff from the Walter A. Canney (WAC) Service Center at 27th & Fairfield to the LOC, and reallocate downtown administrative activities to the LOC and WAC. Identify the placement of a location that will accept customer bill payments. This will provide LES with opportunities to better meet the needs of LES customers by providing an increased level of service reliability, mitigate the risk of having all materials and equipment at one location, and prepare for city growth.

Prior appropriations include actual monies spent in 2015 plus the approved 2016 calendar year budgeted amount.

Also included in appropriations is actual monies spent on the purchase of the property. This was originally 0614 – G: Land – Service Center in 2012/2013 CIP

Group:	(None)
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total: $72,078 Prior Appropriations: $18,478

Project Total:$72,078.00 Prior Appropriations $18,478.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$44,282.00	$9,318.00	$0.00	$0.00	$0.00	$0.00	$53,600.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Furnishings	X	X				
Land Acquisition						
Other	X	X				

0792 G:Communications

Description:

Various communication projects that are required to enhance customer service and system reliability. These include, but are not limited to, fiber, radio, and other types of communications equipment.

Group:	(None)
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,513.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$439.00	$406.00	$668.00	$0.00	$0.00	$0.00	$1,513.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X			
Other	X	X	X			

0794 G:Meters

Description:

This project anticipates the purchases of utility revenue meters for Overhead and Underground service and all classes of LES customers (residential, commercial & industrial).

Group:	(None)
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,747.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$284.00	$296.00	$300.00	$304.00	$287.00	$276.00	$1,747.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0795 G:MMR Project

Description:

LES will be transitioning to AMR meters. This will provide for drive-by meter reading.

Funding in 2017/18 are estimated projections as a continuation of the MMR project (phase 2). This phase would be to incorporate enhanced automation targeting the large commercial/industrial customer services.
Exchanging current industrial metering having limited capabilities with technology that will allow for near real-time meter interval data collection and hosted meter data management.

Note: This project was previously shown as part of "Overhead Transformers & Meters" in the 2012/2013 CIP. It was then shown as item 696, O:AMR Meter Conversion in the 2014/2015 CIP.

Group:	(None)
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	A
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$4,700.00 Prior Appropriations $3,377.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$650.00	$673.00	$0.00	$0.00	$0.00	$0.00	$1,323.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0117 T:Misc. Construction/Rebuild

Description:

Smaller, miscellaneous 115,000 volt and 345,000 volt transmission construction and rebuild projects that are of a repetitive nature and occur annually. These projects can be related to new construction, upgrades or rebuilds.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$473.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$73.00	$75.00	$78.00	$80.00	$82.00	$85.00	$473.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0213 T:Relocations

Description:

Relocation of existing 115,000 volt and 345,000 volt transmission lines for road projects, as required.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$459.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$71.00	$73.00	$75.00	$78.00	$80.00	$82.00	$459.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0214 T:Right-of-Way/Easements

Description:

This item provides for purchasing right-of-way (ROW) and easements for transmission lines. Construction damages are also included in these estimates.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,328.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$2,496.00	$156.00	$156.00	$0.00	$260.00	$260.00	$3,328.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Land Acquisition	X	X	X		X	X
Other	X	X	X		X	X

0639 T:70th&Bluff - 190th&LittleSaltRd Upgrade

Description:

Upgrade about 12 miles of 161kV line from the 70th & Bluff Substation to 190th & Little Salt Road. This is a major upgrade that will replace aging infrastructure along existing corridor.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2022
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$5,805.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$0.00	$0.00	$2,852.00	$2,953.00	$5,805.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction					X	X
Other					X	X

0684 T:91st & Hwy 2 - 40th & Bennet Rd 115kV Line

Description:

Install approximately 7.75 miles of 115kV transmission line from the existing 91st & Highway 2 Substation to a proposed distribution substation near 76th & Rokeby Road and then on to a new switching substation near 40th & Bennet Rd. This project is a combination of Project 0684 and 0686 from the 2014 CIP.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$6,675.00 Prior Appropriations $476.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$1,473.00	$4,726.00	$0.00	$0.00	$0.00	$0.00	$6,199.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0789 T:103rd & Rokeby - 75th & Bennet 345kV Line

Description:

Construct a 345kV line from 103rd & Rokeby substation to approximately 75th & Bennet in conjunction with the construction of the 91st & Hwy 2 - 40th & Bennet Rd 115kV Line. The lines will be constructed on the same towers, reducing the footprint of transmission lines in the area and enabling the retirement of a section of 345kV line nearby that is due to be rebuilt in about 2026.

Group:	Transmission
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	New
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,318.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$1,630.00	$1,688.00	$0.00	$0.00	$0.00	$0.00	$3,318.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0237 S:Misc Ongoing Construction

Description:

Various construction, rebuild and communication projects that are required to enhance customer service and reliability. This could include transformer replacement or terminal modifications at existing substations.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,422.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$154.00	$416.00	$392.00	$168.00	$144.00	$148.00	$1,422.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0238 S:Substation Sites

Description:

Purchase land for substation sites as required for supporting continued growth. In this CIP, new sites are needed for substations near these proposed locations:
- SW 56th & K
- 128th & O
- "Wind Project Interconnection"

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$775.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$120.00	$123.00	$127.00	$131.00	$135.00	$139.00	$775.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Land Acquisition	X	X	X	X	X	X
Other	X	X	X	X	X	X

0638 S:17th & Holdrege Transformer #2

Description:

Add a 115-12kV, 36 MVA transformer and associated switchgear at the existing 17th & Holdrege Substation. This capacity addition will support growth at University of Nebraska (City Campus), research corridor, and the Nebraska Innovation Campus.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2023
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$2,636.00 Prior Appropriations $0.00 Costs Beyond: $1,498.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$0.00	$0.00	$0.00	$1,138.00	$1,138.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction						X
Other						X

0682 S:91st & A Replace Transformer

Description:

This project will replace the existing 115-12kV, 28 MVA transformer (T721) with a new 36 MVA transformer and 12kV switchgear. Transformer T721 was manufactured in 1969, will be 50 years old in 2019 and is one of the oldest 115-12kV transformers in the system. This project acknowledges the need to start replacing older 115-12kV transformers based on the Substation Transformer Replacement Study. It will also provide additional capacity at the 91st & A Substation.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2019
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$2,519.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$2,377.00	$142.00	$0.00	$0.00	$0.00	$2,519.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction		X	X			
Other		X	X			

0683 S:76th & Rokeby Substation

Description:

Build a 115-12kV substation near 76th & Rokeby including a 115-12kV, 36 MVA transformer and associated switchgear. This capacity addition will support the continuing growth in southeast Lincoln.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,989.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,140.00	$849.00	$0.00	$0.00	$0.00	$0.00	$3,989.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0688 S:120th & Alvo Substation

Description:

Build a new 115-12kV substation near 120th & Alvo including a 115-12kV, 36 MVA transformer and associated switchgear. This substation will absorb all load currently served from the 35kV substation located at 108th & Alvo and provide additional capacity to support future growth in northeast Lincoln.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,795.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,027.00	$768.00	$0.00	$0.00	$0.00	$0.00	$3,795.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0689 S:29th & Leighton Substation, Add 115-35kV Trfr

Description:

Add a 115-35kV, 56 MVA transformer at the 29th & Leighton Substation. The 115-35kV transformer will absorb load currently served from 115-35kV, 56 MVA transformer (T304) at 2nd & N which was installed in 1964, will be 52 years old in 2016 and has high core and winding losses. A terminal for the transformer will be created by converting the substation to a ring-bus configuration.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	05/31/2017
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$4,712.00 Prior Appropriations $4,249.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$463.00	$0.00	$0.00	$0.00	$0.00	$0.00	$463.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X					
Other	X					

0690 S:Wind Project Interconnection

Description:

This project is initiated by the Southwest Power Pool (SPP) generation interconnection process and LES will be reimbursed for all associated project costs. The project adds a 3 terminal 115kV ring-bus switching substation near SW 42nd & West Pella Road connected to L1197. The estimate assumes a location immediately adjacent to the existing transmission line.

The project will happen only if the developer decides to construct the wind farm.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2017
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,493.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,493.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,493.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X					
Other	X					

0691 S:91st & Hwy 2 Substation Upgrade

Description:

Install equipment to convert the substation to a ring-bus configuration. This will accommodate an additional line terminal to connect a 115kV line to the planned 76th & Rokeby substation.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2018
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,219.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$59.00	$1,160.00	$0.00	$0.00	$0.00	$0.00	$1,219.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X				
Other	X	X				

0692 S:40th & Bennet Substation

Description:

This project adds a 3 terminal 115kV ring-bus switching substation near 40th & Bennet connected to 115kV lines to SW 7th & Bennet, 40th & Rokeby and 76th & Rokeby substations. The substation will be configured to accommodate the addition of a 115-12kV transformer and associated switchgear in the future.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2019
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$2,495.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$1,907.00	$588.00	$0.00	$0.00	$0.00	$2,495.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction		X	X			
Other		X	X			

0693 S:20th & Pioneers Substation Replace Transformer

Description:

This project will replace the existing 115-12kV, 28 MVA transformer (T381) with a new 36 MVA transformer and 12kV switchgear. Transformer T381 was manufactured in 1970 and will be 52 years old in 2022. This project acknowledges the need to start replacing older 115-12kV transformers based on the Substation Transformer Replacement Study. It will also provide additional capacity at the 20th & Pioneers Substation.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2021
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$2,682.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$0.00	$2,541.00	$141.00	$0.00	$2,682.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction				X	X	
Other				X	X	

0694 S:West Lincoln Substation Rebuild

Description:

Upgrade the 115kV West Lincoln substation which was constructed in approximately 1937. The project will enhance system reliability by reconfiguring the 115kV bus and replacing obsolete equipment. The project also includes retiring 115-35kV transformers T082 (41.6 MVA), T083 (50 MVA) and associated 35 kV bus work removed from service in 2017.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2020
Rating:	B
Status:	Continued
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$4,739.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$2,328.00	$2,411.00	$0.00	$0.00	$4,739.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction			X	X		
Other			X	X		

0790 S:57th & Garland Replace Transformer

Description:

This project will replace the existing 115-12kV, 28 MVA transformer (T621) with a new 36 MVA transformer and 12kV switchgear. This project acknowledges the need to start replacing older 115-12kV transformers based on the Substation Transformer Replacement Study.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2023
Rating:	B
Status:	New
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$2,860.00 Prior Appropriations $0.00 Costs Beyond: $302.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$0.00	$0.00	$0.00	$2,558.00	$2,558.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction						X
Other						X

0842 S:NW56th & Morton Substation

Description:

Add a 115-12kV, 36 MVA transformer and associated switchgear in a new substation at NW 56th & Morton. This substation will support future growth in northwest Lincoln.

Sustainability: Substation transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Substation
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	12/31/2022
Rating:	B
Status:	New
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,769.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$0.00	$0.00	$0.00	$0.00	$3,255.00	$514.00	$3,769.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction					X	X
Other					X	X

0073 O:Transformers

Description:

We will install approximately 100 pole-mounted transformers per year to serve new load and to replace old, deteriorated transformers.

Sustainability: All distribution transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,301.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$200.00	$207.00	$214.00	$220.00	$227.00	$233.00	$1,301.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0074 O:Extensions

Description:

RESIDENTIAL EXTENSIONS: The residential extension item provides for the addition of primary (12,500 volt) and secondary lines (low voltage) to new residential customers or to existing residential customers for increased load. This item also covers removal of existing overhead facilities when a service is converted to underground. Most new service conductors are installed underground.

COMMERCIAL/INDUSTRIAL: A commercial/industrial extension is the addition of primary, secondary, or service facilities to a new customer or to an existing customer for increased load, where the customer is commercial or industrial.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,817.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$282.00	$290.00	$297.00	$307.00	$316.00	$325.00	$1,817.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0076 O:Service Area Adjustments

Description:

LES and Norris have entered into a Joint Planning Agreement. The agreement calls for the planning in a Joint Planning Area and the orderly transition of service area from Norris to LES as required to keep all of the City of Lincoln within LES' service area. These adjustments will provide a buffer area around the city limits to allow planning for infrastructure in these areas.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	C
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$433.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$66.00	$68.00	$71.00	$73.00	$76.00	$79.00	$433.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0077 O:Rebuilds

Description:

The rebuild budget item is for replacement or removal of deteriorated (or otherwise obsolete) facilities. Some rebuild work will be associated with new or increased loads. Rebuild work will also be required on joint poles with the telephone company. We will also annually test about 2,000 poles and treat about 1,600 of these poles with preservative to extend their life.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$28,158.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,206.00	$3,920.00	$4,614.00	$5,311.00	$5,471.00	$5,636.00	$28,158.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0078 O:Relocations

Description:

This item provides for the relocation of existing overhead distribution facilities. This item also includes the overhead portion of an overhead-to-underground relocation project. Relocations are generally requested for federal, state, county, or city governmental agencies for road widening, sewer construction, etc. Customers also request relocation work for various projects. An "aid-to-construction", based on non-betterment cost to LES, is usually required for these projects. We anticipate relocating about 3-4 miles of overhead distribution lines annually.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,179.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$183.00	$189.00	$194.00	$199.00	$204.00	$210.00	$1,179.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0079 O:Major Circuits

Description:

FEEDERS

This budget item provides for ongoing construction of new 12kV and 35kV feeders (main distribution circuits). Reconductoring of existing overhead feeders for capacity requirements and the installation of 600 amp disconnect switches for sectionalizing are also covered by this project.

Sustainability: Distribution feeder conductors are economically evaluated including the life-cycle cost of electrical losses. This allows LES to install higher capacity lines with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

CAPACITORS

This item provides for the installation of pole-mounted distribution capacitor banks. Capacitors are used for power factor correction on the distribution system. These capacitors provide a more economic operation by reducing unmetered electric losses in the distribution and transmission system. They also provide needed voltage support at peak load conditions. We plan to install 2 - 1,200 kVAR, radio-controlled, switched overhead capacitor banks per year.

Group:	Overhead Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$5,593.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$719.00	$1,850.00	$1,856.00	$379.00	$389.00	$400.00	$5,593.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0081 U:Transformers

Description:

Based on projected customer growth, about 50,000 kVA of pad-mounted transformers will be purchased each year to serve new load and to replace existing transformers that are damaged or fail in service. Disposal of PCB-contaminated transformers is included in this project. This item also covers the standard installation charge for the new transformers (per FERC accounting).

Sustainability: All distribution transformers are economically evaluated including the life-cycle cost of electrical losses. This allows LES to purchase higher quality transformers with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

Group:	Underground Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$11,014.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$1,703.00	$1,754.00	$1,806.00	$1,860.00	$1,917.00	$1,974.00	$11,014.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0082 U:Extensions

Description:

RESIDENTIAL EXTENSION: A projected 1,200 new residential customers per year will be served from proposed, new underground primary, secondary or service additions. Also covered by this budget item are about 300 existing customers that request overhead to underground conversions of their electric service or upgrades for increased load.

RESIDENTIAL DEVELOPMENT: This provides primary and secondary extensions to new residential developments and apartment complexes.

COMMERCIAL EXTENSION: About 150 new commercial and industrial customers per year will require new underground primary, secondary or service installations. Other commercial customers will expand their business and will require upgraded service conductors and transformer capacities.

COMMERCIAL DEVELOPMENT: Newly platted commercial and industrial developments, including small shopping centers and offices are covered in this budget item.

Group:	Underground Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$41,649.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$6,436.00	$6,631.00	$6,830.00	$7,037.00	$7,248.00	$7,467.00	$41,649.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0083 U:Rebuilds

Description:

This item provides for replacement of existing underground facilities due to age, deterioration, or other operating problems. This budget item also includes replacing deteriorated overhead facilities with underground, when feasible. The identified projects are general system upgrades that will extend the life of existing underground facilities. LES has about 1,300 circuit miles of underground primary distribution conductor in service. We recognize that some of our underground cable and equipment is approaching the end of its useful life. We anticipate the increased need to replace deteriorating underground cable and obsolete equipment to maintain adequate reliability levels for our customers. Replacement will be done on an "as required" basis. We are also continuing a program to install duct (about 60 miles per year) along existing older cable to facilitate rapid installation in a future failure event.

Group:	Underground Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$59,891.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$9,089.00	$9,866.00	$10,438.00	$11,276.00	$11,611.00	$7,611.00	$59,891.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0085 U:Relocations

Description:

This item provides for the relocation of existing underground distribution facilities. This item also includes the underground portion of an overhead-to-underground relocation project. Relocations are generally requested by federal, state, county, or city governmental agencies for road widening, sewer construction, etc. Other relocation work is requested by customers. An "aid-to-construction", based on non-betterment cost to LES, is usually required for these projects. Typically we will:
· Relocate 3 to 4 miles of existing overhead and underground lines and associated transformers and equipment for road widening projects and customer requests.
· Convert to underground about 1 mile of existing overhead lines and associated transformers and equipment in the discretionary overhead to underground conversion program.

Group:	Underground Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$19,177.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,186.00	$3,242.00	$3,300.00	$2,946.00	$3,223.00	$3,280.00	$19,177.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0086 U:Major Circuits

Description:

FEEDER

This project provides for construction of new 12kV and 35kV feeders (main distribution lines) as needed to serve system growth areas. The installation of switchgears on existing feeders is also included in this budget item.

Sustainability: Distribution feeder conductors are economically evaluated including the life-cycle cost of electrical losses. This allows LES to install higher capacity lines with lower electrical losses (lower energy use and reduction of greenhouse gasses) while maintaining lowest overall cost for customers.

PADMOUNT CAPACITORS

This item provides for the installation of padmounted capacitor banks on the underground distribution system. Capacitors are used for power factor correction on the distribution system. These capacitors provide a more economic operation by reducing unmetered electric losses in the distribution and transmission system. They also provide needed voltage support at peak load conditions. We plan to install 2 - 1,200 kVAR, radio-controlled, padmounted capacitor banks per year.

Group:	Underground Distribution
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$14,433.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$2,578.00	$2,689.00	$2,096.00	$2,160.00	$2,226.00	$2,684.00	$14,433.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0070 W:OH Distribution - Waverly

Description:

Various overhead distribution projects in Waverly city limits. This includes services for new customers as well as rebuilding existing facilities to maintain a reliable system.

Group:	Waverly
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$120.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$120.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0071 W:UG Distribution - Waverly

Description:

Various underground distribution projects in Waverly city limits. This includes services for new customers as well as rebuilding existing facilities to maintain a reliable system.

Group:	Waverly
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,748.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$122.00	$122.00	$376.00	$376.00	$376.00	$376.00	$1,748.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0072 W:Street Light - Waverly

Description:

Various street light projects in Waverly city limits.

Group:	Waverly
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$78.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$13.00	$13.00	$13.00	$13.00	$13.00	$13.00	$78.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0089 L:Misc Ongoing Projects

Description:

SECURITY LIGHTS
Security lighting provides for lighting of private property, as requested by customers, for which they are charged a monthly fee.

COUNTY STREET LIGHTS
This budget item provides for street light facilities for Lancaster County roads. LES accounts for these facilities separately from City of Lincoln street light facilities.

Group:	Street Light
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$240.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$37.00	$38.00	$39.00	$41.00	$42.00	$43.00	$240.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0067 P:Laramie River Station

Description:

This item represents LES' share of anticipated annual capital expenditures for the Laramie River Station. The Laramie River facility consistently ranks among the lowest cost generating stations in the United States. This performance record is a result of efficient and effective design and the continued review and upgrade of facility systems. The Project's facilities are in good condition and in compliance with environmental and other regulatory requirements. However, after over twenty five years of operation the system is beginning to show its age. This fact, coupled with technological advances, is cause for additional investments in the Project. A number of significant plant improvements are scheduled for the 2017 through 2022 time frame, including upgrades which will improve plant efficiency, reliability as well as reduce environmental impacts. The single largest investment will be for new environmental systems to reduce NOx emissions.

Group:	Power Supply
Program:	(None)
Budget Outcome:	Environmental Quality
Budget Goal:	Optimize efficient use of all energy, public and private
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$115,437.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$24,443.00	$40,552.00	$24,387.00	$13,055.00	$7,500.00	$5,500.00	$115,437.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0137 P:Walter Scott Energy Center #4

Description:

This item covers ongoing capital investments in LES' newest base load power plant. LES has a 100 MW share of the Walter Scott Energy Center output. WSEC #4 uses a high efficiency, super critical steam boiler design and extensive emissions controls which significantly reduces fuel consumption and air emissions compared to standard coal plant designs.

Group:	Power Supply
Program:	(None)
Budget Outcome:	Economic Opportunity
Budget Goal:	Predictable and efficient development process
Date Anticipated:	
Rating:	A
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$9,821.00 Prior Appropriations $2,966.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$2,500.00	$750.00	$830.00	$1,250.00	$525.00	$1,000.00	$6,855.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0156 P:Local Generation Capital Projects

Description:

This Budget item covers a variety of projects at the three local gas fired power plants: Rokeby Station, 8th & J Street Station and the Terry Bundy Generating Station. These plant improvements and upgrades are necessary to maintain the operating reliability as well as environmental and security requirements for these critical assets. Budget estimates are based on historical expenditures.

Group:	Power Supply
Program:	(None)
Budget Outcome:	Economic Opportunity
Budget Goal:	Available infrastructure for growth
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$24,500.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$3,500.00	$3,500.00	$4,000.00	$4,500.00	$4,500.00	$4,500.00	$24,500.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0157 P:Misc Env.,Safety,Security

Description:

The purpose of this budget item is to provide for unanticipated capital expenditures imposed by regulatory or operational requirements, unplanned equipment upgrades or to address critical safety issues. Based on operating experience in the SPP Integrated Market (IM), the local LES generation assets have reached a new level of required performance and availability. With requirements of the SAP Energy Market it will be critical to maintain these generating units at a high operational level. Changing environmental regulations and permitting mandates often require unanticipated unit modifications. It is also anticipated that site and system security upgrades could be dictated by any number of regulatory agencies (FERC, NERC, Homeland Security Agency, etc.).

Group:	Power Supply
Program:	(None)
Budget Outcome:	
Budget Goal:	
Date Anticipated:	
Rating:	B
Status:	Ongoing
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$3,400.00 Prior Appropriations $0.00 Costs Beyond: $0.00

6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$550.00	$550.00	$550.00	$550.00	$600.00	$600.00	$3,400.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X	X	X	X	X	X
Other	X	X	X	X	X	X

0785 P:Rokeby 2 Combustion System Upgrades

Description:

This budget item represents the capital improvements that will be incorporated during Rokeby Unit 2 major inspection/refurbishment process. Improvements include replacing the following combustion system components with upgraded components including: Helmholtz damper volume bottles (for improved combustion control), spring loaded combustion chamber tile carrier and tiles, combustion liner collar and thermal coating, reconfigured combustion nozzles, modified combustor hot gas case panel (addition of cooling air holes and thermal coating) and vane carrier cooling modification. The proposed capital upgrades will improve unit performance and reliability

Group:	Power Supply
Program:	(None)
Budget Outcome:	Economic Opportunity
Budget Goal:	Available infrastructure for growth
Date Anticipated:	05/31/2017
Rating:	A
Status:	New
Comp Plan Conformity:	Generally Conforms with Plan

Project Total:$1,700.00 Prior Appropriations $0.00 Costs Beyond: $0.00

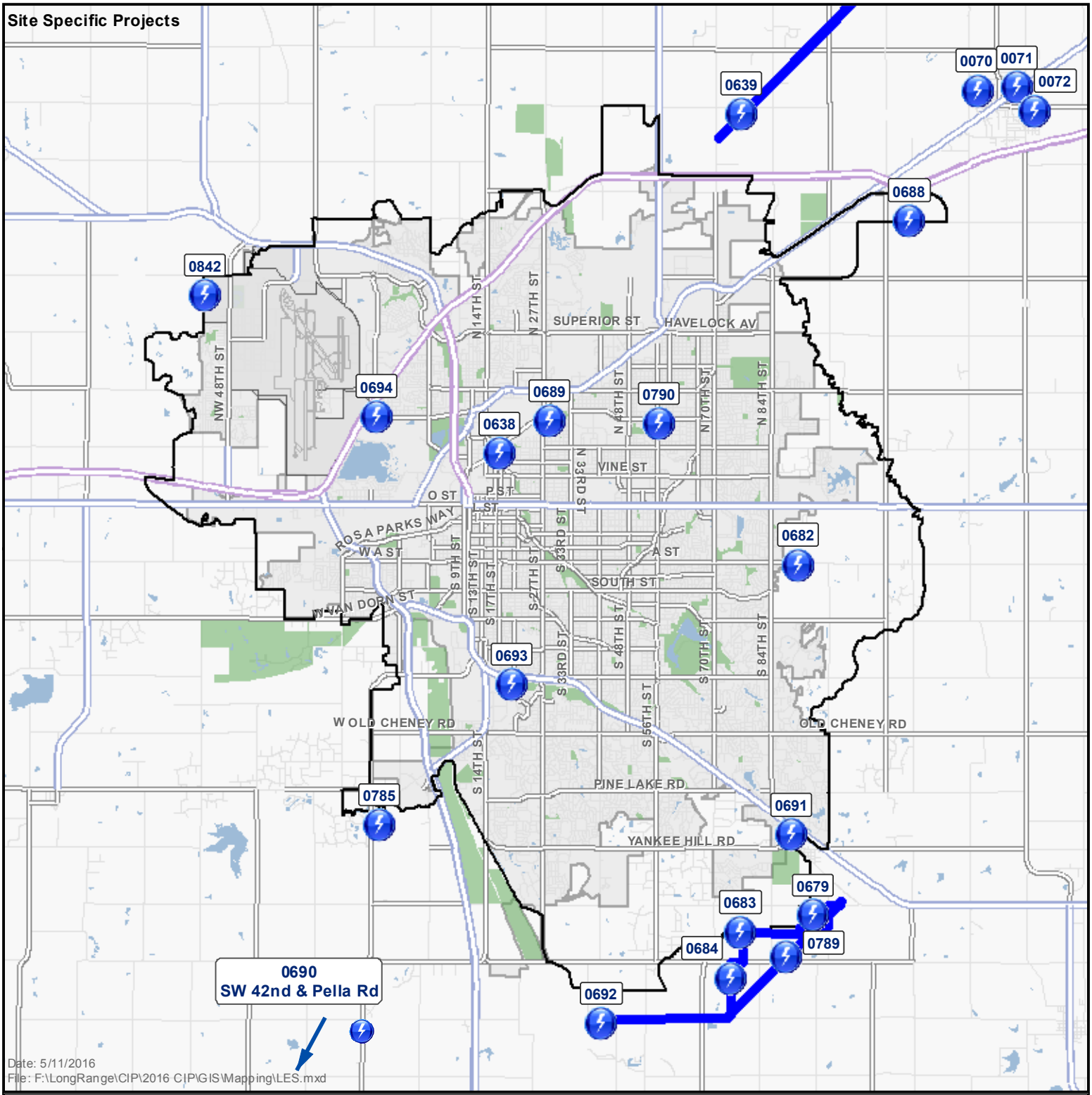
6 yr appropriations

Funding Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	6 yr Total
Lincoln Electric System	$1,700.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,700.00

6 yr estimated cost by activity

Activity type	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Construction	X					
Other	X					

This page left blank intentionally.



Lincoln CIP 2016 - 2022

Lincoln Electric System

Project Locations

XXXX

Last 4 digits of project number

Lincoln's Future Service Limit Shown as Black Outline

N W E S

2 1 0 2

Miles

Consult the detailed project descriptions and funding summary for further information.

Projects with Citywide Benefit

0117	0213	0214	0237
0238	0073	0074	0076
0077	0078	0079	0081
0082	0083	0085	0086
0089	0067	0137	0156
0157	0792	0794	0795

Funding Summary - By Project

* Amounts are in thousands of dollars

Lincoln Electric System

	Project Title	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Total
0679	G:LES Operations Center	**44,282.00**	**9,318.00**	**0.00**	**0.00**	**0.00**	**0.00**	$53,600.0
0792	G:Communications	**439.00**	**406.00**	**668.00**	**0.00**	**0.00**	**0.00**	$1,513.0
0794	G:Meters	**284.00**	**296.00**	**300.00**	**304.00**	**287.00**	**276.00**	$1,747.0
0795	G:MMR Project	**650.00**	**673.00**	**0.00**	**0.00**	**0.00**	**0.00**	$1,323.0
0117	T:Misc. Construction/Rebuild	**73.00**	**75.00**	**78.00**	**80.00**	**82.00**	**85.00**	$473.0
0213	T:Relocations	**71.00**	**73.00**	**75.00**	**78.00**	**80.00**	**82.00**	$459.0
0214	T:Right-of-Way/Easements	**2,496.00**	**156.00**	**156.00**	**0.00**	**260.00**	**260.00**	$3,328.0
0639	T:70th&Bluff - 190th&LittleSaltRd Upgrade	**0.00**	**0.00**	**0.00**	**0.00**	**2,852.00**	**2,953.00**	$5,805.0
0684	T:91st & Hwy 2 - 40th & Bennet Rd 115kV Line	**1,473.00**	**4,726.00**	**0.00**	**0.00**	**0.00**	**0.00**	$6,199.0
0789	T:103rd & Rokeby - 75th & Bennet 345kV Line	**1,630.00**	**1,688.00**	**0.00**	**0.00**	**0.00**	**0.00**	$3,318.0
0237	S:Misc Ongoing Construction	**154.00**	**416.00**	**392.00**	**168.00**	**144.00**	**148.00**	$1,422.0
0238	S:Substation Sites	**120.00**	**123.00**	**127.00**	**131.00**	**135.00**	**139.00**	$775.0
0638	S:17th & Holdrege Transformer #2	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1,138.00**	$1,138.0
0682	S:91st & A Replace Transformer	**0.00**	**2,377.00**	**142.00**	**0.00**	**0.00**	**0.00**	$2,519.0
0683	S:76th & Rokeby Substation	**3,140.00**	**849.00**	**0.00**	**0.00**	**0.00**	**0.00**	$3,989.0
0688	S:120th & Alvo Substation	**3,027.00**	**768.00**	**0.00**	**0.00**	**0.00**	**0.00**	$3,795.0
0689	S:29th & Leighton Substation, Add 115-35kV	**463.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	$463.0
0690	S:Wind Project Interconnection	**3,493.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	$3,493.0
0691	S:91st & Hwy 2 Substation Upgrade	**59.00**	**1,160.00**	**0.00**	**0.00**	**0.00**	**0.00**	$1,219.0
0692	S:40th & Bennet Substation	**0.00**	**1,907.00**	**588.00**	**0.00**	**0.00**	**0.00**	$2,495.0
0693	S:20th & Pioneers Substation Replace	**0.00**	**0.00**	**0.00**	**2,541.00**	**141.00**	**0.00**	$2,682.0
0694	S:West Lincoln Substation Rebuild	**0.00**	**0.00**	**2,328.00**	**2,411.00**	**0.00**	**0.00**	$4,739.0

Funding Summary - By Project

* Amounts are in thousands of dollars

		2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Total
0790	S:57th & Garland Replace Transformer	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2,558.00**	$2,558.0
0842	S:NW56th & Morton Substation	**0.00**	**0.00**	**0.00**	**0.00**	**3,255.00**	**514.00**	$3,769.0
0073	O:Transformers	**200.00**	**207.00**	**214.00**	**220.00**	**227.00**	**233.00**	$1,301.0
0074	O:Extensions	**282.00**	**290.00**	**297.00**	**307.00**	**316.00**	**325.00**	$1,817.0
0076	O:Service Area Adjustments	**66.00**	**68.00**	**71.00**	**73.00**	**76.00**	**79.00**	$433.0
0077	O:Rebuilds	**3,206.00**	**3,920.00**	**4,614.00**	**5,311.00**	**5,471.00**	**5,636.00**	$28,158.0
0078	O:Relocations	**183.00**	**189.00**	**194.00**	**199.00**	**204.00**	**210.00**	$1,179.0
0079	O:Major Circuits	**719.00**	**1,850.00**	**1,856.00**	**379.00**	**389.00**	**400.00**	$5,593.0
0081	U:Transformers	**1,703.00**	**1,754.00**	**1,806.00**	**1,860.00**	**1,917.00**	**1,974.00**	$11,014.0
0082	U:Extensions	**6,436.00**	**6,631.00**	**6,830.00**	**7,037.00**	**7,248.00**	**7,467.00**	$41,649.0
0083	U:Rebuilds	**9,089.00**	**9,866.00**	**10,438.00**	**11,276.00**	**11,611.00**	**7,611.00**	$59,891.0
0085	U:Relocations	**3,186.00**	**3,242.00**	**3,300.00**	**2,946.00**	**3,223.00**	**3,280.00**	$19,177.0
0086	U:Major Circuits	**2,578.00**	**2,689.00**	**2,096.00**	**2,160.00**	**2,226.00**	**2,684.00**	$14,433.0
0070	W:OH Distribution - Waverly	**20.00**	**20.00**	**20.00**	**20.00**	**20.00**	**20.00**	$120.0
0071	W:UG Distribution - Waverly	**122.00**	**122.00**	**376.00**	**376.00**	**376.00**	**376.00**	$1,748.0
0072	W:Street Light - Waverly	**13.00**	**13.00**	**13.00**	**13.00**	**13.00**	**13.00**	$78.0
0089	L:Misc Ongoing Projects	**37.00**	**38.00**	**39.00**	**41.00**	**42.00**	**43.00**	$240.0
0067	P:Laramie River Station	**24,443.00**	**40,552.00**	**24,387.00**	**13,055.00**	**7,500.00**	**5,500.00**	$115,437.0
0137	P:Walter Scott Energy Center #4	**2,500.00**	**750.00**	**830.00**	**1,250.00**	**525.00**	**1,000.00**	$6,855.0
0156	P:Local Generation Capital Projects	**3,500.00**	**3,500.00**	**4,000.00**	**4,500.00**	**4,500.00**	**4,500.00**	$24,500.0
0157	P:Misc Env.,Safety,Security	**550.00**	**550.00**	**550.00**	**550.00**	**600.00**	**600.00**	$3,400.0
0785	P:Rokeby 2 Combustion System Upgrades	**1,700.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	$1,700.0
	Department Totals:	**122,387.00**	**101,262.00**	**66,785.00**	**57,286.00**	**53,720.00**	**50,104.00**	**$451,544.0**

Funding Summary - By Project

* Amounts are in thousands of dollars

Funding Sources

Fund Source	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	Total
Lincoln Electric System	$122,387.0	$101,262.0	$66,785.0	$57,286.0	$53,720.0	$50,104.0	$451,544.0
	$122,387.0	**$101,262.0**	**$66,785.0**	**$57,286.0**	**$53,720.0**	**$50,104.0**	**$451,544.0**

This page left blank intentionally.