

Drake Quarterly Update

John Romero

General Manager

Energy Acquisition Engineering and Planning

June 13, 2018

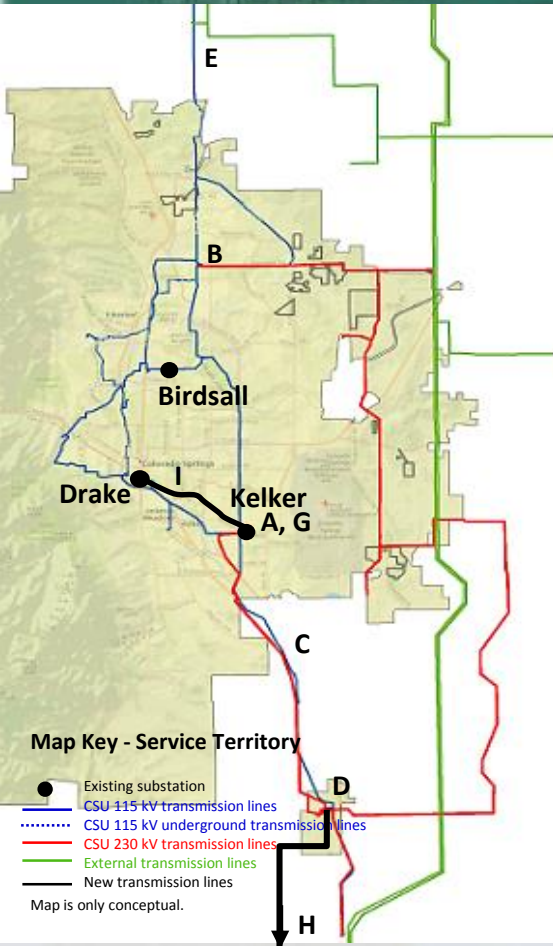
Utilities Board Direction

- Support 3c – distributed generation and import power options, including no replacement generation at Drake or Birdsall sites
- Retain consultant to advance transmission projects
- Accelerate planned transmission projects
- Complete site assessment studies by end of 2019:
 - Appraisal
 - Phase II environmental assessment
 - Evaluation of salvage value
- Complete an EIRP by end of 2020

Major Project Plans

		2018				2019				2020	2021	2022	2023
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Drake	Transmission Projects	Kelker Transformer											
		Cottonwood Transformer											
						Nixon - Kelker Line Upgrades							
						Series Reactor							
										North System Solution			
		Transmission Planning Study											
							Transmission System Expansion at Kelker *						
						New 230kV Midway - Nixon Line *							
						New 115kV Kelker - Drake Line *							
	Drake Site					Salvage Value							
				Phase II				→					
				Appraisal				→					
IRP	Electric									EIRP			
	Gas									GIRP			
Energy Vision	2020	EV 2020 Implementation											
	2030 / 2050	EV 2030 2050											

Drake Project Descriptions



Project	Description
A) Kelker Transformer	Add new transformer to maintain compliance with NERC standards for outage contingencies
B) Cottonwood Transformer	Upgrade and replace one of the older transformers in the system and retain the old as a spare for NERC compliance
C) Nixon-Kelker Line Upgrades	Raise several transmission line structures to allow for more capacity along the line
D) Series Reactor	Add reactor in substation to control power flow and reduce overloads during double circuit contingency outage
E) North System Solution	Work with PSCo to install a specialized transformer in Monument to control the throughflow on CSU's system
F) Transmission Planning Study	Conduct planning study to identify a preferred solution that supports Scenario 3c – importing replacement power
G) Kelker Expansion	Expand the substation to allow for additional lines and improve reliability for extreme event contingencies
H) New Midway-Nixon Line	Add 230kV line to increase import and export capability and improve reliability
I) New Kelker-Drake Line	Add 115kV line to provide replacement power for Drake Decommissioning

Drake Project Updates

Project	Status Update		
A) Kelker Transformer	New transformer energized on 6/5/18, designing spill containment to finalize project		
	% Complete: 95%	Cost: \$3M	Final Completion: 12/14/2018
B) Cottonwood Transformer	New transformer ordered in May 2018, expected delivery by August 2019		
	% Complete: 3%	Estimate: \$2.8M	Final Completion: 12/30/2019
C) Nixon-Kelker Line Upgrades	Preparing scope of work for analysis to determine necessary line improvements		
	% Complete: 3%	Estimate: \$550k	Final Completion: 5/31/2019
F) Transmission Planning Study	Selected consultant and negotiating contract		
	% Complete: 5%	Cost: In Negotiations	Final Completion: 4/1/2019

Kelker Transformer Project Updates

