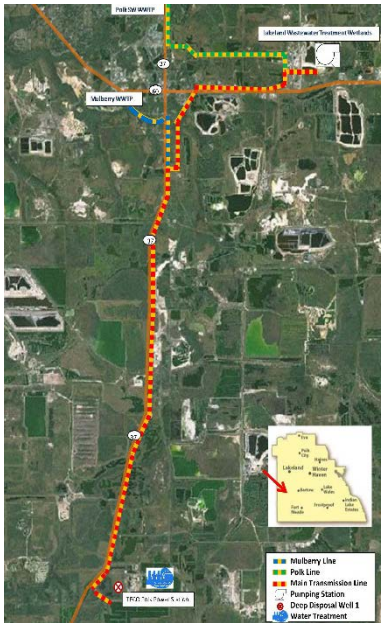
#100 - Name and Project Number:
TECO Polk Power Reuse Original CFWI Project #100

Description of project:
An ongoing FY2009-FY2016 reclaimed water supply project within the SWFWMD portion of Polk County, to supply 10 mgd of reclaimed water to the TECO Polk Power Generation Facility. The project includes the design, permitting, construction and or purchasing of a 10.0 million gallon per day (mgd) reclaimed water pump station (expandable to 17 mgd) at the Lakeland Wetland Treatment System, a 2.0 mgd pump station at the Mulberry Wastewater Treatment Plant (WWTP), a 0.5 mg storage tank at the TECO Polk Power Station, a 10.0 mgd advanced membrane reclaimed water treatment system (expandable to 17 mgd) at the TECO Polk Power Station, a 2.0 mgd membrane concentrate deep disposal well at the TECO Polk Power Station, approximately 80,000 linear feet (LF) of 30-inch diameter transmission main from the Lakeland Wetland Treatment System to the TECO Polk Power Station, approximately 24,000 LF of 18-inch diameter, and approximately 10,000 LF of 12-inch diameter transmission lines from Polk Southwest WWTP and Mulberry WWTP to the 30-inch diameter transmission line, and other necessary appurtenances to supply available reclaimed water flows from Lakeland, Mulberry and Polk Southwest WWTPs to the TECO Polk Power Station (WUP#11747).

Concept diagram:



#2 - Cost-Benefit Analysis of Yield:
Water Resource Benefit - The Supply Project will provide an estimated 10.0 mgd of reclaimed water and will enable the future supply of ultimately up to 17.0 mgd of reclaimed water in the Southern Water Use Caution Area (SWUCA). Cost Effectiveness - It has an initial $9.69 per gallon of capital cost, which is below the $10 to $15 per gallon average for alternative supplies. The estimated cost/benefit is $2.34 per thousand gallons of initial water resource benefit (amortized 8%@30yrs), which is within the cost range for reuse projects which typically range from a low of ~$0.15/1,000 gpd for golf course projects up to ~$10.00/1,000 gpd for residential projects. Future flows are estimated to eventually increase project related reuse flows to 17.0 mgd and will utilize all existing and future reuse flows from Lakeland, Mulberry and Polk SW WWTPs; however the cost effectiveness calculations above only include the initial near term water resource benefits.

#3 Estimated Planning-Level Costs:
Total Supply Project Cost: $96,960,725 (TECO; $46,717,331; SWFWMD $46,717,331; Water Resource and Protection-WRAP $3,526,063).

#4 Water Resource Constraints:
The project is located in the Southern Water Use Caution Area (SWUCA) in an area that has minimum flows or levels (MFLs) established that would apply to increases to the consumptive use permit (CUP) for anticipated water supply demands associated with the ongoing and planned future power generation facility expansions.

#5 Partners and Governance Options:
The ongoing project is cooperatively funded by the Tampa Electric Company (TECO) and the SWFWMD. The project will be owned and operated by TECO. Three utilities (Lakeland, Mulberry, & Polk County) have agreed to supply TECO will all excess reclaimed water for a period of 30 years at no charge.

#6 Planning Level Design Quantities in MGD:

Year	Power	Total Water	Groundwater	WUP Limit	Reclaimed Use
2014	930	3.14	3.14	3.14	0
2015	930	3.14	1.00	3.14	2.14
2017	1390	10.00	4.30	4.30	5.70
2025	2180	16.00	4.30	4.30	11.70
2035	2780	22.00	4.30	4.30	17.70
2045	2780	22.00	4.30	4.30	17.70

2017	Polk Unit 2 conversion 460 MW
2025	Additional Unit (2 on 1 NG) - Additonal 6 MGD
2035	Additional Unit (2 on 1 NG) - Additonal 6 MGD

#7 Project Feasibility:
The ongoing project (construction 85% complete) is technically, environmentally and financially feasible.

#8 - Funding Sources and Amounts:
The $96,960,725 project is funded by TECO; $46,717,331; the SWFWMD $46,717,331; and WRAP $3,526,063. TECO and the SWFWMD each budgeted a total of $38,001,957 between FY2009-FY2014 , a FY2015 funding request of $4,700,000 was conceptually approved by Governing Board July 2014, and FY2016 request of $4,015,374 for final year District funding is anticipated to be requested.

 # 9 Permittability:
The ongoing project (construction 85% complete) is a fully permitted regional water supply project.

#10 Other Considerations – Public Concerns or Non-Technical Obstacles: NONE

#11 Estimated Implementation Schedule:

Design Commence	March 2009
Construction Commence	January 2011
Prelim. Construction Completion (utilizing Lakeland flows)	January 2015
Full Construction Completion	January 2017