BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for an increase in water and wastewater rates in Charlotte, Highlands, Lake, Lee, Marion, Orange, Pasco, Pinellas, Polk, and Seminole Counties by Utilities, Inc. of Florida

Docket No. 160101-WS

/

DIRECT TESTIMONY

OF

PATRICK C. FLYNN

on behalf of

Utilities, Inc. of Florida

Q. Please state your, name profession and address.

A. My name is Patrick C. Flynn. I am Vice-President of Utilities, Inc. of Florida. My business address is 200 Weathersfield Ave., Altamonte Springs, Florida, 32714.

Q. State briefly your educational background and experience.

A. I am a 1978 graduate of the University of Virginia with a Bachelor of Arts degree in Environmental Science. All told, I have over 37 years of experience in the water, wastewater and reclaimed water industry. During that time, I have held various managerial and executive positions with increasing levels of responsibility including all aspects of facility operations, personnel management, capital and operating budget preparation and execution, fleet administration, rate case support, and interface with multiple regulatory bodies and their staffs. In 2012, I was appointed by Governor Scott to serve on the Study Committee on Investor-Owned Water and Wastewater Utility Systems. I have been a licensed water and/or wastewater treatment operator in the states of South Carolina, Florida, Louisiana, and Maryland.

Q. Have you previously appeared and presented testimony before any regulatory bodies?

Yes, I have presented testimony in multiple rate setting dockets in South Carolina and Florida.

Q. On whose behalf are you presenting this testimony?

A. I am presenting this testimony and appearing on behalf of Utilities, Inc. of Florida (UIF), which is the applicant for a rate increase in the present docket.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to present information supporting the additional engineering information required by Commission Rule 25-30.440, and the proforma capital projects.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring multiple exhibits. For each Exhibits PCF-1 through PCF-47 I have

provided a brief description, the justification for the project, the schedule of each project, of the pro forma projects, the placed in service date for those projects that have been completed, and the total project expenditure. I have attached supporting documentation to each exhibit in those instances where the documentation is currently available.

Q. Can you provide a description of each proforma capital project?

A. Yes, the following information describes the scope of each project, its estimated cost, the actual or estimated placed in service date, and the Exhibits associated with each one.

1. Cypress Lakes WTP Hydro Tank #1: Remove and replace a 10,000-gallon hydro pneumatic pressure tank that is at the end of its service life, is not repairable, and was recommended for replacement per its last internal inspection; repurpose the 10,000-gallon ASME-code tank located at Summertree Well 13 by installing it at Cypress Lakes WTP; February 28, 2017; $30,000; Exhibit PCF-1 Cypress Lakes Hydro Tank #1.
2. Cypress Lakes Sediment Removal: Removal and disposal of accumulated grit and sediment from each of the three treatment trains at Cypress Lakes WWTP in order to reestablish the design volume in each aeration tank; remove and replace broken diffusers as needed in each treatment train using stainless steel materials and fine bubble diffusors; September 30, 2016; $50,200; Exhibit PCF-2 Cypress Lakes WWTP Sediment Removal.
3. Eagle Ridge WWTP EQ Tank & Headworks: Replace two carbon steel flow equalization tanks and a bar screen that are now at the end of their service life with a single, glass-fused steel tank and static screen; reconnect existing odor control equipment to new tank; fabricate and replace the splitter box; remove and replace the modular field office trailer with an office trailer sized and configured to meet current operations staff needs; replace the chemical storage building; modify the plant entrance per HOA request; remove trees along fence line; and provide engineering support for design, permitting and construction inspection services; September 30, 2017; $350,000. Exhibit PCF-3 Eagle Ridge EQ Tank & Plant Improvements.

4. Labrador WWTP Sediment Removal: Removal and disposal of accumulated grit and sediment from each of the three treatment trains at Labrador WWTP; remove and replace broken diffusers as needed using stainless steel materials and fine bubble diffusors; September 30, 2016; $61,137. Exhibit PCF-4 Labrador Sediment Removal.

5. LUSI - Lake Groves Sludge Dewatering Equipment: purchase and install a sludge drying and odor control system that uses solar energy to reduce the water content of biosolids and thus reduce sludge hauling expense; purchase one FloTrend sludge dewatering box to support the operation of the SolarOrganite sludge drying unit that reflects an increase in monthly biosolids production beyond the capacity of the one existing box; December 31, 2016; $245,000. Exhibit PCF-5 Lake Groves Sludge Dewatering Equipment.

6. LUSI - Oswalt Road Water Main Relocation: Relocate distribution system facilities on Oswalt Road in advance of a Lake County road and drainage improvement project; December 31, 2016; $50,000. Exhibit PCF-7 Oswalt Rd. WM Relocates (will be submitted within 30 days of the filing).

7. LUSI - SCADA System: Design, fabricate and install hardware and software required to allow remote monitoring and control of all production, storage and pumping facilities: within the combined LUSI water system; at the Lake Groves Reuse Plant; and at 16 LUSI lift stations; July 1, 2016; $470,000. Exhibit PCF-7 LUSI SCADA System.

8. LUSI - TTHM & HAA5 Study: Investigate the cause of elevated total trihalomethane and haloacetic acid concentrations at various locations within the combined distribution system; develop TTHM/HAA5 formation potential curves at each water source; develop operational strategies that will provide a short-term solution; develop conclusions and recommendations to resolve the problem; and provide estimates of probable capital and annual operating costs for each option; September 30, 2016; $79,250. Exhibit PCF-8 LUSI TTHM & HAA6 Analysis.

9. LUSI – Engineering TTHM & HAA5 Remediation: Provide engineering design and permitting services that will comprehensively address elevated TTHM & HAA5 values at multiple locations throughout the combined LUSI water system as recommended by the TTHM/HAA5 Study; $450,000. Exhibit PCF-9 Engineering Lake Groves WTP Upgrades (To be submitted in approximately 60 days).

10. LUSI – US 27 Utility Relocations: In coordination with a Florida DOT highway and stormwater improvement project, design and relocate those water, sewer and reuse facilities that are in conflict with proposed FDOT facilities; June 30, 2017; $63,000 in engineering services plus $1,806,000 in construction costs for a total of $1,869,000. Exhibits PCF-10 Eng-LUSI US 27 Ph. 3 Utility Relocates, and PCF-10a LUSI US 27 Ph. 3 Utility Relocates.

11. Longwood – Church Avenue Utility Relocations: Design, obtain permits and relocate two sewer force mains situated within the Church Avenue right-of-way in coordination with a City of Longwood road and drainage improvement project; $193,880. Exhibit PCF-11 Longwood Church Ave. FM Relocates.

12. Longwood Groves – I&I Study: Clean and video inspect 30,000 LF of gravity sewer main to identify the locations of significant deficiencies in the Longwood collection system; November 30, 2016; $50,000. Exhibit PCF-Longwood Groves I&I Study will be submitted within 30 days of filing.

13. Longwood Groves - I&I Remediation: Remedy gravity sewer main, manhole and sewer lateral deficiencies situated within Longwood Groves subdivision by the use of pipe liners, cured-in-place pipe or excavate and replace techniques to remedy the deficiencies found in the I&I Study. This will promote a reduction in the base influent flow to the Wekiva Hunt Club WWTP; September 30, 2017; $450,000. Exhibit PCF-13 Longwood Groves I&I Remediation will be submitted within 90 days of filing.

14. Mid-County Electrical Improvements and Generator Replacement: Replace the main power

feeder, transformers, transfer switches, distribution panels, motor control centers and main disconnects at the Mid-County WWTP that are not in conformance with current NEC requirements and at the end of their service life; convert incoming power and all loads from 230VAC to 480VAC; remove and replace a 500-Kw emergency generator, fuel cell and transfer switchgear that is not reliable, requires frequent repairs, and is at the end of its service life; provide engineering design, surveying, and construction inspection services in support of the project; June 30, 2017; $900,000. Exhibit PCF-14 Mid-County Electrical Improvements.

15. Mid-County Field Office: Remove and replace the existing field office trailer, electrical service, lab counters, and furniture that are at the end of their service life after approximately 30 years of use; July 8, 2016; $65,000. Exhibit PCF-15 Mid-County Field Office Replacement.

16. Mid-County Flow Study: Conduct a comprehensive, four-month investigation of raw wastewater flow patterns by collecting data across the whole collection system using 16 flow meters positioned at key locations. Analyze the data to determine the source/s of excess inflow and infiltration entering the system; June 30, 2016; $80,000. Exhibit PCF-16 Mid-County Flow Monitoring & Analysis.

17. Mid-County Excess I&I Remediation: Address the collection system deficiencies found in the flow study by application of cured-in-place pipe, pipe liners, lateral replacement, manhole refurbishment or other remedies; July 31, 2017; $600,000. Exhibit PCF-17 Mid-County I&I Remediation (to be submitted within 90 days of filing).

18. Mid-County Methanol Pumps and In-Line Nutrient Analyzers: Replace two explosion-proof methanol feed pumps that require frequent repairs, are critical in the performance of the treatment process and are at the end of their service life. Install an in-line nutrient analyzer to monitor TN and TP concentration within the treatment process to optimize the use of ferric

sulfide and methanol that are critical in meeting current and future effluent water quality limits, and to reduce the risk of noncompliance; October 30, 2016; $102,000. Exhibit PCF-18 Mid-County Methanol Pumps & Instrumentation.

19. Mid-County US Highway 19 Utility Relocation: Design, obtain permits, replace and/or relocate collection system facilities in conflict with an FDOT highway and drainage improvement project within the US Highway 19 corridor; remove and replace a collapsed gravity sewer main segment adjacent to the master lift station; July 31, 2017; $230,000. Exhibit PCF-19 Mid-County US 19 FM Relocation & GSM Rehab.

20. Pennbrooke WTP Electrical Improvements: Design, obtain permits and construct electrical improvements to meet current NEC requirements including: upsizing the main feeder to 300 amps; installing VFD units on three high service pumps and two well pumps; constructing a climate controlled room to house the new electrical equipment; removing the existing electric service, control panel and feeder; upgrading the electric service to the emergency generator; and replacing the lighting in the pump room; December 31, 2017; $270,000. Exhibit PCF-20 Pennbrooke WTP Electrical Improvements (will be submitted within 90 days of filing).

21. Sandalhaven – Placida Road Utility Relocation: Design, obtain permits, and relocate sewer force main facilities in coordination with Charlotte County's planned road and drainage improvement project on Placida Road (CR 775); December 2017; $250,000. Exhibit PCF-21 SH Placida Road Utility Relocation.

22. Sanlando – Autumn Drive WM Replacement: Replace 900 LF of 6-inch thin wall PVC water main, associated isolation valves and water services in The Springs subdivision after experiencing three pipe failures within eight months on that street, each of which caused significant property damage to certain residents as well as temporary loss of service to approximately 45 customers; October 1, 2016; $98,970. Exhibit PCF-22 SUC Autumn Drive WM Replacement.

23. Sanlando – Lift Station RTU Installation: Design, purchase and install Remote Telemetry Units (RTUs) at 55 lift stations in order to add those facilities to the existing Wekiva Plant SCADA system and thereby reduce the risk of sanitary sewer overflows or sewer backups; December 31, 2017; engineering services of $26,200 plus an engineering estimate of $327,000 for a total of $353,200. Exhibit PCF-23 SUC Sanlando LS RTUs.

24. Sanlando – Markham Wood Utility Relocates: Relocate water mains and valves in advance of a Seminole County road improvement project at the intersection of Markham Woods Drive and SR 434; July 31, 2016; $65,900. Exhibit PCF-24 SUC Markham Woods Rd. WM Relocates.

25. Sanlando – Myrtle Lake Hills Water Mains: Design, obtain permits and construct water facilities to serve as many as 116 homes in Myrtle Lake Hills subdivision whose current homeowners are experiencing failing private wells and inferior water quality. The net project cost of approximately $700,000 will be reduced by main extension and plant capacity charges collected from the future customers when they request service and are connected to the new facilities; October 31, 2016; $695,450. Exhibit PCF-25 SUC Myrtle Lake Hills WM.

26. Sanlando –Inflow & Infiltration Study and Remediation, Phase 2: Clean and video inspect 84,000 LF of gravity sewer main to identify the locations of significant deficiencies in the collection system in order to reduce the base influent flow to the Wekiva Hunt Club WWTP, $152,500, completed on July 1, 2016. The deficiencies will then be remedied using various technologies at a cost of $1,573,884, for a total of $1,726,384. Exhibit PCF-26 SUC I&I Study and Remediation, Ph. 2.

27. Sanlando – Shadow Hills Flow Diversion: Design, obtain permits and construct facilities that will allow flow to be diverted from the Shadow Hills WWTP to the Wekiva WWTP including construction of: an 800,000-gallon equalization tank and re-pumping station at the Des Pinar site; 4-inch, 6-inch, 8-inch, and 12-inch force main improvements that will address hydraulic

bottlenecks; demolition of the Shadow Hills WWTP; and upgrades and downgrades to multiple lift stations to optimize pumping capacity so as to prevent sanitary sewer overflows. The project will also include the construction of a field office and an equipment storage shed at the Des Pinar Plant site that will replace buildings that are undersized, inadequate to support the current workforce, and at the end of their service life; December 31, 2017; $260,423 for engineering services plus an engineering estimate of $3,983,000 to construct the facilities for a total of $4,243,423. Exhibit PCF-27 SUC Shadow Hills Diversion.

28. Sanlando – Wekiva WWTP Blower Replacement: Design, purchase and install process blower equipment to replace three (3) each 200-Hp blower-motor assemblies to improve plant performance and maximize the production of reclaimed water; October 2017; $600,000. Exhibit PCF-28 SUC Wekiva Blower Replacement (to be submitted 90 days after filing).

29. Sanlando – Well 2A and Lift Station A-1 Electrical Improvements & Generator Install: Design and install an emergency generator sized and configured to provide backup power to Des Pinar Well 2A and Lift Station A-1 during power outages so as to avoid sanitary sewer overflows or low water pressure. The electrical equipment will be improved to meet NEC specifications; December 31, 2016; $343,437. Exhibit PCF-29 SUC Well 2A & LS A1 Electrical Improvements.

30. Sanlando – Wekiva WWTP Rehabilitation: Remove accumulated grit and debris from each of three treatment trains; replace two clarifier gear drives; replace air diffusers, drop pipe, skimmer arm, and air lift assemblies in each treatment train; replace scum troughs splash plates and guard rails; remove and replace corroded steel structures and beams to restore structural integrity; replace lighting, catwalks and toe plates. Sandblast interior surfaces and coat each train with a durable, corrosion resistant painting system; June 30, 2017; $1,803,000. Exhibit PCF-30 SUC Wekiva WWTP Rehab.

31. Tierra Verde - 401 8th Avenue Gravity Sewer Main Replacement, Phase 2: Excavate, remove

and replace 40 LF of collapsed 8-inch vitreous clay sewer main in the road right-of-way of 8th Avenue to reduce groundwater infiltration and reduce the risk of a sanitary sewer overflows caused by sewer backups; March 8, 2016; $84,673. Exhibit PCF-31 TV 401 8th Street GSM Replacement.

32. UIF – WM Replacements, Orange Co: Design, obtain permits, remove and replace asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Crescent Heights water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, generate excessive water loss, require frequent repairs and generally degrade customer service; March 31, 2017; $1,806,000. Exhibit PCF-33 UIF Crescent Heights WM Replacement.

33. UIF – WM Replacements, Pasco Co: Design, obtain permits, remove and replace 2-inch, 4-inch and 6-inch asbestos cement and galvanized iron water mains, hydrants, service laterals and isolation valves in the Orangewood and Buena Vista water systems that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, generate excessive water loss, require frequent repairs and generally degrade customer service; December 31, 2016; $1,200,000. Exhibit PCF-33 UIF-Buena Vista/Orangewood WM Replacement (to be filed within 60 days of filing).

34. UIF – Summertree Well Abandonment: After placing an interconnection with Pasco County Utilities into service, abandon the four existing water supply wells in conformance with SWFWMD specifications net of any SWFWMD grant money; remove all tanks, pumps, generators, electrical equipment, buildings, fencing and other improvements from each site; $200,000. Exhibit PCF-34 UIF Summertree Well Abandonment (to be filed within 60 days of filing).

35. UIF – WM Replacements, Pinellas Co: Design, obtain permits, remove and replace 2-inch, 4-inch and 6-inch asbestos cement water mains, hydrants, service laterals, and isolation

valves in the Lake Tarpon water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, generate excessive water loss, require frequent repairs, and generally degrade customer service; March 31, 2017; $800,000. Exhibit PCF-35 Lake Tarpon WM Replacement.

36. UIF – Electrical improvements at Little Wekiva and Jansen WTPs: Remove and replace 50-year old electrical controls and equipment to meet current NEC specifications. Install RTUs at eight (8) WTP locations in order to add these sites to the existing Wekiva Plant SCADA system; provide engineering services to design and permit improvements; September 15, 2016; $323,000. Exhibit PCF-36 UIF Electrical Improvements at Little Wekiva & Jansen WTP's.

37. UIF – Eng-Seminole & Orange County WM Replacements: Design and obtain FDEP construction permits before replacing asbestos cement and galvanized iron water mains, service laterals, and isolation valves in those water systems located in Seminole and Orange County that have reached the end of their service life, experience loss of pressure due to tuberculated pipe, and degrade customer service; September 15, 2016; $57,000. Exhibit PCF-37 UIF Eng WM Replacements.

38. UIF – Bear Lake WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Bear Lake water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, and degrade customer service; March 31, 2017; $1,485,270. PCF-38 UIF Bear Lake WM Replacement.

39. UIF – Crystal Lake WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Crystal Lake water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, and degrade customer service; June 30, 2017; $1,585,933.

Exhibit PCF-39 UIF Crystal Lake WM Replacement.

40. UIF – Little Wekiva WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Little Wekiva water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, and degrade customer service; June 30, 2017; $521,681. Exhibit PCF-40 UIF Little Wekiva WM Replacement.

41. UIF – Northwestern FM Replacement: Design, permit, replace, remove and relocate 2,500 LF of 10-inch asbestos cement pipe that has reached the end of its service life; December 31, 2016; $120,000. Exhibit PCF-41 UIF Northwestern FM Relocation.

42. UIF – Oakland Shores WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Oakland Shores water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, and degrade customer service; September 30, 2017; $1,571,701. Exhibit PCF-42 UIF Oakland Shores WM Replacement.

43. UIF – Phillips WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Phillips water system that have reached the end of their service life, generate loss of pressure due to tuberculated pipe, and degrade customer service; design and construct a water main extension between Crystal Lake and Phillips water system to improve reliability of service; September 30, 2017; $1,188,247. Exhibit PCF-43 UIF Phillips WM Replacement.

44. UIF – Ravenna Park WM Replacement: Design, obtain permits, remove and replace the asbestos cement and galvanized iron water mains, service laterals, and isolation valves in the Ravenna Park water system that have reached the end of their service life, cause loss of pressure due to tuberculated pipe, and degrade customer service; March 31, 2017; $2,160,808. Exhibit PCF-44 UIF Ravenna Park WM Replacement.

45. UIF – Ravenna Park/Crystal Lake Interconnect and WTP Improvements: Interconnect the Ravenna Park and Crystal Lake distribution systems following the failure of the Crystal Lake well; replace the cascade aerator and ground storage tank at Ravenna Park; and construct an emergency interconnection with the City of Sanford to minimize water outages; September 15, 2016; $646,000. Exhibit PCF-45 UIF Ravenna Park/Crystal Lake Interconnection.

46. C4500 Kodiak Truck Upgrade: Modify an existing 10-year old service truck by removing the existing service body, its Venturo Model 12 crane, pipe rack and welding unit; install a properly sized and configured utility body, a Venturo Model 25 crane with 20-foot boom extension and 25,000 ft-lb moment rating, twin outriggers, work lights, safety strobe lights, rooftop beacon, power inverter, and 120V outlet; reinstall welding unit; $44,000; September 30, 2016. Exhibits: Knapheide Invoice #1; Knapheide Quote.

47. UIF Global - GIS Mapping Services: Develop a standard asset database template and a record drawing specification that will be applied to all Florida systems and asset types; convert all linear water and sewer assets and system maps to a uniform GIS mapping system format; provide quality control of data throughout the conversion to GIS; June 30, 2017; $350,000. Exhibits: UIF GIS Mapping Proposal Kimley-Horn Task 1; UIF GIS Mapping Proposal Kimley-Horn Task 2; UIF GIS Mapping Services Kimley-Horn Invoices; UIF GIS Mapping Services.

Q. Were these Exhibits prepared by you and your staff under your supervision and control?

A. Yes they were.

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Q. Does that conclude your direct testimony?

A. Yes, it does.