PGS Interviews 12-12-19

**General Discussion**
Calculate depreciation rates at 12/31/ 2020 – maybe YE 2021. They have additions, retirements, etc. to help roll-forward. Most of the changes will be in new additions. We will have to model retirements – some are obvious, some may need to use curves to model. 60/65% plastic on system (mains and services).

Software is out of scope.

Tampa Electric uses VGA. Moved to VGA for PGS in the last study.

They are about to add their first compressor station – need rate.

Cast iron/bare steel/Adel-A – The CI/BS program started ramping up in 2017 and Aldyl-A (Problematic Plastic Pipe or PPP) later.

**Detailed Account Discussion** – Mike Farmer, DW

Rick Wall was supposed to meet at 1:00 on 9/9 – he didn’t call in.

**Account 375 – Structures**
At some of the city gates, there are small structures - more like awnings or sheds. There are a few small buildings (maybe 3-4) at some of the larger city gates. There are security fences around most gates. They are adding cameras at city gates. Look at what is in the account and where the cameras are.

**Account 376 – Steel Mains Shana Rini, Stephen Pinkowski (mains and services)**All steel are coated and wrapped and have replaced most of the cast iron/bare steel. They have an aggressive CP protection program. CI/BS replacement program started ramping up in 2012. They were replacing CI/BS (which are from 30’s through 60’s). Would expect the short-term life to be longer due to those retirements. The cathodic protection and AC mitigation is getting better in some pipe. Capacity is driving steel retirements (originally built in a less “gas demanding” world). Steel program pipe is old when retired and is, if anything, lengthening the life seen in the analysis as compared to the plastic. Steel is affected by more forces of retirement than plastic. Some steel has not been cathodically protected for its full life. If plastic is scratched, it won’t corrode but steel will.
Mains Removal Cost (same for steel and plastic) - All charges go to one work order. Split within the system. There is a default split (ranges from 80/20 to 95/5) depending on the type of project. Project set up requires looking at default percentages. Addition and removal activity are separately estimated and the percentage is used to allocate costs. Most mains replacement (and nearly all capital projects). The CI/BS replacement are replacing the oldest vintages on the system and creating a more negative NS than would likely be expected on an ongoing (non-program) basis.  Operationally, there is no driver that would change the life from that currently approved.

**Account 37602 – Plastic Mains Shana Rini Stephen Pinkowski**
PPP (Problematic Plastic Pipe) program started ramping up around 2017. The retirements would be focusing on pre-1984 pipe. Outside of the PPP, there is little retirement in plastic (relocations and dig ins are drivers). The newer polyethylene pipe is likely to last 75 years. Aldyl-A was produced up to 1983.
RC - Same RC thought for plastic mains as with steel mains (with the retirement vintages being prior to 1984). Operationally, there is no driver other than PPP that would change the life from that currently approved.

**Account 377 – Compression Station Equipment**
This is a new account. There is a new compressor station that has only been in service 1 year (around April 2021). 2 reciprocating engines. 3900 HP, medium speed. They are not running much yet but will run more as load increases. They will provide run time, warranty, life expectations. Etc. 35 years seems reasonable at this point.

**Account 378 – M&R Station – General**
They would expect a shorter life for DRS than for City Gates. They are more likely to be relocated and changed due to capacity needs than the gates. The existing 31 years seems short operationally. DRS are on the side of the road in many cases. They are in the process of reviewing all of the DRS and will be replacing or upgrading many of the DRS over the next few years. There were a number that were retired when moving away from low pressure areas. There are no low pressure systems left. Moving to the analysis life of 40 years is reasonable.

**Account 379 – M&R Station – City Gate**
City gate is defined by being a take point from a transmission system. They have been in the process over the last few years of aggressively rebuilding and upgrading technology in city gates. Many of the original gates are 50 years old or more (with possible some upgraded). They are starting to build new city gates and are doing more capital improvements than in the past. They would expect a longer life from a city gate than from a DRS. There are over 90 city gates. There is not typically any major change in gates after they are installed (maybe heaters, orifice to ultrasonic meters, increasing the size of regulators, etc) – except for when they are upgraded. YZ Odorizers may last 30 to 40 years and are the sole type of odorizers at the gates. Newer heaters may last 30 years or more. Regulators may last 30 years or more if well maintained. Most of the assets are in the site and pipe which may last as long as steel mains. Newer stations are expected to last longer than older ones. Buried piping is cathodically protected and improved above ground atmospheric protection programs. 50 years seems reasonable from an operational perspective.

**Account 380 – Steel Services – Shana Rini, Steve Pinkowski)**Service replacements are done under a work order blanket. The exceptions are bare steel and early generation plastic. At some point when a premise is vacant, the service must be disconnected.
 RC – all replacements of services are charged 100% to new asset – only retirement-only projects are charged to RC. In bare steel/cast iron/Aldyl-A replacements, there is a component of RC. Default for these projects is 95/5. The RC since 2013 is not representative since normal replacements do not charge RC but the CI/BS/PPP does – treat as an outlier. Operationally, there is no driver that would change the life from that currently approved.

**Account 38002 – Plastic Services**
PPP program started retiring in around 2017 and the asset ages would be around 50 years old. When steel mains are replaced, if there is a plastic service, they will replace. The PPP program and the BS/CI programs are artificially depressing the life. DW – suggest leaving at existing life. Operationally, there is no driver other than PPP that would change the life from that currently approved.
RC – See discussion for steel services

**Account 381 – Meters - Steve**
ERTS are booked with meters. All meters have ERTS. Every meter that is removed from a premise is retired. If the premise is vacant for 2 years, the meter is required to be pulled (and retired). Typically, when the ERT fails, the meter will be pulled (and retired).The ERTS may last up to 20 years (heat is hard on batteries).

 **Account 382 – Meter Installations - Steve**The retrofitting of the meters to install ERTs are booked in this account. Not sure if the ERT indexes are booked here. When a meter is replaced, there is no retirement of installation cost or capitalization of the new installation cost. Only when a “failed family” event happens will there be a retirement of installation and capitalization of new installation. If the meter loop is replaced or abandoned, a retirement will be triggered in this account. For every meter set retirement, they will retire 1 unit cost (FIFO) of meter installation and regulator installation. They would not necessarily replace the meter set when the meter is replaced.
RC – 2015 had a large jump.

**Account 383 – Regulators -**
They have been installing premanufactured meter sets for the last 8-10 years. Each quarter, operations sends a count of the stand-alone regulators being removed from the meter sets. They are retired under FIFO. 42 years seems long to SMEs however, the FIFO retirement may make the $ retirements are older than operationally. DW – relook and see if there is a good, slightly shorter life.

**Account 384 – Regulator Installations**
The installation cost for the meter set is split between meter installation and regulator installation (75/25). For every meter set retirement, they will retire 1 unit cost (FIFO) of meter installation and regulator installation. This account should be fairly close in life to the meter installation account.
 RC – 2015 had a large jump.

**Account 385 – Industrial M&R**Meters for these stations are in the meter account. This consists of all other assets serving the customer. They would be more parallel to a DRS than to a city gate. The environment where the industrial M&R stations are set is harsher than most DRS and they would have a slightly shorter life than the DRS. 37 years is reasonable operationally.

**Account 387 – Other**
No discussion

**9/19/2022**

**Liquified Natural Gas (LNG) – Monte Patrick**
Blue Marlin – was system reliability project. Storage and vaporization project. Now planning for a trailer and vaporizer for summer needs. Vaporization equipment is expected to last 20 years and tanks are expected to last 40 years. Also, some connecting pipe to connect to trailer and vaporization (in other accounts). In Fort Meyers, there is a winter peak. They will move Blue Marlin trailers and vaporizer to Ft. Meyers in the winter. Most of the cost will be land cost. Same principle as Blue Marlin.

**Renewable Natural Gas (RNG) – Patrick Monte, Travis Payne, Phil Beauchamp, Rosemary Barbour, Sean**
There 3 RNG projects. They are currently building pipelines for 2. 1 New River – Building interconnect, third party will own. Should be in service by beginning of 2023. 2 Chevron/Brightmark – 2 interconnections to dairy farm. Company will buy from 3rd party. 3rd party will pay for use. 15 year contract for Chevron to lease. Will be booked in leased assets accounts. They will provide information on the lease terms. There is a buy out clause at the end of 15 years at a nominal amount. The project needs to be depreciated over 15 years with no NS. 3 Alliance Dairy – online mid December. PGS will own and operate. 24 year project life based on contract with the dairy (need to see if any extension clauses). TECO Clean Advantage will likely get involved. It might be similar to the Chevron contract – they will let us know when resolved. There may be interim capital that will be the responsibility of the company to replace for Alliance. For alliance, there is a placeholder for replacements at year 10. They will likely be O&M. The other two have the responsibility for the replacements on the 3rd party.

**General Plant - Depreciated**

**Account 390 – Structures**
No retirement since 2005. Only $28K in investment. All buildings are booked in Account 375. HQ building is owned by TECO and rented.

**Account 391 – Office Furniture (15 current)**as

**Account 391.01 – Computer Equipment (8 current)**as

**Account 391.02 – Office Equipment (15 current)**
as

**Account 392 – Transportation**
392.01 – Vehicles under ½ ton – 8 current – 9 -
392.02 – Vehicles ½ to 1 ton – 7 current – 10 -
392.04 – Trailers – 20 current – 27 -
392.05 – Vehicles over 1 ton – 12 current – 13 -

**Account 393 – Stores Equipment (15 current)**
as

**Account 394 – Tools, Shop and Garage Equipment (25 current) - 18**
as

**Account 394.01 – CNG Station Equipment (20 current) - Monte**
Cunningham can speak to.

**Account 395 – Laboratory Equipment (20 current)**
as

**Account 396 – Power Operated Equipment (15 current) – 18 – Mark Cunningham (may talk about CGates too)**There are a couple CNG trailers.
as

**Account 397 – Communications Equipment (12 current)**
as

**Account 398 – Other (15 current)**
as

General Plant – VGA should be proposed