equitrans Midstream

SECTION I - INTERCONNECT EQUIPMENT CHECKLIST -By Producer & Verified by EQM personnel

SITE NAME, LOCATION, MID# : _____

DATE: _____ **Completed By (Name & Co.)** _____

Y	N	N/A	DESCRIPTION
			TESTS AND REPORTS
			Test Reports - Fabricator Shop - Hydro/Air Pressure test documents and X-Ray reports
			Test Reports -Field Welding - Hydro/Air Pressure test documents and X-Ray reports
			Meter Micrometer Sheet / Accuracy Test Reports - Orifice, USM, Turbine or Rotary
			Mechanical Connections (Documentation of bolt torque and leak checks)
			GENERAL
			ANSI Rating - Flanges & Valves (Note: Manuf. and model)
			Equipment Tags - Verify proper working pressure, electric classification & equipment is on the Approved List
			Confirm Required Distances
			Class 1 / Div 2 - see hazardous area drawing for distances
			Pipeline to edge of R/W
			GC Building to meter set (min. 15 feet)
			Check Valve - downstream of M&R set
			Filter/Separator (F/S) or Liquid Level Shut-off(LI Type: _____ Size: _____
			METER & REGULATION
			Orifice Plate - Pull and check/confirm size
			Extra plates available ? (Producer to provide)
			Meter Size & Bypass: Tube Information Manufacturer: _____ S/N: _____
			OPP, Pressure Control & Flow Control
			Monitor Type: _____ S/N: _____
			Controller Type: _____ Range: _____
			Primary (Pressure) Type: _____ S/N: _____
			Controller Type: _____ Range: _____
			Primary (Flow Control) Type: _____ S/N: _____
			Controller Type: _____ Range: _____
			Instrument Supply System lines- Separate lines to TOL's & upstream or regs
			Locations of sensing lines taps downstream - 10D downstream of regs, sloped & separate lines
			Remote set point - Automatic shut-in for gas quality per Equitrans tariff.
			GAS QUALITY MONITORING EQUIPMENT
			Initial gas sample analysis approved ?
			Gas Chromatograph or Continuous Sampler Type: _____ S/N: _____
			Sample System Pony ☐ Mustang ☐ Other _____
			Heat traced sample tubing
			GC tap location (per drawing ?)
			GC - Calibration Gas
			GC - Zero Grade Helium
			Moisture Analyzer Type: _____ S/N: _____
			H2S Analyzer Type: _____ S/N: _____
			O2 Analyzer Type: _____ S/N: _____
			FACILITIES, INSTRUMENTATION & TELECOMMUNICATION
			FC / RTU Manufacturer: _____ S/N: _____ Battery Size: _____
			Communications Type: _____ Provider/Phone#: _____
			ELECTRICAL / CORROSION
			Conduit - Separate conduit for data, AC power & DC power
			Conduit - Sealed
			AC Power - Inspection sticker Source: _____ Sticker/Pole#: _____
			Isolation flange kits - per drawing of site
			Corrosion Coupon TOL's - 3/4" min. at top and bottom of pipe
			STATION LOT AND ACCESS
			Building / Enclosure (Per drawings)
			Access road
			Site is at final grade (gravel to top of skid I-beam)
			Fence and Signage complete
			Meter Site Agreement - Access for EQM?

last modified PJRyan

SECTION 2 - FINAL COMMISSIONING CHECKLIST BY EQM PERSONNEL

DATE: _____ **Completed By (Name & Co.)** _____

Y	N	N/A	DESCRIPTION	COMMENTS
FACILITY START- UP				
			Verify all items in SECTION 1 of this checklist	
			Verify all piping and equipment has been purged. (>95% Gas in Air)	
			Leak test all flanges, tubing & threaded connections after pressurization is complete.	
			Verify correct size and press. rating of pressure control and over-pressure protection (OPP) equip. and transmitters.	
			Calibrated & test all pressure control and OPP equipment and transmitters & verify correct signal to RTU.	
			Have pressure control & OPP set points been provided by engineering and/or pipeline operations? Comment by whom.	
			Adjust Press control and OPP equipment to specified set points.	
			Locking valves have been installed on all sensing & supply lines associated with OPP equipment.	
			All sensing & supply lines to OPP equipment have been locked in position with "Company" locks.	
RTU CONFIGURATION / TRANSMITTER CALIBRATIONS				
			Verify that RTU and Transmitter installation is complete.	
			Calibrate Transmitters and RTU	
			Verify proper sizing of solar panel, thermal electric generator and batteries for required polling frequency (as applicable).	
			Verify correct static pressure & D/P range of RTU.	
			Verify correct K factor configured in RTU (if applicable).	
			Verify the correct pipe diameter & orifice size is entered in the RTU.	
			Verify RTU has been configured to read in gauge pressure (psig)	
			Verify that RTU manifold valves are in the correct position.	
			Gas quality data has been properly entered in the RTU?	
			RTU is configured to auto shut-in if gas quality not per Contract.	
GAS QUALITY				
			Verify initial gas sample.	
			Take a moisture sample after gas flow has been established.	
			Verify all gas quality monitoring equipment is activated, calibrated and configured properly, including auto-cal frequency.	
SCADA/COMMUNICATIONS/FINAL TIL				
			Verify that communication equipment has been configured properly.	
			Verify communication with the RTU from CYGNET/SCADA host.	
			Confirm SCADA has appropriate data points mapped.	
			Complete final TIL	
TAKE PHOTOS OF:				
			Pipeline Tap/Valve and M&R lot	
			Meter and Regulator Skid	
			GC Equip and Build/Enclosure	
			Other	