Dublin Medium and Low Voltage Drives PM Service

FIXED PRICE PROPOSAL

City of Columbus Dublin Rd
Columbus, OH

30556678.1
July 07, 2025

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Contents

1 Rockwell Automation Statement of Work[1]

This Rockwell Automation Medium Voltage ("MV") and Low Voltage ("LV") PowerFlex Drives Preventative Maintenance Services proposal is offered to McNaughton-McKay Electric Company for resale to City of Columbus Dublin Rd ("Customer").

1.1 Dublin Medium and Low Voltage Drives PM Service Solution Statement of Work Summary

Medium Voltage Drives

Rockwell Automation Medium Voltage Variable Frequency Drive Preventative Maintenance Services are designed to help optimize the performance of your automation assets. These services, based on Rockwell Automation's 20-year service maintenance schedule, include a standardized series of inspections to verify that your Variable Frequency Drive is operating to specifications and to maximize its availability, reliability, and efficiency.

Low Voltage Drives

This Rockwell Automation Preventative Maintenance Agreement includes scheduled maintenance in accordance with the manufacturing specifications for each of the LV drives identified in the list of equipment to be serviced. This schedule is a practical implementation of the LV Drives Preventative Maintenance schedule with the objective of reducing downtime and risk associated with the operation and maintenance of these drives.

1.1.1 Basis for Statement of Work

The following details the information used as a basis for this Statement of Work.

- Request from City of Columbus Dublin Rd to Rockwell Automation.
- Reference documents: Electrical and Dimensional Drawing of MV Drives: 7011940, 6502468270 & 6503724889

1.1.2 Solution Description

- Year – thirteen (13) PM Services for two (2) MV VFDs. [7011940]
  - This proposal will provide all required hardware for Years 1 - 13 as per "Figure 1: 20 Year Service Maintenance Schedule".
- Year – nine (9) PM Services for two (2) MV VFDs. [6502468270]
  - This proposal will provide all required hardware for Years 1 - 9 as per "Figure 1: 20 Year Service Maintenance Schedule".
- Year – eight (8) PM Services for two (2) MV VFDs. [6503724889]
  - This proposal will provide all required hardware for Years 1 - 8 as per "Figure 1: 20 Year Service Maintenance Schedule".
- Year – five (5) PM Services for two (2) LV PF755 VFDs and three (3) PF700 VFDs.

Qty	Model	Order Number	Rating	Age
1	**PowerFlex 7000 – Air Cooled Frame A**	**7011940-002-11**	**350HP, 4160V**	**13 years**
1	**PowerFlex 7000 – Air Cooled Frame A**	**7011940-014-11**	**350HP, 4160V**	**13 years**
1	**PowerFlex 7000 – Air Cooled Frame A**	**6502468270-101**	**900HP, 4160V**	**9 years**
1	**PowerFlex 7000 – Air Cooled Frame A**	**6502468270-201**	**900HP, 4160V**	**9 years**
1	**PowerFlex 7000 – Air Cooled Frame A**	**6503724889-101**	**900HP, 4160V**	**8 years**

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Qty	Model	Order Number	Rating	Age
1	**PowerFlex 7000 – Air Cooled Frame A**	**6503724889-201**	**900HP, 4160V**	**8 years**
1	**PowerFlex 755 – Frame 7**	**64196895**	**250HP**	**5 years**
1	**PowerFlex 755 – Frame 7**	**51602632**	**250HP**	**5 years**
1	**PowerFlex 700 – Frame 3**	**43123612**	**40HP**	**5 years**
1	**PowerFlex 700 – Frame 3**	**42795152**	**40HP**	**5 years**
1	**PowerFlex 700 – Frame 5**	**43672799**	**75HP**	**5 years**

This Statement of Work includes PM Services for the MV and LV VFDs as listed above:

- **[7011940-002-11 & 7011940-014-11] [Year thirteen (13)]**
  - Duration of this activity is up to seven (7) consecutive days per VFD, that is total fourteen (14) days for two (2) VFDs.
  - Monday through Sunday between the hours of 7:00 a.m. and 6.00 p.m. local time (excluding Rockwell Automation observed holidays), up to ten (10) hours per day.
- **[6502468270-101 & 6502468270-201] [Year nine (9)]**
  - Duration of this activity is up to four and a half day (4.5) consecutive standard days per VFD, that is total nine (9) days for two (2) VFDs.
  - Monday through Friday between the hours of 7:00 a.m. and 6.00 p.m. local time (excluding Rockwell Automation observed holidays), up to ten (10) hours per day.
- **[6503724889-101 & 6503724889-201] [Year eight (8)]**
  - Duration of this activity is up to four and a half day (4.5) consecutive standard days per VFD, that is total nine (9) days for two (2) VFDs.
  - Monday through Friday between the hours of 7:00 a.m. and 6.00 p.m. local time (excluding Rockwell Automation observed holidays), up to ten (10) hours per day.
- **[Two (2) PF755 250 HP, two (2) PF700 40HP & one (1) PF700 75HP]: [Year five (5)]**
  - Duration of this activity is up to two (2) consecutive standard days.
  - Monday through Friday between the hours of 7:00 a.m. and 6.00 p.m. local time (excluding Rockwell Automation observed holidays), up to eight (8) hours per day.
- **General**
  - Travel and expenses based on portal-to-portal travel from Rockwell Office to the customer site.
  - Should extra time be required, this will be addressed via the Documented Change Request (DCR) process.

1.1.2.1 Equipment.

The following equipment is included in this Statement of Work.

Medium Voltage

Part Number	Description	7011940-002-11 7000A	7011940-014-11 7000A	6502468270-101	6502468270-201	6503724889-101	6503724889-201	Preventative Maintenance Category
80026-446-02-R	Washable Door Filter 53.5 x 76.95 CM	2	2	2	2	2	2	**Health Check** [Annually]
81001-717-01-R	Fiberglass Filter 432X795 MM	2	2	2	2	2	2	
346567-Q01-R	Coin Battery 3V 300MA 23MM	1	1	1	1	1	1	
1606-XLP30E	AC/DC DIN MOUNTED POWER SUPPLY	1	1	1	1	-	-	**Power Supplies** [Years 5,10,15,20]
22610-101-02-R	PKG-SK ROTRON FAN 115V W/LEADS	1	1	1	1	1	1	
22610-103-01-R	FAN MR2B3 SPARE PART	1	1	-	-	-	-	
80026-044-06-R	Power Supply IGCT Up to 6600V	4	4	2	2	2	2	
80026-518-01-R	Absopulse Power Supply DC To DC	1	1	-	-	-	-	
PN-457450	AC/DC Power Supply Cosel 1000W	1	1	-	-	-	-	
80026-420-62-R	Powerware 9130 Battery Assembly	1	1	-	-	-	-	
80190-800-01-R	SPSB PKGD CUSTR ASSY, CONF COAT	-	-	12	12	12	12	
1606-XLP72E	Power Supply XLP 72 W Power Supply	-	-	-	-	1	1	
PN-457451	AC/DC Power Sup, Chass,85/264Vi,60V,600W	-	-	1	1	1	1	
80026-964-01-R	FAN/WEG MOTOR,230/460V,60HZ	2	2	-	-	-	-	**Main Cooling Fan** [Years 7,14]
PN-239330	ZIEHL-AGEGG FAN, #163403_UL	-	-	-	-	2	2	
PN-321103	Fan, 380-480V, 3 ph, 50/60 Hz 2300 RPM	-	-	2	2	-	-	
80026-508-05-R	ASC SNUBBER CAPACITOR, 0.2 UF	24	24					**Snubber Capacitors** [Year 10,20]
81004-286-52-R	400A SGCT ASSY	12	12					**Power Devices** [Replace year 12]
80159-701-51-R	ELECTRICAL JOINT COMPOUND TUBE 225G	12	12					

Low voltage

Part Number	Description	PowerFlex 755 – Frame 7	PowerFlex 700 – Frame 5	PowerFlex 700 – Frame 3	Preventative Maintenance Category
SK-R9-FAN11-F7A	PF750 Series, Type 1 Heatsink Fan Kit, Frame 7	2	-	-	**Fans** [Years 5,10,15,20]
SK-R9-FAN2-F7	PF750 Series, Internal Fan Kit, Frame 7	2	-	-	
SK-G9-FAN2-F23	Internal Fan	-	-	2	
SK-G9-FAN1-F3	Heatsink Fan	-	-	2	
SK-G9-FAN2-F5	Heatsink Fan, IP20 NEMA Type 1	-	1	-	

1.1.2.2 Medium Voltage Preventative Maintenance Scope of Supply

Physical Checks

- Record/Validate Drive, Motor and Feedback Device Nameplate Information
- Examine environment in which drive is installed (clean, ambient temperature – visual) and record.
- Inspect input/output/bypass contactor sections.
- Inspect all associated drive components for loose power cable connections and ground cable connections.
- Torque all loose cables to the required torque specifications.
- Inspect the bus bars and check for any signs of overheating / discoloration and tighten the bus connections to the required torque specifications.
- Clean all cables and bus bars that exhibit dust build-up.
- Use torque sealer on all connections.
- Carry out the integrity checks on the signal ground and safety grounds.
- Check for any visual/physical evidence of damage and/or degradation of components in the low voltage compartments. This includes Relays, Contactors, Timers, Terminal connectors, Circuit breakers, Ribbon cables, Control Wires, etc.; causes could be corrosion, excessive temperature, or contamination.
- Clean all contaminated components using a vacuum cleaner and wipe clean components where appropriate.
- Check for any visual/physical evidence of damage and/or degradation of components in the medium voltage compartments (inverter/rectifier, cabling, DC Link, contactor, load break, harmonic filter, etc.). This includes main cooling fan, power devices, heat sinks, circuit boards, insulators, cables, capacitors, resistors, current transformers, potential transformers, fuses, wiring, etc.; Causes could be corrosion, excessive temperature, or contamination.
- Carry out the physical inspection and verification of the proper operation of the contactor/isolator interlocks, key interlocks, and door interlocks.
- Physical verification of the additional cooling fans mounted in the AC Line Reactor cabinet; check the Harmonic Filter cabinet for mounting and connections.
- Clean the fans and ensure that the ventilation passages are not blocked, and the impellers are freely rotating without any obstruction.
- Carry out the insulation meggering of the drive, motor, isolation Megger the drive, motor, isolation transformer/line reactor, and the associated cabling.
- Check clamp head indicator washers for proper clamp pressure and adjust as necessary.
- Check resistors and capacitors for all snubber resistors, sharing resistors and snubber capacitors.

Control Power Checks

- Apply 3 Phase Control power to the drive, and test power to all of the vacuum contactors (input, output, and bypass) in the system, verifying all contactors can close and seal.
- Verify all single-phase cooling fans for operation.
- This includes the cooling fans in the AC/DC Power supplies and the DC/DC converter
- Verify the proper voltage levels at the CPT (if installed), AC/DC Power Supplies, DC/DC converter, isolated gate power supply boards.
- Verify the proper gate pulse patterns using Gate Test Operating Mode
- If there have been any changes to the system during the outage, place the drive in System Test Operating Mode and verify all functional changes

Final Power Checks before Restarting

- Put all equipment in the normal operating mode, and apply medium voltage
- If there were any changes to the motor, input transformer, or associated cabling, retune the drive to the new configuration using auto tuning
- Save all parameter changes (if any) to NVRAM
- Run the application up to full speed/full load

- Capture the drive variables while running, in the highest access level if possible

Consultation and Remediation

- Review Maintenance and Operator Logs
- Informal Instruct on drive operation and maintenance
- Reminder of safety practices and interlocks on MV equipment, and on specific operating concerns
- Reminder of the need to properly identify operating conditions
- Review installed equipment revisions and compare against any known Product Service Advisories
- Make recommendations on needed critical spares stocking
- Perform Maintenance & Record

1.1.2.3 Medium Voltage Service Maintenance Schedule

MV VFD Preventative Maintenance includes a visual inspection of all drive components visible from the front of the unit, power component resistance checks, power supply voltage level checks, tightness checks for all accessible power connections, general cleaning, and maintenance.
The 20-year service maintenance schedule of a MV VFD is shown below.

Rockwell Automation Medium Voltage VFD Preventative Maintenance Schedule																						
	Interval Periods (In Years)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Air-Cooling System	Door Mounted Air Filters	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
	Main Cooling Fan Motor	-	I	I	I	I	I	I	RFB/R	I	I	I	I	I	I	RFB/R	I	I	I	I	I	I
	Redundant Cooling Fan Moto (if supplied)	-	I	I	I	I	I	I	RFB/R	I	I	I	I	I	I	RFB/R	I	I	I	I	I	I
	Small Aux. Cooling Fans "Caravel"	-	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	I
Liquid-Cooling System	Mesh Filters	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
	De-ionizing Filter Cartridge	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	All Fittings / Connections / Hose Clamps	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Redundant Cooling Pump Motor / Pumps	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Redundant Cooling Pump Motor Seals	-	I	I	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	I	I	R
	Thermostatic Valve Element	-	I	I	I	I	I	I	R	I	I	I	I	I	I	R	I	I	I	I	I	I
Power Switching Components	Power Devices (SCGTs / SCRs)	-	I	I	I	I	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	I
	Snubber Resistors / Sharing Resistors / HECS	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Rectifier Snubber Capacitors	-	I	I	I	I	I	I	I	I	I	Rv/R	I	I	I	I	I	I	I	I	I	Rv/R
	Inverter Snubber Capacitors	-	I	I	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	I	I	R
	Integrated Gate Driver Power Supply	-	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R
	Self-Powered SGCT Power Supply (SPS)	-	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R
Integral Magnetics / Power Filters	Isolation Transformer / Line Reactor	-	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M
	DC Link / Common Mode Choke	-	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M
	Line / Motor Filter Capacitors	-	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M	I	I	I	I	M
Control Cabinet Components	AC / DC and DC / DC Power Supplies	-	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R	I	I	I	I	RFB/R
	Control Boards	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Batteries (DCBs and CIB)	-	I	I	R	I	I	R	I	I	R	I	I	R	I	I	R	I	I	R	I	I
	Battery Module (UPS)	-	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
Connections	Low Voltage Terminal Connections / Plug-in Connections	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Medium Voltage Connections	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Heatsink Bolted Connections	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Medium Voltage Connections (Rectifier)	-	-	-	I	-	-	I	-	-	I	-	-	I	-	-	I	-	-	I	-	-
	Medium Voltage Connections (Inverter)	-	-	-	-	-	-	-	-	-	-	I	-	-	-	-	-	-	-	-	-	I
Enhancements	Firmware	-	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-
	Hardware	-	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-	Rv	-	-
Operational Conditions	Parameters	-	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I
	Variables	-	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I
	Application Concerns	-	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I
Spare Parts	Inventory / Needs	-	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I	Rv	I	I

Figure 1: 20-Year Service Maintenance Schedule

Note the following when reading the schedule:

- **I – Inspection** indicates that the component should be inspected for signs of excessive accumulation of dust or debris and/or external damage.
- **M – Maintenance** indicates a maintenance task that is outside the normal preventative maintenance tasks, and can include the inductance testing of Line Reactors/DC Links, or the full testing of an isolation transformer.
- **R – Replacement** indicates that the component has reached its mean operational life, and should be replaced to decrease the chance of component failure.
- **C – Cleaning** indicates the cleaning of a part that can be reused.
- **Rv – Review** refers to a discussion with Rockwell Automation.
- **RFB/R – Refurbishment/Replacement** indicates that the parts can be refurbished at lower cost or the parts can be replaced with new ones.

1.1.2.4 Low Voltage Preventative Maintenance Scope of Supply

Lost productivity caused by poor performance or unplanned failure of your automation assets can significantly reduce your revenue and profitability. To reach your production and business goals, you need to keep your critical assets running at peak efficiency. But not all companies have the resources to develop and sustain a preventive maintenance program that will optimize their operating environment.

Rockwell Automation Preventive Maintenance provides plant-wide maintenance services on all your automation assets including drives, programmable controllers, motion systems, networks and software – both discrete and process systems. Pending system failures are identified and only those system components that are past their operational lifecycle are recommended to be repaired or replaced. This approach drives down costs by eliminating unnecessary repairs occurring with most time-based preventive maintenance programs.

During each maintenance visit, a comprehensive series of inspections will be conducted to ensure equipment is operating to specifications and to maximize its availability, reliability and efficiency. At the conclusion of each visit, you will receive documentation of all activities performed including measurements taken and remediation recommended.

Rockwell Automation will provide Preventative Maintenance on Low Voltage Drives as listed. The preventative maintenance services will be executed using the guidelines listed below in this Statement of Work. A list of the drives to perform Preventative Maintenance on is listed in section 1.1.2.1. The Rockwell Automation Field Support Engineer will maintain a spreadsheet tracking the progress and which drives have been completed during the year.

Periodic Inspection

Industrial control equipment must be inspected periodically. Inspection intervals are based on environmental/operating conditions and adjusted as indicated by experience. We recommend an initial inspection within 3…4 months after installation. We recommend an annual inspection after initial inspection on an ongoing basis.

Contamination

If inspection reveals that dust, dirt, moisture, or other contamination has reached the control equipment, the cause must be eliminated. This contamination can indicate an incorrect or ineffective enclosure, unsealed enclosure openings (conduit or other), or incorrect operating procedures. Dirty, wet, or contaminated parts must be replaced unless they can be cleaned effectively by vacuuming or wiping.

Cooling Devices

Inspect blowers and fans that are used for forced air cooling. Replace any that have bent, chipped, missing blades or if the shaft does not turn freely. Apply power momentarily to check operation. If unit does not operate, check and replace wiring, fuse, blower, or fan motor as appropriate. Clean or change air filters as recommended.

ATTENTION: Do not use compressed air or similar to clear dust or debris.

Preventive Maintenance Checklist of Industrial Control and Drive System Equipment

Inspect and clean the power section components (IGBTs, SCRs, and capacitors) as part of the annual clean and inspection cycle (as access allows). Do not remove the whole drive assembly to gain access to the components. The life expectancy of the power section components is designed to last for the life of the drive for wall-mounted drives. The actual life is dependent on ambient and environmental conditions, load, variation of load, power system configuration, output and carrier frequency configuration, cooling system, and other application-related factors. The design life expectancy of the overall components normally exceeds 10 years (in some cases can last 20 years or more) in normal operating environments.

Solid-state Devices

Solid-state devices require little more than a periodic visual inspection. Inspect the printed circuit boards to determine whether they are properly seated in the edge connectors. Board locking tabs must be in place. Necessary replacements must be made only at the personal computer board or plug-in component level. Do not use solvents on printed circuit boards. When blowers are used, air filters must be cleaned or changed periodically depending on the specific environmental conditions encountered.

Locking and Interlocking Devices

Check these devices for proper working condition and capability of performing their intended functions.

Replacements

Make any necessary replacements only with Allen-Bradley renewal parts or kits. Assure that parts are properly matched to the model, series, and revision level of the equipment.

Final Check Out

After maintenance or repair of industrial controls, always test the control system for proper functioning under controlled conditions that avoid hazards if a control malfunction occurs.

Keep Good Maintenance Records

This rule is most helpful to locate possible intermittent problems by pointing to a particular area of constant trouble within the overall system. Further, good maintenance records reduce major costly shutdowns by demanding the use of proper test equipment and an appropriate inventory of spare parts. We recommend that a complete record of parameter settings be kept close to the drive for future reference. Some drives also incorporate an operator interface that can store a copy of the parameter settings

1.1.2.5 Low Voltage Service Maintenance Schedule

LV VFD Preventative Maintenance includes a visual inspection of all drive components visible from the front of the unit, power component resistance checks, power supply voltage level checks, tightness checks for all accessible power connections, general cleaning, and maintenance.

Recommended Drives Maintenance Tasks and Schedule – PowerFlex 750-Series, 70, 700, 700S, DC

	Years >	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Components and Activities																						
Air-Cooling System	Door-mounted Air Filters (1)	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
	Roof-mounted Assembly Air Filters (1)	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R	C/R
	Main Heatsink Cooling Fan(s)		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
	Door-mounted Cooling Fans		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
	Capacitor Bank Cooling Fans		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
	Converter Input Fuse Stirring Fan		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
	Converter Gate Board Stirring Fan		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R
	DC Precharge Control Board Stirring Fan		I	I	I	I	R	I	I	I	I	R	I	I	I	I	R	I	I	I	I	R

(1) Inspect and replace filters every 3 months or more frequently, depending on the environment.

Figure 2: 20 Year Service Maintenance Schedule

Note the following when reading the schedule:

- **I – Inspect -** Inspect the component for signs of excessive accumulation of dust, dirt, or external damage. For example, inspect the filter capacitors for bulges in the case, inspect the filters/fan inlet screens for debris that can block the airflow path.
- **C – Clean -** Clean the components that can be reused, specifically the door-mounted air filters and fan inlet screens.
- **R – Replace -** This component has reached its mean operational life. Replace the component to decrease the chance of failure. It is likely that components can exceed the designed life in the drive, but component life is dependent on many factors such as usage and heat.

1.1.2.6 System Documentation

Rockwell Automation will provide the following:

- Preventative Maintenance Service Report

1.1.2.7 Delivery

Delivery is approximately 15 weeks from Rockwell Automation acceptance of Purchase Order. Delivery is based on availability at time of purchase and is subject to change. Delivery is dependent on documentation submitted by Customer. Please refer to 1.2.1 Documentation Requirements. Additional time and cost may apply if documentation is not submitted or available at start of project.

1.1.2.7.1 Document Acceptance

Customer will have (5) business days to review and provide a written response regarding project documentation that requires Customer approval. If a written response is not submitted to Rockwell Automation within (5) business days after the date the project documentation was emailed to Customer, the project documentation will be considered accepted by Customer. Customer-requested changes received after the specified (5) business day response period will impact the project by a day-for-day delay in schedule, and Customer may be subject to additional costs and changes to the project plan as a result of the delay.

1.1.3 Services

1.1.3.1 Services Scheduling

Subject to a four (4) week notice of Customer's requested service date, Rockwell Automation will utilize a qualified Field Service Professional ("FSP") located closest to the customer work site. If Customer provides less than the previously stated advance notice, and a local qualified FSP is unavailable for the requested on site date, Rockwell Automation will offer Customer the option to:

1) wait until the locally qualified FSP is available, or
2) schedule an alternative out-of-region resource, which may result in additional travel charges

1.1.3.2 Services Not Covered

The following items are **NOT** included in this Statement of Work.

- Removal of, or protection from, hazardous materials.
- Electrical, structural, civil, piping, or mechanical designs and installation outside of statement of work
- Site assistance during installation outside of statement of work
- No approval drawings or approval cycle included
- Supply or modification of network media between enclosures, buildings and process areas
- Any modifications to conduit and/or wiring that extends outside the Rockwell Automation structure detailed in this Statement of Work
- Connections to 3rd party equipment
- Field modifications upgrades or engineering changes

- Formal operator, maintenance, or electrical training
- Dispose of coolant if required

1.2 Customer Responsibilities

1.2.1 Documentation Requirements

Customer will provide any documents required for completion of MV and LV VFD Preventative Maintenance upon receipt of order acknowledgement confirmation.

Note: If Customer documents are not delivered by the required date, the Documented Change Request (DCR) Process will be followed to address any resulting delays.

1.2.2 Hardware Installation

Customer will provide assistance in lifting the Main Cooling Fan during the preventative services.

1.2.3 Single Point of Contact

Customer will designate a representative that is authorized to act on the plant's behalf with respect to this project. This representative should have a working knowledge of the machinery and process and be available to Rockwell Automation personnel during working hours.

1.2.4 Maintenance, Electrical, and Operations Staff

Customer will provide appropriate personnel knowledgeable in the process, operation, and control system supplied to assist Rockwell Automation personnel.

1.2.5 Access to the System

Customer will make the process available to Rockwell Automation personnel during the mutually agreed upon schedule for the purpose of implementing the services and equipment described in this Statement of Work.

1.3 Assumptions, Clarifications, and Exceptions

The following assumptions, clarifications, and exceptions have been made by Rockwell Automation in the development of this Statement of Work:

Reference	Assumptions (A), Clarifications (C), and Exceptions (E)
A1	**Safety.** All aspects of mechanical, electrical, and process safety are responsibilities of Customer.
A2	**Mechanical Designs and Services.** All electrical, structural, civil, piping, or mechanical designs and services are to be managed by Customer and their selected contractor(s) unless otherwise specified in this Statement of Work.
C1	**Quotation Scope.** This quotation includes only the hardware, software, and services that are specified in the Statement of Work.
C2	**Documentation.** All project and system documentation will be in English and furnished in electronic format unless otherwise stated. Translation into other languages is not included in this Statement of Work.
C3	**Network Wiring.** Rockwell Automation is not responsible for the supply or modification of network media and wiring between enclosures, buildings, and process areas.
C4	**System Performance and Design.** Rockwell Automation is a manufacturer of industrial control equipment that is component parts on machines or manufacturing systems designed by others. As the provider of control equipment or engineering services related to that equipment, Rockwell Automation's description of responsibility is limited to the individual controls of the system only. The overall performance and overall design of the machine or manufacturing system, including safety features and failure modes, are the responsibility of others and are not included in Rockwell Automation's Statement of Work. The services provided by Rockwell Automation are not the services of an Engineer of Record or Professional Engineer.
C5	**RoHS.** Customer supplied/specified products will meet all applicable material restrictions as defined in RoHS. If it does not, Customer will notify Rockwell Automation prior to shipment of the Customer supplied/specified products to Rockwell Automation. Customer will indemnify Rockwell Automation against any claim arising out of Rockwell Automation's use of Customer supplied/specified products.
C6	**Hazardous Materials.** Rockwell Automation is not responsible for the removal of or protection from hazardous materials.
C7	**Existing Devices.** Customer represents that any existing operator, machine-mounted, or field devices that are in use or are to be reused are in good working order and will be repaired or replaced by Customer when required. Repair and/or replacement of damaged devices is not included in Rockwell Automation's Statement of Work.
C8	**Existing Equipment.** Rockwell Automation is not responsible for electrical/mechanical adjustments, or changes/replacements to existing equipment required for advancing the process into a production status. This includes system performance consulting and support of equipment supplied by others that affects the performance of Rockwell Automation supplied equipment.
C9	**Safety Integrity Level - Control System.** The control system supplied by Rockwell Automation is not specifically designed to meet any Safety Integrity Level (SIL) in accordance with international/US national standard IEC-61511 / ISA84.00.01. Accordingly, it is therefore the responsibility of Customer to ensure that other measures - separate and distinct from the Rockwell Automation Statement of Work - are in place to ensure that the overall system operation is not impaired in the event of a failure of the Rockwell Automation control system.
C10	**Rigging and Handling.** Rigging and handling to receive, store, move and set the Rockwell Automation supplied equipment is the responsibility of Customer. The equipment will be stored at Customer's facility in a mutually agreed upon area. A secure and dry area is required.
C11	**Installation Services.** Demolition, installation, and wiring services are not included in this Statement of Work. Rockwell Automation Installation Services can be offered upon request at an additional expense.
C12	**Optional Services.** Extended warranties, additional training, additional engineering support, and other services are available upon request and are not included in this Statement of Work.
C13	**Spare Parts.** Spare parts are not included in this Statement of Work.
C14	**Documented Change Request (DCR) Process.** Changes to this scope of work requested by Customer throughout the duration of the project will be identified and communicated through project management at Rockwell Automation. Estimates for the material costs, labor, and schedule

Reference	Assumptions (A), Clarifications (C), and Exceptions (E)
	impacts will be prepared when a change in scope is identified. Refer to the change provision of the Terms and Conditions of Sale referenced in this Statement of Work.
C15	**Customer or Site-Specific Requirements.** This Statement of Work does not include Customer specific requirements or on-site activities such as Customer or site-specific safety training, background checks, health-related testing or vaccinations, international work visas, and copies of expense receipts. Rockwell Automation must be made aware of any such requirements prior to contract award. Costs for associated time and expenses incurred while complying with such requirements will be at Customer expense.
C16	**Infectious Disease Planning**. Rockwell Automation is committed to health, safety, and doing all we can to maintain a high level of service for our customers. We are committed to communicating with you about the impact that an infectious disease and any related governmental restrictions may have on the deployment of our personnel and delivery of the project and truly appreciate your cooperation and understanding. In submitting any purchase order, you acknowledge and agree that Rockwell Automation will be excused from performance, or delay in performance, of its obligations under this purchase order, regardless of whether a contract is currently in place governing the parties' relationship, to the extent that Rockwell Automation is unable to perform such obligations due to the effects of a known infectious disease affecting Rockwell Automation and/or third parties, including, without limitation, logistics and materials suppliers.
C17	**On-site Working Hours.** Standard Rockwell Automation working hours are Monday through Friday, 8:00 AM to 6:00 PM (first 8 hours/day). Hours not included in the scope of this Statement of Work and worked outside the standard working hours will be billed as follows: • 1.5 Times Standard Rate - Saturdays and any hours exceeding eight (8) on a weekday or performed outside the standard working hours • 2.0 Times Standard Rate - Sundays and holidays
C18	**Travel Time & Expenses.** Travel time and expenses in excess of those which are included in this Statement of Work will be billed as follows: • Travel time to and from the jobsite is billed at the standard rate. Transportation, auto rental, lodging, meals, phone, and miscellaneous expenses are billed at cost plus a 10% administrative handling fee.
C19	**Stand-by Time.** Stand-by time is defined as time spent on-site waiting for completion of customer activities. This includes, but is not limited to, waiting for correction of construction, installation, and wiring or piping errors, and other delays beyond the control of, or not within, Rockwell Automation's specific responsibilities. Stand by time will be invoiced separately at applicable time and expense rates.
C20	**Work Site Safety.** Customer is responsible for assuring a safe and secure work environment, compliant with relevant local, state, provincial, and nationally-recognized standards and regulations, for work at the site.
C21	**Ethics and Compliance.** All of Rockwell Automation's employees and every person who performs work for, or on behalf of Rockwell Automation are treated with respect and dignity. Rockwell Automation has a no-tolerance policy for discrimination, and harassment, and zero tolerance for workplace violence and weapons. Please see the PartnerNetwork Code of Conduct and the Rockwell Automation Global Policy People for further details. https://www.rockwellautomation.com/en-us/company/about-us/sustainability/ethics-compliance.html
C22	**Information Security Standards** In the performance of all Work pursuant to this Agreement and Statement of Work, Customer and Rockwell Automation will comply with the following standards and practices: **1. Data Transmission** Customer agrees that all transmission or exchange of sensitive data with Rockwell Automation shall take place using secure, industry acceptable, standards (e.g., password-protected, using a complex password; encrypted WinZip sent via e-mail, or, for large files, an encrypted file transfer service; physical media such as paper/DVD sent securely; or another equally secure means of transport). If Customer requires Rockwell Automation to use a Customer specified system, the security of the data in transit and at rest once sent from Rockwell Automation is Customer's sole responsibility. **2. Customer-Provided Hard Disk** If Rockwell Automation personnel are required to use Customer-provided hard disks, Customer agrees to provide the hard disk with designated backup and recovery processes and in encrypted

Reference	Assumptions (A), Clarifications (C), and Exceptions (E)
	form, using commercially supported or industry standard open source encryption solutions. The Customer must use commercially reasonable efforts to prevent the Customer-provided hard disk from introducing any malicious software into Rockwell Automation's systems. These efforts shall include, but are not limited to, the use of anti-virus and/or anti-malware and the regular deployment of security patches to remediate any vulnerabilities. **3. Remote Access** Remote access by Rockwell Automation's personnel into Customer's control system(s) must be accomplished in accordance with either Customer or Rockwell Automation procedures, whichever is more stringent. If Customer requires Rockwell Automation personnel to use Customer-specified procedures, the security of the connection/session is Customer's sole responsibility, and Customer is solely responsible for logging activities of all users accessing the Customer's system.
C23	**Cybersecurity for Solutions.** Sub-contractors and/or third-party vendors will follow any applicable industry best practices and/or guidelines for cybersecurity and data protection with regard to IEC 62443 2-4.
C24	**Customer Success Publication.** Sharing customer success stories helps position customers as leaders among companies pursuing excellence in their industrial operations. Customer agrees that Rockwell Automation can reference and disclose Customer's name and logo in internal and external marketing materials and will share only the solutions and services purchased, Customer industry, location, and general results through a customer success story. Rockwell Automation will make no claims that Customer endorses the product or solution, and the success story will be used for marketing purposes only.
E1	This field intentionally left blank.

Table 1: Assumptions, Clarifications, and Exceptions

1.4 Rockwell Automation Commitment for Sales Through Distribution

The Rockwell Automation Commitment for Sales Through Distribution (the "Commitment Terms") found at https://www.rockwellautomation.com/en-us/company/about-us/legal-notices/commitment-for-sales-through-distribution.html covers purchases by Distributor's customer ("Customer") from Distributor of the Products and Services described and integrated pursuant to this Statement of Work to be provided by Rockwell Automation, Inc. and/or its affiliates. The Commitment Terms apply directly to Customer and Rockwell Automation.

Accepted.

Customer: _____

Date: _____

2 Distributor Commercial Terms

2.1 Pricing Summary

McNaughton-McKay Electric Company's price is based on the Statement of Work set forth in Section 1 above. All prices are in US Dollar. Quotation is valid for 60 days from date of issue.

Description	Serial Number	Labor & Hardware Cost	Project Price
Year 13 Medium Voltage PF7000 VFD Preventative Maintenance	[7011940-002-11 & 7011940-014-11]	Labor: $96,790.75 Hardware: $148,100.50	$244,891.25
Year 9 Medium Voltage PF7000 VFD Preventative Maintenance	[6502468270-101 & 6502468270-201]	Labor: $55,628.36 Hardware: $50,401.64	$106,030.00
Year 8 Medium Voltage PF7000 VFD Preventative Maintenance	[6503724889-101 & 6503724889-201]	Labor: $55,339.45 Hardware: $40,446.80	$95,786.25
Low Voltage VFD Preventative Maintenance	N/A	Labor: $10,635.25 Hardware: $2,772.25	$13,407.50
		TOTAL:	**$460,115.00**

The total price provided is based on the purchase of the full scope of supply. Unless unit pricing is called out as an add or delete price, any itemized unit pricing is approximate and provided for informational purposes only and does not constitute an offer. Unless expressly stated, prices do not include sales, use, excise, customs, value-added, tariff, duty, or similar taxes. Distributor will pay or reimburse Rockwell Automation for all such taxes as may be applicable. Given the uncertainty of potential tariffs, Rockwell Automation may at any time prior to shipment, upon notice to Distributor, adjust the prices for products and services to address any increase in any additional or new tariff, duty, or similar tax affecting the products and services covered by this proposal.

2.2 Invoicing Schedule

Description	Milestone	Payment Percent
Dublin Medium and Low Voltage Drives PM Service Solution	Milestone #1: Upon Purchase Order	40%
	Milestone #2: Completion of 7011940 VFDs PM	15%
	Milestone #3: Completion of 6502468270 VFDs PM	15%
	Milestone #4: Completion of 6503724889 VFDs PM	15%
	Milestone #5: Completion of LV VFDs PM	15%

2.3 Purchase Order Instructions

Attn: Mike Starn
McNaughton-McKay Electric Co.
2255 Citygate Dr.
Columbus, OH 43219
Email: starnm@mc-mc.com

2.4 McNaughton-McKay Electric Company Terms and Conditions of Sale

The sale of products and services by Seller is subject to Seller's general terms and conditions of sale ("Seller's Terms") as attached to this document or as otherwise posted on Seller's website at https://www.mc-mc.com/terms. Seller objects to and rejects any terms or conditions that may appear on or are referenced in Customer's purchase order or other document that are in addition to or otherwise inconsistent with Seller's Terms. Customer's receipt or acceptance of delivery of any ordered item above will constitute its acceptance of Seller's Terms. The above link also includes Seller's Return Policy for customer reference.