PrivITation Energy Solutions



PROPOSAL FOR:
CITY OF MERCED
POLICE DEPARTMENT AND
CIVIC CENTER
AUTOMATION PREVENTATIVE
MAINTENANCE

Site Locations: Merced Police Department 611 W 22nd St Merced, CA 95340

Merced Civic Center 678 W 18th St Merced, CA 95340

old sworld values meet mery sporld immovation

Site Contact:
City of Merced
Wallace Broughton
1776 Grogan Ave.
Merced, CA 95340
BroughtonW@CityofMerced.org



DEAR WALLACE,

PRIVITATION ENERGY SOLUTIONS APPRECIATES THE OPPORTUNITY TO PROVIDE YOU WITH OUR COMPREHENSIVE BUILDING AUTOMATION SYSTEM MAINTENANCE AGREEMENT. OUR GOAL IS TO PROVIDE OPTIMAL ENERGY EFFICIENCY THROUGH THE CAREFUL AND PRECISE MAINTENANCE AND CALIBRATION OF THE AUTOMATION SYSTEMS CURRENTLY CONTROLLING UTILITIES AT THE CITY OF MERCED POLICE DEPARTMENT AND CIVIC CENTER BUILDINGS.

DURING SCHEDULED MAINTENANCE VISITS, DUR TECHNICIANS WILL ENSURE OPTIMAL EFFICIENCY THROUGH A SERIES OF REGULARLY PERFORMED TESTS, UPDATES, BACKUPS, DIAGNOSTICS, AND CALIBRATIONS. THEY WILL ALSO KEEP DETAILED REPORTS OF ALL TASKS PERFORMED AND OF ANY FAULTY EQUIPMENT, IRREGULARITIES, OR OTHER CONCERNS THAT THE CITY OF MERCED SHOULD BE AWARE OF. BY DOING SO, WE HOPE TO BUILD A LASTING FOUNDATION OF TRUST AND CONFIDENCE BETWEEN PRIVITATION AND THE CITY OF MERCED.

THE FOLLOWING PROPOSAL AND SCOPE OF WORK OUTLINES THE SERVICES THAT WILL BE PERFORMED, THE FREQUENCY OF THOSE SERVICES, AND THE TERMS FOR THE SERVICE. WE ARE CONFIDENT THAT THIS AGREEMENT IS WILL BOTH SAVE THE CITY OF MERCED COST OF UTILITIES FOR THESE BUILDINGS AS WELL AS ALLEVIATE CONCERN FOR THEM.

OUR TECHNICIANS ARE TRAINED AND HAVE EXTENSIVE EXPERIENCE IN MECHANICAL AND AUTOMATION SYSTEMS. THIS COMBINATION ALLOWS THEM TO UNDERSTAND YOUR SYSTEM AND BUILDING AS A WHOLE IN ASCERTAINING NECESSARY CORRECTIONS, REPLACEMENTS, CALIBRATIONS, AND UPGRADES.

THANK YOU FOR YOUR TIME IN REVIEWING OUR PROPOSAL. PLEASE FEEL FREE TO CONTACT US WITH ANY QUESTIONS OR CONCERNS REGARDING THIS PROPOSAL, OUR COMPANY, OR FURTHER SERVICES NOT MENTIONED HEREAFTER.

SINCERELY,



Brian J Brazell
DIRECTOR OF AUTOMATION
BBRAZELL@PRIVITATION.COM



SUMMARY OF MECHANICAL EQUIPMENT

MECHANICAL EQUIPMENT

	CHILLER SYSTEMS					
QTY	MANUFACTURER	MODEL	SERIAL	DESCRIPTION		
1	TRANE	RTAC2004UJOHUAFNL1NY	U05D01517	AIR COOLED		
1	TRANE	CGAMD52A2FD2AXD2A1A1	412A27550	AIR COOLED		

BOILER SYSTEMS			
MANUFACTURER	MODEL	SERIAL	DESCRIPTION
RBI	MB1250	010952169	GAS FIRED
RBI	MB1250	120852126	GAS FIRED
RAYPACK	H3-0514	0201191360	GAS FIRED
	MANUFACTURER RBI	MANUFACTURER MODEL RBI MB1250 RBI MB1250	MANUFACTURER MODEL SERIAL RBI MB1250 010952169 RBI MB1250 120852126

AUTOMATION EQUIPMENT

GLOBAL CONTROLLERS / SUPERVISORS / WORK STATIONS / SERVER				
QTY	MANUFACTURER	DESCRIPTION		
4	SIEMENS	APOGEE PXCM AND TECS		
1	DISTECH CONTROL	ECLYPSE S-1000 ADVANCED SERVER		



AUTOMATION MAINTENANCE TASKS

GLOBAL CONTROLLERS TASKS

- CONTROL PANEL INSPECTION & CLEANING
- PERFORM BACKUP AND UPGRADE OF CONTROLLER DATABASES
- INSPECT CONTROLLER ALARMS AND LOGS AND CHECK FOR ANY FAILURES AND/OR IRREGULARITIES
- > INSPECT NETWORK TRAFFIC ON ALL NETWORKS/TUNE NETWORKS
- > INSPECT GRAPHICS AND USER INTERFACE FOR FUNCTIONALITY
- > INSPECT AUDIT AND LOG HISTORY FOR ANOMALIES
- PROVIDE USER ACCESS UPDATES AND SECURITY LEVELS

SUPERVISOR TASKING

- PERFORM BACKUP AND UPGRADE OF SUPERVISOR DATABASE
- > INSPECT NETWORK TRAFFIC ON ALL NETWORKS/TUNE NETWORKS
- > INSPECT GRAPHICS AND USER INTERFACE FOR FUNCTIONALITY
- INSPECT AUDIT AND LOG HISTORY FOR ANOMALIES
- PROVIDE USER ACCESS UPDATES AND SECURITY LEVELS
- PROVIDE FIRMWARE UPGRADES WHEN RELEASED
- PROVIDE RECOMMENDATIONS FOR SOFTWARE UPGRADES
- REVIEW AND TEST CRITICAL ALARMING
- REVIEW AND TEST PUSH NOTIFICATIONS



AUTOMATION MAINTENANCE TASKS (CONT.)

WORKSTATION / SERVER TASKS

- VERIFY AND/OR PROVIDE OS UPDATE IF NECESSARY
- > INSPECT OS PERFORMANCE AND TASKING
- > INSPECT BROWSERS PERFORMANCE AND UPDATE REQUIREMENTS

CHILLER PLANT CONTROLLERS TASKS

- > SEQUENCE(S) FUNCTIONAL PERFORMANCE TEST
- > CONTROL PANEL INSPECTION & CLEANING
- > VERIFICATION OF SENSORS AND DEVICES
- VERIFY DATA VIA INTEGRATION BACNET, MODBUS, ETC.
- CORRECT/REPAIR/REPLACE LABELING

BOILER/HEATING CONTROLLERS TASKS

- > SEQUENCE(S) FUNCTIONAL PERFORMANCE TEST
- CONTROL PANEL INSPECTION & CLEANING
- > VERIFICATION OF SENSORS AND DEVICES
- VERIFY DATA VIA INTEGRATION BACNET, MODBUS, ETC.
- CORRECT/REPAIR/REPLACE LABELING



AUTOMATION MAINTENANCE TASKS (CONT.)

AIR HANDLER CONTROLLERS TASKS

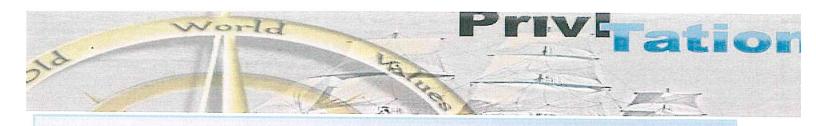
- > SEQUENCE(S) FUNCTIONAL PERFORMANCE TEST
- CONTROL PANEL INSPECTION & CLEANING
- > VERIFICATION OF SENSORS AND DEVICES
- VERIFY DATA VIA INTEGRATION BACNET, MODBUS, ETC.
- CORRECT/REPAIR/REPLACE LABELING

FAN COIL CONTROLLERS TASKS

- > SEQUENCE(S) FUNCTIONAL PERFORMANCE TEST
- CONTROL PANEL INSPECTION & CLEANING
- CALIBRATE SENSORS AND DEVICES
- VERIFY DATA VIA INTEGRATION WIRELESS, SMART ROOM
- CORRECT/REPAIR/REPLACE LABELING

VAV BOX CONTROLLERS TASKS

- SEQUENCE(S) FUNCTIONAL PERFORMANCE TEST
- CONTROL PANEL INSPECTION & CLEANING
- > VERIFICATION OF SENSORS AND DEVICES
- VERIFY DATA VIA INTEGRATION WIRELESS, SMART ROOM



MECHANICAL MAINTENANCE TASKS

BOILER OPERATIONAL MAINTENANCE

- VISUALLY INSPECT BOILER PRESSURE VESSEL FOR POSSIBLE LEAKS AND RECORD CONDITION.
- CHECK HAND VALVES AND AUTOMATIC FEED EQUIPMENT. REPACK AND ADJUST AS REQUIRED.
- CHECK FUEL PIPING FOR LEAKS AND PROPER SUPPORT.
- CHECK BURNER SEQUENCE OF OPERATION AND COMBUSTION AIR EQUIPMENT.
- REVIEW MANUFACTURER'S RECOMMENDATION FOR BOILER AND BURNER START-UP.
- > CHECK FUEL SUPPLY.
- CHECK AUXILIARY EQUIPMENT OPERATION.
- INSPECT BURNER, BOILER AND CONTROLS PRIOR TO START-UP.
- > START BURNER, CHECK OPERATING CONTROLS.
- > TEST SAFETY CONTROLS.

BOILER ANNUAL MAINTENANCE

- > INCLUDES TASKS 1-10 ABOVE.
- INSPECT FIRESIDE OF BOILER AND RECORD CONDITION.
- BRUSH SOOT AND DIRT FROM COMBUSTION CHAMBER.
- INSPECT FIREBRICK AND REFRACTORY FOR DEFECTS.
- DISASSEMBLE, INSPECT AND CLEAN LOW-WATER CUTOFF.
- INSPECT, CLEAN AND LUBRICATE THE BURNER AND COMBUSTION AIR EQUIPMENT.



MECHANICAL MAINTENANCE TASKS (CONT.)

AIR COOLED CHILLER ANNUAL INSPECTION

- RUN UNIT AND CHECK OPERATION. ADVISE ON CONDITION OF UNIT BEFORE STARTING ANNUAL SHUTDOWN INSPECTION.
 - VERIFY OPERATION OF OIL HEATER THERMOSTAT.
- LEAK TEST CHILLER PRIOR TO PERFORMING REPAIRS ON CHILLER. ADVISE ON CONDITION.
 - LEAK TEST OF UNIT WILL BE PERFORMED IN COMPLIANCE WITH EPA AND SCAQMD RULE 1415 BY A CERTIFIED AUDITOR. RECORD KEEPING SHALL BE THE RESPONSIBILITY OF THE EQUIPMENT OWNER OR OPERATOR.
 - ALL LEAKS NOT COVERED WITHIN THIS WORK SCOPE SHOULD BE REPAIRED TO CONFORM TO EPA AND SCAQMD RULE 1415 AND EPA 608.
- REMOVE AND STORE OIL CHARGE.
 - REMOVE OIL SAMPLE FOR ANALYSIS.
- CHECK AND CALIBRATE CONTROL SWITCHES PRESSURE AND TEMPERATURE.
 - HIGH PRESSURE
 - OIL PRESSURE
 - MINIMUM DIL PRESSURE
 - REFRIGERANT LOW TEMPERATURE CUT OUT
 - CHILLED WATER LOAD RECYCLE
 - DIL HEATER TEMPERATURE THERMOSTAT



MECHANICAL MAINTENANCE TASKS (CONT.)

- CHECK AND CALIBRATE ALL GAUGES AND THERMOMETERS.
 - COOLER, CONDENSER AND OIL PRESSURE GAUGES
 - CHILLED WATER INLET AND OUTLET THERMOMETER
 - CONDENSER WATER INLET AND OUTLET THERMOMETER
- INSPECT, DISASSEMBLE AS NECESSARY, CLEAN AND TIGHTEN ALL ELECTRICAL CONNECTIONS ON THE FOLLOWING:
 - COMPRESSOR MOTOR MAGNETIC STARTER
 - OIL PUMP MOTOR MAGNETIC STARTER
 - CHILLED WATER PUMP MOTOR MAGNETIC STARTER(S)
 - CHILLER CONTROL PANEL
- PERFORM MEGGER TEST ON ALL MOTORS IN ABOVE ITEM AND RECORD.
- CHECK AND RECORD VOLTAGE AND AMPERAGE ON ALL MOTORS IN ABOVE ITEM AND RECORD.
- ISOLATE AND DRAIN COOLER TUBE BUNDLE. ADVISE ON CONDITION, IF APPLICABLE
 - REMOVE WATER BOX COVER AND INSPECT
 - PERFORM EDDY CURRENT ANALYSIS
 - REMOUNT WATER BOX COVER



MECHANICAL MAINTENANCE TASKS (CONT.)

NOTE: IT IS THE RESPONSIBILITY OF THE CLIENT THAT THE ABOVE VALVES HOLD FOR ISOLATION AND DRAINING OF SYSTEM.

SHOULD TUBES REQUIRE CHEMICAL CLEANING AND TUBE BRUSHING WHICH IS NOT PART OF THIS SCOPE OF WORK, IT WILL BE AN ADDITIONAL COST TO THIS PROJECT.

- EQUALIZE UTILITY VESSEL AND OPEN ALL ISOLATION VALVES FOR NORMAL OPERATION OF CHILLER.
- INSPECT, CLEAN AND FLUSH OIL COOLER SOLENOID STRAINER AND TEMPERATURE CONTROLLED WATER-REGULATING VALVE. SET TEMPERATURE CONTROLLED WATER REGULATOR TO CONTROL OIL TEMPERATURE WHILE COMPRESSOR IS IN OPERATION.
- > START CHILLER
- CHECK OPERATION OF CHILLER AND OPERATING CONTROLS (PNEUMATIC AND ELECTRIC).
- CHECK OPERATION OF CONTROL MODULE:
 - CHILLED WATER SET POINT.
 - FULL LOAD AMPERAGE CALIBRATIONS.
 - DEMAND LIMIT SET POINT.
- PROVIDE WRITTEN SERVICE REPORT AND LOG TO BUILDING MAINTENANCE-ENGINEERING DEPARTMENT.



AUTOMATION NETWORK MAINTENANCE TASKS

NETWORK FIREWALL AND INTERNET SERVICE PROVIDER TASKS

- MAINTAIN ANNUAL SECURITY SUBSCRIPTIONS
- > UPDATE FIRMWARE AND PATCHES
- MONITOR LOGS, ALARMS, FOR INTRUSION, ATTACKS, FAILURE
- FOLLOW PROTOCOLS AND SPECIFICATIONS AS SHOWN BELOW A-G

SERVER UPDATE AND SOFTWARE MAINTENANCE

- > UPDATE DISTECH SERVER AND FIELD PANEL FIRMWARE AND SOFTWARE
- DISTECH ANNUAL SERVER UPDATES AND OPTIMIZATION
 - A. Installing recommend and critical firmware updates to network equipment within 30 day from release date by manufacture.
 - B. Installing recommend and critical security updates to Windows based computer systems within 30 day from release by Microsoft.
 - C. Proactivity notifying the City of Merced of equipment and software that is reaching end of life and propose a plan for corrective mitigation until equipment /software can be upgrade and/or replaced. Execution of corrective action will be based on Merced City approval of the corrective mitigation plan and possible additional costs associated with said plan. Mitigation controls that only require professional services and do not require the replacement or substation of hardware/software shall be include in the scope of this agreement.
 - D. Follow all "Emergency Directive and Updates" from the Zyxel Product Security Incident Response Team (PSIRT) for network equipment in scope of this contract.
 - E. Maintain 30 days of audit/security logs on network equipment, including public internet addresses, and any changes to these addresses.
 - F. Proactively monitor network equipment for intrusion detection and notify the City of Merced of any potential breach or unusual activity.
 - G. If network equipment in scope of this contract is the source or used for lateral movement in a cyber security incident PrivITation will be responsible from all remediation, include any notifications disclosures and all cost incurred for corrective action to the network equipment in this scope. PrivITation will not responsible for any action taken by City staff that may cause a compromise to the network.

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TERMS AND CONDITIONS

This agreement (the "Agreement") is made between City of Merced (the "Client") and PrivITation Energy Solutions (the "Contractor").

- 1. Contractor will provide its Mechanical and Automation maintenance of the equipment located at The Police Department and Civic Center located at 611 W 22nd St, Merced, CA 95340 and 678 W 18th St, Merced, CA 95340 respectively. The services to be performed are set forth in "Automation Maintenance Tasks" and "Mechanical Maintenance Tasks".
- 2. All Services provided under this agreement will be performed during normal working hours (Monday-Friday 7AM to 4PM) ("Normal Working Hours") unless otherwise specifically provided for in this agreement or negotiated and agreed upon between client and contractor.
- 3. Client agrees to pay to Contractor the amount(s) set forth in "Pricing". Such amount(s) shall be invoiced by Contractor to Client.
- 4. Payment of all invoices is due NET 30 days from date of invoice
- 5. Client agrees to provide free access to all areas of the facility for the equipment identified in and/or relating to the List of Covered Equipment and to provide suitable means as may be necessary to reach such equipment situated with limited or restricted access;
- 6. Client agrees to allow Contractor to start and stop the equipment as necessary to perform the services; and supply suitable electrical service.
- 7. Neither party to this Agreement shall assign any of its rights or obligations hereunder without the prior written approval of the other party.
- 8. This Agreement shall be governed by the laws of the state of where the Services are performed without regard to its conflicts or choice of law principals. Any legal action relating to this Agreement, or the breach thereof, with the exception of any legal action for collection of amounts due, shall be commenced within one (1) year from the date at which the work was performed.



TERMS AND CONDITIONS (CONT.)

- 9. Contractor shall indemnify, protect, defend (with legal counsel selected by the City), save and hold City, its officers, employees, and agents, harmless from any and all claims or causes of action for death or injury to persons, or damage to property resulting from intentional or negligent acts, errors, or omissions of Contractor or Contractor's officers, employees, volunteers, and agents during performance of this Agreement, or from any violation of any federal, state, or municipal law or ordinance, to the extent caused, in whole or in part, by the willful misconduct, negligent acts, or omissions of Contractor or its employees, subcontractors, or agents, or by the quality or character of Contractor's work, or resulting from the negligence of the City, its officers, employees, volunteers and agents, except for loss caused by the sole negligence or willful misconduct of the City or its officers, employees, volunteers or agents. It is understood that the duty of Contractor to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code. Acceptance by City of insurance certificates and endorsements required under this Agreement does not relieve Contractor from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall survive the termination of this Agreement and shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply.
- 10. Contractor's warranty applies only to equipment, parts and/or labor furnished and installed by Contractor. No other warranties or guarantees expressed or implied are made by Contractor. No representations of any kind have been made by Contractor to Client except as set forth herein.

Parts and Equipment: Contractor warrants repair or replacement parts and equipment furnished by it to be free from defect for a period of one (1) year from the date of delivery unless the manufacturer's warranty is for a shorter period. In which case, the shorter period will apply. Contractor warrants parts and equipment not manufactured by it only to the extent that Contractor is able to enforce liability against the manufacturer.

Labor: Contractor's warranty includes the cost of Contractor's labor for correcting defects in material and workmanship originally supplied by it under this Agreement for a period of 90 Days after installation, provided that the material was furnished and installed by Contractor.



TERMS AND CONDITIONS (CONT.)

Contractor's labor for warranty purposes shall be provided during Normal Working Hours. Any labor provided outside of Normal Working Hours shall be paid for by Client at Contractor's applicable rates. Contractor's liability for defects in material and workmanship, if any, shall be limited to the cost of the repair and/or replacement materials, at Contractor's option.

- 11. This Agreement contains the entire understanding between the parties.
- 12. The term of this Agreement shall be for a period of 1 year commencing July 31, 2021 and terminating July 31, 2022 unless sooner terminated as provided herein. Subject to mutual agreement between Client and Contractor on pricing for any renewal term, this Agreement shall be automatically renewed for a term of one (1) year on the expiration of the term identified above and thereafter on each one (1) year anniversary date thereof unless cancelled by Client or Contractor by written notice at least thirty (30) days' prior to the anniversary date.
- 13. Either Customer or Contractor may terminate this Agreement for convenience with at least 30 days' prior written notice to the other party.
- 14. In the event that any modifications, replacements or repairs whatsoever are performed on the equipment listed in "Summary of Automation Equipment" and "Summary of Mechanical Equipment" by any party other than the Contractor, Contractor reserves the right, at its sole option, to terminate or renegotiate the terms of Services applicable to such equipment.
- 15. Client agrees that Contractor shall be promptly notified of any malfunction in the system(s) that comes to the client's attention, and;
- 16. Client agrees that in the event of any emergency or system failure, to take reasonable safety precautions to protect life and property (including fire watch) during the period of time from when Contractor is first notified of the emergency or failure until such time that Contractor notifies the Client that the system is operational or that the emergency has cleared.
- 17. In the event repairs, replacements, or emergency services outside of the scope of this Agreement are required, Client shall pay Contractor for such services at Contractor's standard billing rates, including overtime rates as may be applicable.



PRICING

SERVICES SUMMARY

- RESPONSE TIME: 15 MINUTES MAXIMUM. A SERVICE NUMBER WILL BE PROVIDED FOR IMMEDIATE CONTACT AND RESPONSE.
- SUPPORT TIME: 8 HOURS VIA PHONE OR ONSITE TO BE USED THROUGHOUT CONTRACT AS NEEDED BY CUSTOMER.
- COMPLETE AUTOMATION AND MECHANICAL SERVICE OF EQUIPMENT AT MERCED POLICE DEPARTMENT AND MERCED CIVIC CENTER PER TASKING ABOVE.
- AUTOMATION NETWORK MAINTENANCE AND SERVICE AT MERCED POLICE
 DEPARTMENT AND MERCED CIVIC CENTER INCLUDING FIRMWARE AND PATCHES
 AND REAL TIME ATTACK SERVICE MONITORING.
- AUTOMATION SERVER MAINTENANCE SUPPORT SERVICE.
- ALL SERVICES WILL BE LOGGED AND REPORTED REGULARLY.
- ANY REPAIRS OR SERVICE NEEDED, BUT OUTSIDE THE SCOPE OF WORK OUTLINED IN THIS PROPOSAL, WILL BE CLEARLY DOCUMENTED, REPORTED, AND A PROPOSAL ISSUED TO CUSTOMER.
- DISCOUNT LABOR RATE WILL BE HELD IN EFFECT THROUGHOUT THE TERM OF THE CONTRACT.

DISCOUNT LABOR RATE

\$125.00/HR.

TOTAL

\$17,250.00



PRICING AGREEMENT

WE WILL PROVIDE (1) ANNUAL MECHANICAL SERVICE AS DUTLINED IN THIS DOCUMENT ON CHILLERS AND BOILERS - CHILLER SERVICE WILL BE COMPLETED IN WINTER/SPRING AND BOILER SERVICE WILL BE COMPLETED IN SUMMER/FALL SO THAT THEY ARE READY WHEN THEY ARE NEEDED

AUTOMATION SERVICE WILL BE ONGOING THROUGHOUT THE YEAR WITH (6) ON SITE (8 HOUR) VISITS SPACED APPROXIMATELY EVERY TWO MONTHS, AND (1) REMOTE/ON SITE (8 HOUR) TOTAL SUPPORT TO BE USED THROUGHOUT THE YEAR AS NEEDED

OUR FEE IS PAYABLE QUARTERLY (\$4312.50) IN ADVANCE, FOR A PERIOD OF 1 YEAR AND IN ACCORDANCE WITH THE INCLUDED TERMS AND CONDITIONS.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE EXECUTED THIS AGREEMENT, AS OF THE DATE AND YEAR WRITTEN BELOW.

CUSTOMER:

CITY OF MERCED

CONTRACTOR:

PRIVITATION ENERGY SOLUTIONS

BY:

SIGNATURE:

NAME:

TITLE:

DATE:

BY:

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Kanta Sva

TITILE

8-20-20

DATÉ:

APPROVED AS TO FORM:

nterm City Attorney

rced- Automation and Mechanical
Preventative Maintenance Proposal

PrivITation Energy Solutions 07/8/2021

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