

APPENDIX A - SCOPE OF SERVICES

Miami-Dade County, hereinafter referred to as the County is contracting for purchase of regular maintenance, repairs,, technical support, software upgrades, parts and components, training, emergency, and monitoring services for the Siemens building management system installed at various County buildings.

The Contractor shall provide dedicated account management to coordinate the delivery of the aforementioned services.

1. QUALIFICATIONS OF PERSONNEL

1.1. Technicians

The Contractor shall provide qualified technicians with the following qualifications during the term of the Contract, including extensions and renewals, thereof to perform all services and to work on System 600 and Apogee hardware, software and firmware:

- a. The technicians shall have completed the Siemens Industry factory training.
- b. Technicians shall have a minimum of 5 years of experience on System 600 and Apogee automation equipment
- c. Contractor shall ensure that the system technicians are proficient in troubleshooting, problem solving, and performing preventive maintenance on the System 600 and latest Apogee technology.

1.2. Engineering Personnel

The Contractor shall provide qualified engineers proficient in studying, analyzing and preparing written reports on such matters as, but not limited to: equipment performance, conservation of energy, and modifications to temperature control systems.

2. MAINTENANCE SERVICES

The contractor shall provide maintenance services for system 600, Apogee and pneumatic as specified below, as part of the annual maintenance fee listed in Appendix D – Price schedule.

2.1. Overview

The Contractor shall provide the services below on the System 600, Apogee and pneumatic equipment:

- a. The Contractor shall provide 24 hour, 7 day per week, on-line and on-site emergency service on an as needed basis. The County Project Manager will notify the Contractor for the services as needed. Emergency services during normal business hours (Monday through Friday from 8:00 a.m. to 5:00 p.m.) are included as part of the maintenance fee. In the event an emergency occurs, and requires the Contractor to respond after normal business hours, the Contractor shall bill the County the premium rate, which is the difference between overtime and normal hourly rates as specified in Appendix D – Price Schedule.

- b. The Contractor's contact information for Apogee support on a 24 hours, 7 day per week basis, outside of the local office is the following:
Name: Customer Support Services
Address Irving, Texas
Telephone Number: 800-959-0911/800-832-6569
- c. The Contractor shall have a call-in service available to the County including the telephone number and sequence of events when an emergency call is placed to the Contractor.
- d. The Contractor must provide recommendations for improved system performance in the form of the latest procedural or product improvements. These will be presented on computer generated service orders after each visit.
- e. The Contractor shall leave sample service order with the County after each visit with procedural or product cost saving recommendations.
- f. The Contractor must provide the latest Insight software upgrades (as confirmed by Siemens Industry factory) with 8 hours of training (for County staff) on a yearly basis as part of this Contract.
- g. To minimize the possibility of Apogee downtime, the Contractor must carry local stock of Apogee components. The Contractor must also be able to deliver any part or component by next day.
- h. The Contractor must provide the latest technical manual updates on Apogee (as confirmed and authorized by Siemens Industry factory) on a yearly basis as part of this Contract.

2.2. On-line Systems Troubleshooting and Diagnostics

- a. The Contractor shall provide system and software troubleshooting and diagnostics via modem / internet connection. The Contractor shall furnish, and install the necessary on-line service equipment to enable the Contractor's local office to remotely log-on to the County's system via regular voice grade dial up phone line or via internet (if permitted by the County).
- b. Operator Support: The Contractor shall provide consultation to assist the operator(s) in identifying, verifying and resolving problems found in executing the tasks for which they have received training from Siemens.
- c. Account Management: The Contractor shall provide dedicated account management to coordinate the delivery of service, offer technical assistance for system programs and engineered control strategies, and implement the quality assurance program.

2.3. Hardware Service For System 600 and Apogee

The Contractor shall provide the following services as necessary to keep the system in peak operating condition:

- a. **Corrective Maintenance and Component Replacement:** The Contractor shall repair or replace failed or worn components to maintain system in peak operating condition with new or reconditioned components of compatible design. Components that are suspected of being faulty may be repaired or replaced in advance to prevent system failure at no additional cost to the County. .
- b. **Parts Life Cycle:** The Contractor shall provide a written notification to the County for the obsolescence of any part as soon as the obsolescence bulletin is released from the Contractor's Headquarters. It is also the responsibility of the contractor to provide written notice with the estimated end of the service part cycle. In the event any part as listed in Appendix B or added through any subsequent supplemental agreement becomes obsolete, the Contractor shall be responsible for providing service to the part, including replacements for no less than seven (7) years from the date referenced in the bulletin.
- c. **Response Window:** The Contractor shall respond to the request from the County Monday through Friday, 8:00 a.m. – 5:00 p.m. The Contractor shall provide emergency service, between scheduled preventive maintenance calls, Monday through Friday 8:00 a.m. - 5:00 p.m. to minimize downtime. Emergencies will be determined by Miami-Dade County.
- d. **On-Line Response Within 2 Hours:** The Contractor shall respond via modem / internet connection within 2 hours of the notification by the County for corrective maintenance during the emergency response window specified. If remote diagnosis determines a site visit is required to complete troubleshooting procedures, be on-site within the response time selected below.
- e. **On-Site Response Within 4 Hours:** The Contractor shall be on-site to provide emergency service within 4 hours of the request by the County. Non-emergency calls, as determined by Miami-Dade County will be incorporated into the next scheduled preventive maintenance visit. For work done in hours excluding hours between Mondays through Friday 8:00 a.m. to 5:00 p.m.; Miami-Dade County will pay the premium rate, which is the difference between the regular labor rate and the overtime labor rate.
- f. **Schedule Preventive Maintenance:** The Contractor shall perform preventive maintenance throughout the year in accordance with a program of standard maintenance routines as determined by the County, equipment application and location, and the manufacturer's recommendations, in conjunction with the approval from the County. The Contractor will be required to submit for approval a schedule to follow by items to be inspected per Appendix C – Task List. The schedule shall allow for all items listed in Appendix B to be physically inspected once per year. A report with a list of equipment that has been inspected shall be submitted to the County per visit.
- g. **Monthly System Integrity Tests:** The Contractor shall conduct system integrity tests through a series of point checks, point commanding techniques, selective disabling, system wide function tests and examination and analysis of standard report logs by a trained systems specialist or field engineer.

- h. Firmware Revisions: The Contractor shall develop, furnish and install firmware revisions to maintain or improve present performance within the functional capabilities of the County's system. The Contractor shall notify the County of any available revisions, and the County shall determine if and when needed.

2.4. Software Services

The Contractor shall provide the following services as necessary to keep the system in peak operating condition:

- a. Software Revisions: The Contractor shall develop, furnish and install software revisions to maintain or improve present performance within the functional capabilities of the County's system. The Contractor shall provide this service on all the operating and applications software packages currently comprising the system.
- b. Monthly Diagnostic Tests: The Contractor shall perform database diagnostic tests, analyze the results and maintain the system database for optimum building control performance within the functional limits of the system.
- c. On-Line Response Within 2 Hours: The Contractor shall respond via modem / internet connection within 2 hours of the notification by the County for corrective maintenance during the emergency response window specified. If remote diagnosis determines a site visit is required to complete troubleshooting procedures, be on-site within the response time selected below.
- d. On-Site Response Within 4 Hours: The Contractor shall be on-site to provide emergency service within 4 hours of the request by the County. Non-emergency calls, as determined by Miami-Dade County will be incorporated into the next scheduled preventive maintenance visit. For work done in hours excluding hours between Mondays through Friday 8:00 a.m. to 5:00 p.m.; Miami-Dade County will pay the premium rate, which is the difference between the regular labor rate and the overtime labor rate.

3. List of Buildings/Facilities

A. List of buildings covered under the maintenance services described in Section 2.

1. Medical Examiners Building
2. Courthouse Center
3. Stephen P. Clark Center
4. South Dade Courthouse Annex
5. South Dade Government Center
6. Data Processing Center
7. Gerstein Justice Building
8. Hickman Building
9. Graham Building
10. Cultural Center
11. Miami-Dade Courthouse
12. Caleb Center

13. Miami-Dade 140 West Flagler Building
14. North Dade Justice Building
15. Miami-Dade Public Defender
16. Miami Dade Permit Building
17. Miami Dade Elections
18. Miami-Dade Fire Rescue
19. WASD Douglas
20. WASD Hialeah Preston

B. List of buildings with customized services

21. Port of Miami 1080/1050 Building – See Paragraph 8.
22. Miami-Dade Police HQ – See Paragraph 6.
23. Central Support Facility – Paragraphs 2 and 11 are applicable to this building.
24. North District Chiller Plant – Paragraphs 2 and 12 are applicable to this building.

4. Addition/Deletion of Facilities/Buildings and/or devices

The County reserves the right to add or delete a building/facility from the Contract at any time during the term of this contract including any extensions or renewals thereof. The Contractor shall not provide service, upon receipt of notice from the County, and shall not bill the County for the facilities/buildings that are being deleted from the Contract.

The County also reserves the right to add or delete devices from this Contract at any time during the term of this Contract including any extensions or renewals thereof. The prices for additions/deletions of devices will be adjusted annually.

5. Additional Services

For parts that may no longer be available in future (as listed in Appendix B); the County will negotiate price for that building where parts are no longer supported. The Contractor shall install replacement parts, if parts are no longer available through any source of distribution, at a discount of 15% (on Time and Material), in addition to the 55% discount on current published list part and 25% discount on labor as specified in Appendix D.

The County may request additional services (including smoke evacuation certification, testing and repair services) during the term of the Contract. The scope of services and rates for these additional services will be determined at a later date. The Contractor shall not commence work until a Notice-To-Proceed/work order is issued by the County or a supplemental agreement is executed by the County.

The County may request the Contractor to submit a proposal to upgrade the parts (e.g. panels etc.). Upon receipt of the request from the County, the Contractor shall submit a detailed proposal to the County. The County reserves the right to negotiate the proposal submitted by the Contractor. The negotiated scope of services and prices will be incorporated into the contract via issuance of supplemental agreements by the County as specified in Article 7 of the Contract.

The County may request NFPA certification services and repair services for smoke evacuation systems. The Contractor will conduct an evaluation of HVAC equipment associated with the Smoke Evacuation Systems on annual basis, if requested by the County. The Contractor will conduct a preliminary Smoke Test and a final Smoke Test (to be certified by an engineer) and shall provide report and certificate to the County.

6. Special Service for Miami-Dade County Police Headquarters Facility

The Police Headquarters facility is located at 9105 NW 25th Street, Miami, Florida 33172. This Contract covers the annual inspections of the 217 pneumatic variable air volume boxes. Material coverage for the variable air volume boxes is not included in this Contract, the inspections are included.

7. OEM Parts

For buildings covered under the maintenance service as described in Section 2, the Contractor shall provide parts for repair and replacement at no additional cost to the County. Unless the part has exceeded its life cycle as defined in this agreement.

For all other buildings, the contractor shall provide parts, on an as needed basis, at the discounted rates specified in Appendix D.

The Contractors shall stock parts and deliver them within 24 hours of the request from the County. All parts shall carry warranty for replacement due to premature failure. List of most common parts:

- a. Micro logic Boards including SCU's, BLM's, MBU's
- b. Digital input / output boards
- c. Analog input / output boards
- d. Circuit modules
- e. Control relays
- f. Air / Water Temperature Sensors
- g. Controller Units, TEM's
- h. Computer software (for system backups)
- i. Air / Water flow meters
- j. Thermostats

8. Services for Port Miami Department

The Building Management Systems at the Port Miami are maintained by the County staff.

8.1 Locations

Locations of the Building Management Systems (Siemens Apogee – Insight at all locations) at the Port Miami are as follows:

- a. 1050 - RCCL Building
- b. 1080 - RCCL Building
- c. 1015 - Port Administration Building
- d. Passenger Terminal B/C
- e. Passenger Terminal J

8.2 List of Equipment at Port Miami

- a. **1050 RCCL, 6 story corporate office building:**
The air conditioning to this building is controlled by Siemens Controls, including two chillers, 12 air handlers units, the controls of the condenser pumps to RCCL's computer room, (the loose of these pumps could cause millions of dollars in damages to RCCL's computer system), the Smoke Evacuation (life safety system) which controls all of the smoke evacuation and pressurization fans.
- b. **1080 RCCL, 6 story corporate office building:**

The air conditioning to this building is controlled by Siemens Controls, including three chillers, 14 air handler units with variable frequency drives, the controls of the condenser pumps to RCCL's computer room, (the loose of these pumps could cause millions of dollars in damages to RCCL's computer system), the Smoke Evacuation (life safety system) which controls all of the smoke evacuation and pressurization fans.

c. **1001-1015, Port Administration Building:**

The air conditioning to this building is controlled by Siemens Controls, including two chillers, four air handler units, over 30 fan coil units with individual room control. The air condition control to the Port's Main Computer Server Room.

d. **Passenger Terminal B/C:**

The air conditioning to this building is controlled by Siemens Controls, including two chillers, eight air handler units, five fan coil units with individual room control.

e. **Passenger Terminal J:**

The air conditioning to this building is controlled by Siemens Controls, including two chillers, four air handler units, Co2 sensors that control the exhaust fans in the customs area based on carbon monoxide levels, return air sensors throughout the terminal.

8.3 Technical Support - The Contractor shall provide following services on as-needed basis to the County:

- a. **Consultation** – The Contractor shall have technicians available for consultation and troubleshooting for the hardware and software components of the building management system. The Contractor shall be available for telephone consultation and for on-site consultation 24 hours a day and seven days per week. The Contractor shall be on the County site within 4 hours of notification by the County.
- b. **Technical Support (Parts and Labor)** – The Contractor shall provide technical support in the form of qualified personnel 24 hours per day, 7 days per week and provide all parts, equipment and materials necessary to make emergency or scheduled repairs as needed. The Contractor shall maintain an up to date copy of the program for each location in which Siemens has an active service agreement for preventive maintenance of the control system, in case is needed to reload the program via on-line or on-site. The Contractor shall be on the County site within 4 hours of notification by the County.

8.4 Smoke Evacuation Services For Port of Miami

- a. The Contractor shall provide technical support and services for the Apogee Smoke Control Testing at the 1080 and 1050 Building at Port Miami.
- b. The Contractor will test and inspect all of the Apogee Smoke Control Life Safety System Building technologies per the inspection frequencies requested by staff. The work is to be performed in the following three stages at each facility.
1. A preliminary visual/functional inspection during normal business hours. The Contractor will visit the mechanical rooms to identify exposed mechanical deficiencies, leaking Eps, equipment on hand, VFDs failures, dampers frozen, check the system to confirm the programming is in place and functional and that all of the control panels

are working correctly. A report shall be generated and submitted with the findings.

2. The Contractor shall perform a preliminary smoke control system test, afterhours; all the zones are tested on normal power and one zone on emergency power. The County will provide a ten (10) hour window to complete the work starting no later than 6:00PM local time. A report shall be generated and submitted with the findings.
3. The Contractor will perform a final smoke control system test, afterhours; random zones will be tested on normal and emergency power as dictated. The County will provide an eight (8) hour window to complete the work starting no later than 6:00PM local time. A report shall be generated and submitted with the results of the testing. If all zones are functional, Contractor shall issue a signed and sealed report that the smoke control system is operating properly. However, if problems are found, repairs will need to be initiated by the County and defective areas will need to be tested again.

c. The County will not allow smoke bombs to be set off in the buildings.

9. **Smoke Evacuation Services for Courthouse Center, Stephen P. Clark Center, Cultural Center and Central Support Facility.**

- a. Siemens will test and inspect the Apogee Smoke Control Life Safety System Building Technologies annually. The inspections will be broken into quarterly portions for the **SPCC and the Family Courthouse**. During each visit one floor/zone will be tested for Smoke Control functionality. Miami-Dade will choose the floor/zone to perform the smoke test on each quarter. The inspections for the **Cultural Center and Central Support** will be completed all at once unless mutually determined otherwise.
- b. The maintenance fee includes the necessary overtime labor to perform the work. The visits will be scheduled in advance.
- c. Miami-Dade shall provide one person to assist with the testing and to provide access to equipment.
- d. A report shall be generated after each inspection with the results of the testing. The first part of the test consists on simulating the purge/pressurization actions from the Fire Fighters Smoke Control System (FSCS) and verifies that the mechanical equipment is responding according to the sequence of operation and override commands from the FSCS. Siemens will simulate a fire alarm in one floor/zone each inspection (to be decided by the customer). Per Miami-Dade's request, there will be no smoke bombs set off in the building.
- e. The Mechanic's will be checking smoke control dampers, and the mechanical fan equipment for proper operations, on the floor/zone in question, above and below as dictated by the sequence of operations.
- f. Stairwell pressurization & door force opening will be tested and documented on the same set of floors that we are performing the testing. All results whether

satisfactory or not will be recorded. Miami Dade County personnel will be present to assist with the testing and inspections.

10. Training and Educational Material

The Contractor shall provide training and educational material to the County staff on as needed basis. Upon receiving the request from the County's Project manager or designee, the Contractor shall provide a proposal to the County. The County reserves the right to negotiate the scope of work and prices to be paid by the County. The negotiated statement of work and prices will be incorporated into the contract via issuance of work orders or supplemental agreements by the County as specified in Article 7 of the Contract.

11. Monitoring Services

11.1 The contractor shall provide the following general services:

- a. Manage and operate the County Building Management Systems Control Center ("BMS Control Center") during regular business hours. The regular business hours are Monday – Friday 7:00a.m. to 4:00p.m. Contractor shall provide two part-time on-site fully qualified personnel with a minimum certification/training levels in the following areas:
 1. 5-615 APOGEE Field Panel and FLN Operations.
 2. 5-620 APOGEE Workstation Operations.
 3. 5-625 APOGEE Advanced Operations.
 4. 5-630 APOGEE PPCL Programming.
 5. 5-720 APOGEE Workstations with BACnet.
 6. 5-725 APOGEE with BACnet Advanced Operations.
 7. FIS2124 XLS Voice Installation, Operation and Maintenance.

- b. Both personnel shall have 65% of their time allocated to the control center. The BMS Control Center is presently located on the second floor of the County's Central Support Facility located at 200 NW 1st Street, Miami, Fl. The location of the County's BMS control center may change as determined by the County. The County will provide the new location to the contractor. **Note:** The planning and moving of the Control Center is not part of this agreement. The BMS Control Center provides services to the following facilities managed by the Facilities Utilities Managed Division (FUMD) of the Internal Services Department (ISD):

No.	Building	Address	Square Footage
1.	Caleb Center	5400 NW 22 nd Avenue	117,437
2.	Carol Day Care Center	112 NW 3 rd Street	15,478
3.	Central Support Facility	200 NW 1 st Street	350,000
4.	Civic Park Plaza	1469 NW 13 th Terrace	24,437
5.	Coral Gables Courthouse	3100 Ponce de Leon	25,000
6.	Courthouse	73 W Flagler Street	273,884
7.	Courthouse Center	175 NW 1 st Avenue	469,242
8.	Cultural Center/Plaza	101 W Flagler Street	321,493
9.	Data Center	5680 SW 87 th Avenue	111,548
10.	Emergency Ops Center	5600 SW 87 th Avenue	8,000
11.	Gerstein Justice Bldg.	1351 NW 12 th Street	417,504
12.	Graham Building	1350 NW 12 th Avenue	113,000
13.	Hialeah Branch Court	11 E 6 th Street	38,000

14.	Hickman Building	275 NW 2 nd Street	75,000
15.	Juvenile Justice Center	3302 NW 27 th Avenue	18,664
16.	Medical Examiner Bldg.	No. 1 Bob Hope Road	88,000
17.	Metro Annex	864 NW 23 rd Street	30,180
18.	Metro Flagler Bldg.	140 W. Flagler Street	256,082
19.	N. Dade Justice center	15555 Biscayne Blvd.	44,000
20.	Overtown Transit Village North	701 NW 1 st Court.	317,662
21.	Public Defender Bldg.	1320 NW 14 th Street	84,408
22.	Elections/311	2700 NW 87 th Avenue	120,000
23.	S. Dade Govt. Center	10710 SW 211 th Street	109,272
24.	S. Dade Govt. Center	10890 SW 211 th Street	3,225
25.	Stephen P. Clark Center	111 NW 1 st Street	760,000
26.	West Dade Permitting Center	11805 Coral Way	106,960

- c. Provide a remote BMS Control Center at Contractor's facility for after hours monitoring. The remote BMS control Center shall be operational 24 hours/7 days a week to provide for redundant operations if needed and be "Underwriters Laboratory (UL) Rated". This base service includes roll over of the phones during normal working hours as needed to support the local operations staff.
- d. Supervise all activities within both BMS Control Centers, including the utilization of the various systems.
- e. Receive messages and disseminate information to County departments, staff, and personnel; other government agencies; County contractors and their subcontractors, as needed, via various communication mediums provided by the County such as two-way radios, telephones, e-mails, and pagers. Contractor shall provide a satellite telephone for use during emergencies.
- f. Contractor shall work closely with the County's Project Manager to create a Continuity of Operation Plan (COOP) in the event of a communication, equipment, and/or systems failure or during scheduled maintenance that affects the BMS Control Center operations. The COOP shall address the following:
1. Ensuring uninterrupted monitoring services are provided, including the process for provisions of an action plan to the County's Project Manager within 4 hours of such failures. The action plans will describe the steps to be taken by the Contractor to resolve the failures and are subject to approval by the County's Project Manager.
 2. Plan for provision of services during scheduled maintenance at either BMS Control Center. The contractor shall work closely with the County's Project Manager to submit and finalize the COOP, incorporating the County's recommendations therein. The final COOP shall be submitted to the County's Project Manager within sixty days of contract award.
- g. Attend project status meeting with the FUMD staff regularly to provide updates on the operations. Such meetings may be held on-site at the County's BMS Control Center or via teleconference, at the discretion of the County's Project Manager.

- h. Meet monthly with FUMD personnel to discuss pending issues and address any concerns by the County regarding the services being provided. The Contractor shall produce and maintain records and meeting minutes of the monthly meetings. Such records and minutes shall be provided to the County's Project Manager at the next monthly meeting or upon request.
- i. Notify FUMD staff within 30 minutes (via communication medium identified in item d above) of any issues that may affect system performance or the performance of the services provided to the County, and the Contractor's efforts to resolve the issues.
- j. Obtain contractor Identification Badges for employees prior to commencement of work by any of Contractor's employees. To obtain a badge, the employee must pass security clearance. The security clearance is subject to, among other things, passing personal and/or corporate criminal background checks. The cost for the background checks will be paid by the Contractor.

11.2 The contractor shall meet and provide the following operational requirements:

- a. Ensure appropriate staffing at both BMS Control Centers, including during and throughout an emergency or crisis situation including, but not limited to hurricanes.
- b. Ensure that the remote BMS Control Center remotely monitors the County systems in real-time.
- c. Ensure that calls to the BMS Control Center never go to voice mail. The Center should be able to handle multiple phone calls simultaneously and shall rollover the phones to the remote BMS Control Center during normal working hours as needed to support the local operations staff.
- d. Create and run various system reports on the BMS including the Fire Alarm System and County's work order system as may be needed. The reports may be required on a daily basis or as requested by FUMD personnel. The following list is an example of the reports provided on the BMS:
 - 1. Panel Point Log
 - 2. Failed Point Log
 - 3. Alarm Point Log
 - 4. Operator Point Log
 - 5. Disabled Point Log
 - 6. Panel Display Report
 - 7. Motor Status Report
- e. Issue point commands to the BMS as requested by building management staff. This includes, but is not limited to the following tasks which shall be performed within 10 minutes of request:
 - 1. Commanding points on/off (turning equipment on or off)
 - 2. Changing set points (setting to a value)
 - 3. Commanding valves (setting to a value)
 - 4. Commanding dampers (setting to a value)
 - 5. Commanding pump/pumps to run at a certain speed (setting a value)
 - 6. Initiating resets (may be a command of on/off or a setting of a value)

7. Command/set the point priority as needed. An example of this would be to change the priority at which a point is at from one value (None, PDL, Emergency, Smoke, and Operator, etc.) to another.
 8. Commanding the various point options (Disabled alarm printing, alarm by command, out of service/disabled and reset Totalization).
- f. Create and update databases for the BMS as needed. Unless otherwise specified or agreed, the following tasks shall be performed within 8 hours of request. This includes, but is not limited to the following:
1. Equipment scheduling database (Scheduler & Time of Day).
 2. Point database modification (point configurations and setup).
 3. Creating graphics and editing (graphics used for the graphical user interface).
 4. Creating and modifying trend definitions. (Database used for the configuration of the trending function).
 5. Creating and modifying PPCL program as requested by the county. In the event any modifications are deemed extensive (more than 8 hours), the County will request a quote or proceed as T&M as specified in Appendix D – Section B. All PPCL modifications shall be reviewed and approved by the County's BMS Superintendent.
 6. Creating and modifying plotter graphs utilizing the Dynamic Plotter software or Excel using data exported from the system.
 7. Monitor, respond, and escalate BMS alarms and events as instructed in Point Informational Text, Point Memo and the Procedures Manual. These tasks shall be performed within 10 minutes of system triggering alarm. Escalation process shall be completed within 40 minutes of system triggering alarm.
 8. Monitor and operate chiller plant equipment based on procedures and sequences provided by Chiller Plant Superintendent. This information may be found on graphics created to outline chiller plant operation. Supplemental information may also be found in Point Informational Text, Point memo and the Procedures Manual.
 9. Monitor and respond to fire alarms connected to the BMS control room as instructed in Point Informational Text, Point Memo and the Procedures Manual.
 10. Log all events, requests and service calls. Create work orders based on these calls and requests from building management staff.
 11. Create edit and update the Procedures/SOP and contact manuals as needed. This will be done at the request of and subset to the approval of FUMD personnel.
 12. Create, enter and close work orders on the County's work order system (Infor/Eams). This includes demand and maintenance work orders for the utilities generator crew and chiller plants managed by FUMD. Emergency work orders shall be created within 30 minutes of receiving call, non-emergency work orders shall be created within 2 hours of receiving call. All work orders shall be closed within 2 days of receiving the information needed to close the work order.

Note: the "work order system" is a software application used to create work orders and track assets. It can track several aspects of tasks/projects

including: time, labor, progress, materials, warranties, repair history, maintenance history & costs.

- g. Ensure Contractor's staff is trained on new advances and technologies related to provision of the Services.

11.3 The contractor shall meet and provide the following security requirements for remote BMS Control Center:

- a. General Security
 - 1. Have in place a security policy that manages and maintains the internal security of its infrastructure.
 - 2. Have the capability to immediately disable all or part of the functionality of the application should a security issue be identified.
- b. Physical Security
 - 1. Maintain equipment hosting the application located in a physically secure facility, which requires identification badge access at a minimum.
 - 2. Maintain infrastructure (hosts, network equipment, etc.) hosting the County's application located in a locked cage-type environment.
 - 3. Keep accurate internal records identifying the personnel with access to the environment hosting the application.
- c. Network Security for Internal Access
 - 1. Deploy appropriate firewalling technology and authentication using cryptographic technology.
 - 2. Deploy one of the following cryptographic technologies: IPSEC, SSL, SSH/SCP, PGP.
 - 3. Deploy one of the following remote access technologies offered by the County: Point-to-point IPSEC VPN, SSL-VPN, Citrix, SSH/SCP, PGP.
- d. Host Security
 - 1. Provide remote BMS Control Center that has been hardened against network attacks.
- e. Authentication and Authorization
 - 1. Provide all users accessing the BMS a unique username and password (unless a secure implementation of digital certificates is used in place of username and password).
 - 2. Ensure all authorized users accessing the BMS utilize a strong password incorporating both letters and numbers, at least six characters in length.
Note: Intruder lockout detection shall occur according to the County's security measures in place. Users denied access will require to be authenticated by the County System administrator, prior to regaining access to the system.

11.4 Remote Call Center Services

- a. The Contractor shall provide a remote Call Center with redundant operations in the event of a failure in the remote Call Center. Such services will be provided under the same terms and conditions and at no additional cost to the County. The Contractor shall provide a remote Call Center that shall:

1. Serve and function as a 24 hour/7 day a week call center for various GSA/FUMD provided services. Receive messages and disseminate information to County departments, staff, and personnel; other government agencies; County contractors and their subcontractors, as needed, via various communication mediums such as two-way radios, telephones, e-mails and pagers.
2. Ensure that calls to the BMS Control Center never go to voice mail. The Center should be able to handle a multiple phone calls simultaneously and shall rollover the phones to the remote BMS Control Center during normal working hours as needed to support the local operations staff.
3. Continue operation in the event of a communication failure. Details regarding this plan shall be made available to and approved by the County.
4. Ensure appropriate staffing at the Call Center, including during and throughout an emergency or crisis situation including, but not limited to hurricanes.

11.5 Performance Guarantees

- a. Listed below are the performance guarantees. Failure to respond to the alarms or perform the required tasks listed below, in accordance with the Scope of Services, Section 11 “Monitoring Services” and to the satisfaction of the County, shall cause the Contractor to accrue points for each documented incident. Repeated failures to comply with the Contract requirements may result in a non-performance report being generated. The County reserves the right to find the Contractor in default of the contract for failure to perform.

Incident Type	Points
a) Failing to report alarm within 10 minutes as required in Paragraph 8.2(f)(7).	1,000
b) Failing to escalate BMS alarms and events as instructed within a total time of 40 minutes as required in Paragraph 8.2(f)(7).	1,500
c) Failing to log an event as required in Paragraph 8.2(f)(10).	1,000
d) Failing to issue point commands as requested by building management staff within 10 minutes of notification (Paragraph 8.2 - e).	1,000
e) Failing to create emergency Work Orders within 30 minutes of receiving call [Paragraph 8.2(f)(12)].	1,000
f) Failing to create a non-emergency Work Order within 2 hours of receiving call [Paragraph 8.2(f)(12)].	500
g) Failing to close a Work Order within 2 days of receiving the information needed to close the Work Order [Paragraph 8.2(f)(12)].	500
h) Failing to create an update a database at the County’s request within 8 hours [Paragraph 8.2(f)]. Excluding incidents in e, f, and g mentioned above.	1,000
i) Failing to provide an action plan to the County within 4 hours in the event of a systems failure [Paragraph 8.1(e)(1)].	5,000

Below is the point schedule and escalation associated with the incidents listed in the table above. There are three Levels of Escalation to be triggered when the accumulated value reaches the thresholds set below. Points will be tallied using a 182 day rolling window.

Levels of Escalation	Points
Accruing these points will initiate a meeting between Contractor’s Account Project Manager and the County’s Project Manager. The contractor shall provide the	4,000

county's Project Manager with an action plan to prevent incidents from occurring again which provides a resolution that satisfies the County.	
Accruing these points will initiate a meeting between contractor's Upper Management (Area Manager or higher and county's GSA/FUMD division director. The Contractor shall provide the County's Project Manager with an action plan to prevent incidents from occurring again which provides a resolution that satisfies the County.	6,000
Accruing these points will initiate a replacement of the Contractor's BMS Control Center personnel and may also result in a non-performance report of the Contractor being generated by the County.	8,000

12. Services for North District Chiller Plant

12.1 The Contractor shall provide the technical support and services throughout all periods listed to the Siemens Building Management System at the Miami-Dade North District Chiller Plant per the terms and conditions of the Contract. The County will provide a lift for the contractor to service the Siemens sensors located in high and difficult to reach locations. In addition, the County will provide access for the Contractor to service the Apogee controls equipment installed at the American Airlines Arena and Terremark Building which are part of the Apogee system control at the North District Chiller Plant. The Contractor shall provide the preventative maintenance to test the open/close contacts. Excluded from coverage are Non Siemens Sensors and Non Siemens Valves. Additional, coverage for each service period will be provided as follows:

- a. In addition, the Contractor shall provide the following equipment, keeping them in stock on site as spares.
 - 1. 1 ice controller
 - 2. 2 spare 50% sensors
 - 3. 2 spare 100% sensors for emergency stock
- b. In addition, the Contractor shall provide one visit by the factory authorized service company to spend no more than 2 days on-site inspecting the sensors, controllers and utilize the spare stock as needed for replacement. The County will provide a scheduled shutdown/meltdown of one tank for this service visit. Should additional time be needed, the County will pay based on the rates specified in Appendix D – Price Schedule.
- c. In addition, the Contractor shall provide the replacement coverage on the valve actuators only. The valves bodies and packing's are excluded as they may not be serviced without a plant shutdown. The labor for the replacement of the new valve actuators shall be billed separately as specified in Appendix D – Price Schedule.
- d. Excluded from coverage are 10 Yaskawa VFD's (Variable Frequency Drive). The Contractor shall provide preventative maintenance and emergency services for the remaining 12 VSDs (Variable Speed Drive); one 350/250 HP replacement VFD or two 200/100 HP replacements per year for the remaining 12 VSD's. If more than one fails the County may be charged per the rates specified in Appendix D – Price Schedule.
- e. In addition, the Contractor shall provide on-site training: one (1) day per quarter by a system specialist, and two (2) days per quarter for a Siemens Energy Engineer to review the operations of the plant to make written recommendations for energy savings improvements.