



**FlexNet RNI Site to SaaS
Migration and Upgrade
With
Sensus Analytics
and Implementation of SaaS
Consumer Portal**



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1. Services Summary and General Responsibilities

City of League City, TX (“League City”) is requesting a migration of the FlexNet Regional Network Interface (“RNI”) environment to Sensus Software as a Service solution in Sensus’ Data Centers. League City operates the RNI on their customer premise equipment (“CPE”). This statement of work describes the services that will be performed by Aqua-Metric, Sensus and League City in the migration of the RNI from League City’s premise site (“Site”) to the Sensus Data Center Software as a Service (“SaaS”) environment.

Sensus will install, setup, and configure the RNI in the SaaS environment in Sensus’ Data Centers. Sensus will perform certain configurations on the CPE to allow the transfer of data to occur from Site to SaaS. Sensus will build, validate and test the SaaS environment and functionality prior to production cut-over. Sensus will also setup and implement the Sensus Analytics (“SA”) solution in a SaaS environment.

Aqua-Metric/Sensus will perform integration with the Sensus Analytics solution and will work with League City’s billing system provider if changes are necessary to the current interface. Prior to the migration to the production system, Aqua-Metric/Sensus will provide end-user training on the latest version of the RNI, SA solutions and Portal. In addition to the migration of the RNI, this includes the upgrade of the FlexNet RNI to version 3.X.

Pricing provided on page 14 of this document reflect guaranteed pricing for the term of the Project as detailed herein. This includes up to 35,000 end services, and a minimum five-year term.

As part of the project, Sensus will install the Consumer Portal in the SaaS environment to allow the Residents and Commercial Customer in the City of League City to access to their water consumption information.

1.1 General Responsibilities

Aqua-Metric and Sensus Responsibilities

- Aqua-Metric shall provide a Project Manager (“PM”) to coordinate all aspects of the migration, upgrade, implementation, and integration process. The PM shall serve as the primary Sensus contact for the project, and will coordinate with the League City PM to communicate project timelines and other important information.
- Aqua-Metric/Sensus shall provide technical resources required to support the migration, configuration, and integration of the Sensus FlexNet RNI, SA solution, and League City billing system. Aqua-Metric and Sensus shall be responsible for proper configuration of the various Sensus systems, and shall also provide League City guidance on various application configurations when different options are available.
- Aqua-Metric shall provide integration services for the FlexNet RNI, SA solution and providing the data integration specifications for League City billing system to League City and the Billing System Vendor.

- Aqua-Metric and Sensus shall develop a project schedule and timeline to be provided to League City outlining the key project dates and milestones.
- Aqua-Metric/Sensus shall provide technical resources required to support the setup and configuration of the Sensus Analytics Consumer Portal (“Portal”).
- Aqua-Metric shall coordinate with League City, League City’s 3rd party backhaul vendors, as well as other IT departments and vendors as necessary to complete the project outlined herein.

League City Responsibilities

- League City shall appoint a Project Manager to act as a single point of contact for League City to coordinate with the Sensus Project Manager on the overall delivery of the solutions described herein.
- League City agrees to engage in Systems Acceptance Testing (SAT) of the FlexNet Regional Network Interface (RNI) in a timely manner after upgrade. League City agrees to provide formal acceptance of the Regional Network Interface (RNI) 3.x environment in writing within 30 days of successful completion of Systems Acceptance Testing (SAT).
- League City shall pay all approved invoices related to the project in a timely manner.

2. Description of Services

2.1 Aqua-Metric Project Management

Designate an Aqua-Metric Project Manager to act as the primary interface with League City for duration of the project. The Aqua-Metric PM will create an overall project plan and timeline to complete the appropriate tasks and activities. The Aqua-Metric PM and League City PM will work jointly to identify any risks associated to the success of the project and work to mitigate such risks. Project management activities are described below.

Aqua-Metric and Sensus Responsibilities

- Provide a single point of contact for project managing all related activities.
- Schedule/Coordinate project kick-off meeting (meeting may be delivered remotely).
 - Provide overall project governance and project kick off presentation.
- Create and review project plan and timeline.
- Review the program guidelines, deliverables, and expectations, and present project schedules and baseline project plan created.
- Communicate activity updates on regular interval agreed upon by League City and Sensus.
- Advise League City on issues related to challenges with project activities or risk mitigation strategies.

- Consult with League City on challenges and open trouble tickets requiring Sensus internal escalation.
- Develop the Systems Acceptance Testing (SAT) plan and agreement with League City.

League City Responsibilities

- Designate League City contact to coordinate activities with Sensus PM and technical resources.
- Schedule resources to attend meetings and assist Sensus when tasks require League City support.
- Provide list of personnel for email distribution of information.
- Establish a communication and activity plan.
- Work to define the terms of SAT and understand how League City will communicate the formal acceptance of the upgrade to Sensus.

2.2 RNI Transition Period and Parallel Data Delivery

During the RNI Transition Period League City will continue to operate the Site-based RNI 3.x system. Sensus will work with League City to export the RNI 3.x database and subsequently import the database into Sensus' SaaS environment. Data delivery and information will be transferred via "piperules" to ensure the latest information is transferred to the SaaS RNI 3.x system in preparation for production cut-over activities.

Aqua-Metric and Sensus Responsibilities

- Sensus shall install, setup, and configure a SaaS RNI on managed servers within the Sensus Data Center.
- The SaaS RNI will be provisioned to support the number of services correlated to the propagation study of record.
- Sensus shall perform database clean-up and maintenance in League City's RNI 3.x system:
 - Clean-up of stale meters,
 - Clean up database of non-existent or irrelevant data,
 - Perform database maintenance such as rebuilding indexes, updating indexes, consistency checks, run SQL query/agent jobs, etc.
- Aqua-Metric and Sensus shall work with League City personnel to make an image of the existing database resident on League City's RNI servers.
- Sensus shall restore the data image retrieved from League City's RNI onto the SaaS RNI servers configured for League City within the Sensus Data Center.
- Sensus shall remotely configure League City's RNI 3.x system using "piperules" to deliver new data from League City's RNI to the SaaS RNI during the transition period.

- Sensus shall configure the “piperules” on the SaaS managed servers in the Sensus Data Center to accept the new incremental data from CPE RNI during the transition period.

League City Responsibilities

- League City will provide Aqua-Metric and Sensus with remote access to League City systems and network.
- League City shall coordinate with Aqua-Metric and Sensus to facilitate the creation of the backup image from the Site-based RNI.
- League City shall coordinate with Aqua-Metric and Sensus to allow the configuration of “piperules” on the Site-based RNI to allow incremental data to be delivered to the hosted FlexNet RNI in the Sensus Data Center.
- League City shall provide network connectivity between League City’s Site and the Sensus Data Center to provide data synchronization.
- League City will be responsible to provision firewall policies to facilitate the synchronization via “piperules” between League City’s site and Sensus Data Center.

2.3 Setup and Integration of SA Solution with RNI

The Sensus Analytics solution is a Software as a Service (SaaS) solution that provides League City with the ability to aggregate both metering data and customer billing data into a single platform to provide the reporting, dashboards, and analytics that will enable League City to become more operational efficient and effective in making business decisions on a day-to-day basis.

League City is purchasing the SA Water Enhanced with the following modules: Billing Access, Meter Insight, Device Access, Report Access, Alarm Dashboard and Alert Manager.

Aqua-Metric and Sensus Responsibilities

- Sensus shall setup, install, and configure the SA solution instance for League City.
- Configure the RNI to transmit the required data to the SA solution as follows:
 - CMEP (Reading Data, Alarms & Events)
 - Implement CMEP configuration settings/run time parameters
 - MultiSpeak 4.1 Meter Interactions
 - On Demand Reads Request
- Aqua-Metric and Sensus shall integrate the SaaS RNI 3.x environment with the SA solution per the requirements above, and ensure that data is successfully delivered from the RNI to the SA solution.
- Aqua-Metric and Sensus shall integrate the SA solution with the Portal.

League City Responsibilities

- The League City PM shall engage with the Aqua-Metric PM and shall coordinate with other departments and/or vendors to facilitate the setup and integration of the Sensus RNI and SA solution.

2.4 Configuration of SA solution with League City billing system

Aqua-Metric and Sensus will work to configure the SA solution with League City's billing system according to League City's system requirements.

Aqua-Metric and Sensus Responsibilities

- Aqua-Metric and Sensus shall configure the SA solution so that it can receive data from the League City billing system. This is to ensure that updates to meter information are received daily from the billing system into the SA solution. SA will not be performing file exports for billing. The exports would need to be configured by League City or their Billing System Vendor.
 - Delivery Frequency: Daily
 - Delivery Method: files will be posted to Sensus Secure FTP site by League City
 - Delivery Format: League City will send a file of comma separated values (CSV) format. Values may be in any order but static once an order is determined. A minimum set of fields is required to support the SA solution. The minimum set of fields required is as follows:
 - Account, MeterID, RadioID, Account_Billing_Cycle, Account_Route, Asset_Address, sdp_Lat, sdp_Lon, Cust_Name
 - Additional synchronization fields may be requested by League City for reporting, search, and other functionality of the SA solution. The entire list of fields is as follows. Not including field may limit functionality of the system:
 - meter_id, meter_id_2, radio_id, meter_manufacturer, meter_type, meter_lifecycle_state, sdp_id, sdp_state, sdp_lat, sdp_lon, sdp_grid_id, nearest_branch, asset_address, asset_city, asset_state, asset_zip, account_id, account_status, account_service_type, account_billing_cycle, account_rate_code, service_cycle, service_route, sdp_flow, sdp_zone, sdp_meter_size, sdp_usage_uom, sdp_meter_mult, number of dials, last known read, minimum usage threshold, maximum usage threshold, customer_name, customer_home_phone, customer_cell_phone, customer_email, non_billable
 - Note: Additional Fields may be added in support of new functionality in future releases of SA
 - Additional fields for the synchronazation may be desired by League City for the Portal application.

League City Responsibilities

- The League City PM shall engage with the Aqua-Metric PM and shall coordinate with other departments and/or vendors to facilitate the configuration of the SA solution and League City billing system.
- Collaboration may include, but is not limited to, the creation and delivery of data synchronization files from the billing system.
- League City will be responsible for providing the communication path between SA solution and CIS/billing system for the purpose of the data exchange.
- League City will assist in defining required fields and work with billing vendor to get desired information in the Synchronization file(s).
- Any fees/costs for modification and testing of the billing interface for League City billing system charged by the billing vendor will be responsibility of League City.

2.5 Validation and Testing Services

Sensus will validate and test all functionality of the system prior to the cut-over production of the SaaS RNI 3.x environment. Validation and testing includes the connectivity to/from the base stations, integration to SA solution and League City billing system, and two-way communication.

Aqua-Metric and Sensus Responsibilities

- Aqua-Metric and Sensus will verify the base stations are at the appropriate hardware and firmware build for RNI 3.x, the RF cards are at the required revision and GPS is configured and functional.
- Aqua-Metric will notify League City if base stations require hardware upgrades to be performed.
- Aqua-Metric/Sensus will update/upgrade the firmware and/or hardware required for any base station required to function in order to facilitate the SaaS RNI 3.x upgrade.
- Aqua-Metric/Sensus shall configure the base stations and redirect communication from League City's Site-based RNI 2.x system to the SaaS RNI 3.x system.
 - Sensus shall validate and test meter data information and traffic is transferred from redirected base station to SaaS RNI 3.x system.
 - Aqua-Metric/Sensus shall issue certain two-way commands to League City specified test meters to ensure two-way communication is working and functional.
- Sensus shall test the RNI and SA solution integration and provide written notice to League City when the integration is complete.

- Aqua-Metric/Sensus shall test the integration from RNI to SA solution to test for on-demand reads, alarms, etc., to verify system functionality.
- Aqua-Metric shall test the SA solution to League City billing system integration and provide written notice to League City when the integration is complete.
- Aqua-Metric/Sensus shall perform a test of the integration between the SA solution and League City billing system to ensure League City receives meter data to issue billing reads.
- Aqua-Metric/Sensus shall perform a test of the Portal spot check that data is showing up in the system as expected.

League City Responsibilities

- League City has performed all necessary base station hardware upgrades as required to perform the RNI 3.x upgrade.
- League City will identify the appropriate base station and specify the select set of test meters to perform system validation and testing.
- League City shall test the interface between the Sensus systems and League City billing system within 30 days after written notice from Aqua-Metric/Sensus that the integration has been completed.
- League City shall test the Consumer Portal after the system is setup and configured.
- Integration testing shall include the verification of the data synchronization from the Sensus systems, as well as the verification of reading data delivered by the Sensus RNI system.
- League City shall provide written notice of acceptance of the integration upon successful completion of the integration testing.

2.6 Production Cut-Over to SA and Redirection of Base Station Connections

Aqua-Metric/Sensus will work with League City to determine production cut-over date and timeline working with Aqua-Metric PM and League City PM. After proper validation and testing has been performed on the SaaS RNI 3.x system, the cut-over activities will take place and Sensus will work with League City to reconfigure all base stations to communicate directly with the SaaS RNI 3.x system.

Aqua-Metric/Sensus Responsibilities

- After League City has provided written acceptance of the SaaS RNI solution and integration, Sensus will remotely reconfigure all FlexNet base stations in service within League City's service area to communicate directly with the SaaS RNI 3.x environment.
- Aqua-Metric/Sensus shall coordinate with the League City PM to facilitate backhaul testing and ensure that network traffic is being routed properly to the SaaS RNI 3.x environment.

- Following the reconfiguration of the base stations, Aqua-Metric/Sensus will work with appropriate League City personnel to configure Open VPN at each site.
- Aqua-Metric will update all system drawings and applicable documentation.

League City Responsibilities

- League City shall coordinate with Sensus to facilitate the reconfiguration of the base stations to communicate directly with the SaaS RNI 3.x environment.
- League City shall coordinate the current network backhaul providers at the base station sites, to redirect the backhaul of the data from the current RNI 2.x production environment to the SaaS RNI 3.x environment.
- League City is solely responsible for network backhaul connections at the base station sites, including any changes to the network backhaul equipment or settings, and any ongoing network backhaul charges from the base station sites.
- League City will need to, prior to the cutover from the non-hosted 2.2.4 RNI and SaaS 3x or 4x RNI, assist with setup of a network link so the two RNIs have the ability to run in parallel. This will allow for proper testing of the new system and to prepare the new system for cutover.
- This will require an open vpn connection between the non hosted and SaaS RNI.
- This connection will exist between the two network controllers over network ports 1194 and 9700.
- It is important that the non-hosted RNI allows port 22, 1194 and 9700 access from the SaaS RNI environment.
- After cutover to the new SaaS structure, Aqua Metric and Sensus will require access to League City's three basestations through the City's existing firewall through additional ports - 9600 and 9800.

2.7 Production Cut-Over of Portal and Rollout to League City Water Customers

Aqua-Metric/Sensus will work with League City to determine production cut-over date and timeline working with Aqua-Metric PM and League City PM for the Portal. After proper validation and testing has been performed on the SaaS Consumer Portal, the City will start Rolling out the application to the citizens.

Aqua-Metric/Sensus Responsibilities

- After Acceptance Aqua-Metric will assist League City on creation of a rollout plan of the SA Consumer Portal

League City Responsibilities

- League City shall execute the rollout plan after training and acceptance.

3. Assumptions

- RNI is only required to integrate with:
 - SA solution
 - League City billing system
- MultiSpeak 4.1 and CMEP will be used
- No Enterprise Service Bus (ESB) will be utilized for this project
- Single Sign-on is out of scope for this project

4. Scope

This Statement of Work is limited to the current FlexNet infrastructure in place as of contract signing. The City currently has a total of three (3) base stations. Any additional expansion of infrastructure and/or base stations, as well as any additional request for further systems integration or ongoing management/maintenance of the system, will require a Change Request and pricing will reflect this change.

All infrastructure and base stations will be analyzed to determine if upgrades are necessary. If any additional hardware or work associated to additional hardware is required, League City will pay appropriate fees to purchase hardware and pay associated labor fees accordingly.

There are no hardware upgrades anticipated for the base stations to support migration to either Site to SaaS RNI or Site to Site with Logic.

All work is assumed to be performed remotely, unless otherwise specified within this Statement of Work.

Pricing does not include travel and expenses for on-site work to be performed. If travel and on-site work is required, expenses for these services will be invoiced at actual rates. Estimated airfare is \$1,000.00 and daily per diem charges are \$300, which includes hotel, meals, and rental car charges.

If any travel is required by League City, the actual travel and expenses plus additional consulting time (at \$250/hr) will be billed to League City.

Travel expenses will only be incurred if Sensus personnel is required to be on-site. Aqua-Metric support and Aqua-Metric consulting expenses are covered under the Project Management cost documented in the quote (RNI with Analytics Upgrade).

Any costs or fees associated with the Billing System and the Billing System Vendor for software and/or services are the responsibility of League City.

Any costs or fees to integrate other systems are not included in the current scope.

5. Termination

Aqua-Metric/Sensus understands that City is a governmental entity, and should the Legislature fail to provide funding for any period during the term of this contract, City shall be excused for all liability for payment. City is required to give Aqua-Metric/Sensus written notice within thirty (30) days after learning that the funds will not be available. Upon receiving written notice from City, this contract will automatically terminate. In addition, the City shall be allowed to terminate this contract for any reason upon giving ninety (90) days written notice of its intent to terminate to Aqua-Metric/Sensus.

6. Signature Page

The undersigned agrees to all the terms, conditions, and expectations listed in the above Statement of Work.

Client/Customer

City of League City

Company Name

Authorized Signature

Authorized Contact (Type or Print)

Title

Date

Attest

Date

Contractor

Thirkettle Corporation

dba Aqua Metric Sales Company

Company Name

Authorized Signature

Authorized Contact (Type or Print)

Title

Date

Attest

Date

A. Price Quote for Sensus Analytics Upgrade SaaS



Kristy Segarra - Manager, Bids & Proposals
6700 Guada Coma Drive • Schertz, TX 78154
Phone: (210) 967-6300 • Fax: (210) 967-6305
Email: kristy.segarra@aquametric.com



March 22, 2017

Quote for City of League City, Texas
Attention Nancy Massey
Address 300 W Walker Street
City, State, ZIP League City, Texas 77573
Phone (281) 554-1000
Email nancy.massey@leaguecity.com

Quantity	Description	Unit Price	Extended
1	RNI Setup Fee	\$3,750.00	\$3,750.00
1	Sensus Analytics Setup Fee	\$3,750.00	\$3,750.00
1	Annual RNI SaaS Fee	\$14,705.88	\$14,705.88
1	Annual Sensus Analytics Enhanced SaaS Fee	\$11,764.71	\$11,764.71
1	Project Management	\$12,500.00	\$0.00
1	Sensus Analytics Basic Integration ⁶	\$2,000.00	\$2,000.00
1	RNI 3.X Training	\$5,000.00	\$5,000.00
1	Sensus Analytics On-Site Training	\$2,500.00	\$2,500.00
	Total:		\$43,470.59

Year Two Costs			
1	Annual RNI SaaS Fee	\$18,823.53	\$18,823.53
1	Annual Sensus Analytics Enhanced SaaS Fee	\$13,529.41	\$13,529.41
	Total:		\$32,352.94

Year Three Costs			
1	Annual RNI SaaS Fee	\$22,941.18	\$22,941.18
1	Annual Sensus Analytics Enhanced SaaS Fee	\$15,294.12	\$15,294.12
	Total:		\$38,235.30

Year Four Costs			
1	Annual RNI SaaS Fee	\$27,058.82	\$27,058.82
1	Annual Sensus Analytics Enhanced SaaS Fee	\$17,058.82	\$17,058.82
	Total:		\$44,117.64

Year Five Costs			
1	Annual RNI SaaS Fee	\$31,176.47	\$31,176.47
1	Annual Sensus Analytics Enhanced SaaS Fee	\$18,823.53	\$18,823.53
	Total:		\$50,000.00

This quotation on the product and services named, may be subject to the conditions noted below:

1. Net 30 Days to Pay
2. Freight Allow on orders over \$5,000.00
3. Pricing guaranteed for term of Project - date ranges as shown
4. Return product may be subject to 25% restocking fee
5. Minimum 5 Year Term; 5% Increase on All Annual Services Years 6-10 (from Year 5 Costs)
6. Basic Integration for Sensus side only. Billing provider may have additional costs associated with integration
7. Pricing based on 35,000 Services
8. Pricing does not include bonding

B. Sensus Software as a Service (SaaS) Benefits

Where every dollar invested makes more cents.

Our Software as a Service (SaaS) offer provides all the benefits of a Sensus communications network by placing the RNI (Regional Network Interface) in your own private cloud-based solution. When you move to a SaaS model, we provide all of the hardware and software required to operate the RNI through our world-class data centers. There is no need for additional capital expenditures such as IT, additional office space and specialized resources. You can achieve the business outcomes you require, with the lowest total cost of ownership and complete peace-of-mind.











We monitor your servers and network connections around the clock to ensure high availability and reliability. Our data center team performs all hardware maintenance as well as software patches, updates, and upgrades to ensure you have access to the latest features. In addition to standard security testing procedures, we perform quarterly third party audits and security testing by certified Cyber-Security partners to ensure your information is safe. In addition, we eliminate your need to maintain a separate disaster recovery environment using our geographically separated data center locations.

Overview of Sensus Software as a Service

- Sensus owns RNI software and license
- Sensus manages, maintains and monitors software and server hardware
- Annual fee includes all hardware and software licenses
- FlexWare software maintenance is included
- Disaster recovery included

Benefits and Outcomes Delivered:

- Reduce
- IT and operational costs
- Risk associated with system configuration and maintenance
- Risk in planning for business continuity through disaster recovery
- Environmental impact (carbon footprint)
- Provide predictable costs for budgetary planning
- Increase availability and system performance through our dedicated network and servers
- Increase and strengthen security of your IT systems
- Accelerate time to market with new technologies
- Increase operational efficiency leveraging our Network Operations Center

	Customer owns	Sensus owns
RNI License		
Connection to Data Center		
Hardware (servers, storage, etc.)		
Software (OS, 3 rd party, RNI)		
Disaster recovery (HW, SW, etc.)		

Compare the Benefits

Own and Operate		Software as a Service (SaaS)	
Customer Responsibilities	Sensus Responsibilities	Customer Responsibilities	Sensus Responsibilities
NETWORK		NETWORK	
<ul style="list-style-type: none"> • Configure and manage equipment (non-RNI) • Configure and manage network addresses • Configure and manage Virtual Private Networks (VPNs) • Configure and manage standard time source (NTP or GPS) • Configure and manage security access points • Respond to relevant alarms and notifications 	<ul style="list-style-type: none"> • Assist in configuring connection from base stations to licensed RNI server • Assist in configuring standard time source (NTP or GPS) • Respond to customer incidents when customer calls technical support 	<ul style="list-style-type: none"> • Configure and manage equipment (non-RNI) • Configure and manage local area network and addresses 	<ul style="list-style-type: none"> • Configure and manage equipment (non-RNI) in Data Center • Configure and manage network addresses in Data Center • Configure and manage Virtual Private Networks (VPNs) • Configure and manage standard time source (NTP or GPS) • Configure and manage security access points • Respond to relevant alarms and notifications
STORAGE AREA NETWORK (SAN)		STORAGE AREA NETWORK (SAN)	
<ul style="list-style-type: none"> • Respond to alarms and notifications • Investigate issues using log files • Manage vendor if physical storage is off-site • Configure and verify regular backups are occurring successfully 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Respond to alarms and notifications • Investigate issues using log files • Manage vendor if physical storage is off-site • Configure and verify regular backups are occurring successfully

Own and Operate		Software as a Service (SaaS)	
Customer Responsibilities	Sensus Responsibilities	Customer Responsibilities	Sensus Responsibilities
DATABASE		DATABASE	
<ul style="list-style-type: none"> Define data retention policy Archive relevant data Purge old, irrelevant, and excess data Monitor space and capacity requirements Respond to database alarms and notifications Install database software upgrades and patches Migrate data during installation and upgrades 	<ul style="list-style-type: none"> May perform or assist with installation of database patches, updates, and upgrades as a paid service Perform standard technical support troubleshooting of RNI application and/or database when customer calls for assistance 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Define data retention policy Archive relevant data Purge old, irrelevant, and excess data Monitor space and capacity requirements Respond to database alarms and notifications Install database software upgrades and patches Migrate data during installation and upgrades
RNI APPLICATION		RNI APPLICATION	
<ul style="list-style-type: none"> Research significant problems with meter reads and system performance Create and manage user accounts Customize application configurations Support application users Investigate application operational issues Respond to alarms and notifications Install application upgrades and patches Perform firmware upgrades over-the-air, or delegate and monitor field personnel for on-site upgrades 	<ul style="list-style-type: none"> May perform or assist with installation of application patches, updates, and upgrades as a paid service Perform standard technical support troubleshooting of application when customer calls for assistance 	<ul style="list-style-type: none"> Research significant problems with meter reads and system performance Create and manage user accounts Customize application configurations Support application users Investigate application operational issues Respond to alarms and notifications Perform firmware upgrades over-the-air, or delegate and monitor field personnel for on-site upgrades 	<ul style="list-style-type: none"> Install RNI application patches, updates, and upgrades when customer requests per Change Management process Perform standard technical support troubleshooting of application when customer calls for assistance
OPERATING SYSTEM AND THIRD-PARTY SOFTWARE		OPERATING SYSTEM AND THIRD-PARTY SOFTWARE	
<ul style="list-style-type: none"> Install operating system and other 3rd party software patches, updates, and upgrades Perform system hardware maintenance, or delegate and monitor maintenance personnel with tasks such as monitor system performance, capacity, and availability 	<ul style="list-style-type: none"> May perform or assist with installation of system patches, updates, and upgrades as a paid service Perform standard technical support troubleshooting of system when customer calls for assistance 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Install operating system and other 3rd party software patches, updates, and upgrades Perform system hardware maintenance and monitor system performance, capacity, and availability Perform standard technical support troubleshooting of system when customer calls for assistance
SECURITY		SECURITY	
<ul style="list-style-type: none"> Configure and manage security policies Install security-related software and hardware upgrades and patches for operating system, database, and applications Respond to alarms and notifications 	<ul style="list-style-type: none"> May perform or assist with installation of security patches, updates, and upgrades as a paid service Perform standard technical support troubleshooting of RNI application and/or database when customer calls for assistance 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Configure and manage security policies Install security-related software and hardware upgrades and patches for operating system, database, and applications Respond to alarms and notifications
BUSINESS CONTINUITY		BUSINESS CONTINUITY	
<ul style="list-style-type: none"> Develop and implement a disaster recovery plan Monitor system performance trends Monitor for significant equipment and infrastructure faults Identify problems and tasks required to perform required repairs; delegate to appropriate personnel Replicate all systems (hardware and software) to a separate location (if available) Perform complete system switch over to disaster recovery location (if available) 	<ul style="list-style-type: none"> May consult with customer to create a business continuity plan and/or procedures as a paid service May assist with switch over of systems to disaster recovery location as a paid service Perform standard technical support troubleshooting of system when customer calls for assistance during a disaster situation 	<ul style="list-style-type: none"> Develop and implement a disaster recovery plan Inform Sensus when to execute and switch over to the disaster recovery environment (execution fee will apply) 	<ul style="list-style-type: none"> Develop and implement a disaster recovery plan Monitor system performance trends Monitor for significant equipment and infrastructure faults Identify problems and tasks required to perform required repairs; delegate to appropriate personnel Replicate all systems (hardware and software) to a separate location Perform complete system switch over to disaster recovery environment

C. Data Center Highlights

Physical Security:

- 24x7x365 on-site staffed technicians and security personnel with a dedicated guard room protected by ballistics rated glass
- Electronic badge card key and pin access
- Motion activated digital security cameras (interior and exterior)
- Biometric authentication readers on Data Center access doors through a mantrap entrance

Fire Detection & Suppression:

- Multiple zone dry-pipe pre-action fire suppression system
- Incipient early warning fire detection system
- Data Center safe fire extinguishers

Environmental Design:

- Zoned N +1 design – 900 tons of datacenter cooling
- Redundant 630 ton EVAPCO Cooling Towers
- Redundant 450 ton McQuay Chillers
- DataAire and Stulz CRAC units

SAS-70 Type II, SSAE 16 Type 1 Certified

