CITY OF KYLE, TEXAS
BIDDER PROPOSAL
FOR "K 15-16.2" SCADA SYSTEM

Bid for SCADA SYSTEM,
with **NO EXCEPTIONS** is:

$ _____

Bid for SCADA SYSTEM per specifications,
with **EXCEPTIONS listed**
on exception sheet is:

$ 182,637.00 _____

Delivery with ___224___ **calendar days after award of bid.**

"By the signature hereon affixed, the bidder hereby certifies that neither the bidder nor the firm, corporation, partnership, or institution represented by the bidder, or anyone acting for such firm, corporation, or institution has violated the antitrust laws of the State, codified in Section 15.01 et. seq., Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business."

SIGNED: _____

NAME (*Please Print*) David Walker _____

BIDDER Data Flow Systems, Inc. _____

ADDRESS 605 N. John Rodes Blvd. _____

___ Melbourne, FL 32937 _____

PHONE 321-259-5009 _____

BID DATE: Thursday, July 28, 2016 at 12:00 P.M.

BID LOCATION: 520 E RM150, Kyle, TX 78640

Mark on sealed envelope: **"BID K 15-16.2"** SCADA SYSTEM

EXCEPTIONS TO SPECIFICATIONS LIST: (*Please list page, paragraph and item, then list item substituted or excepted*)

The Hyper SCADA Server, CTU-Master Radio, CTU Antenna and operator training

as listed in the specifications already exist and are not included in the bid proposal.

These are Part 1 all paragraphs, Part 2 all paragraphs and paragraph 8.3.

CITY OF KYLE, TEXAS
BIDDER PROPOSAL

(DFS

Data Flow Systems

BID QUOTATION 160718-01-HRH3
LIFT STATIONS & WWTP RTUs
"BID K 15-16.2"
CITY OF KYLE, TEXAS
JULY 18, 2016

SUMMARY OF SCOPE

DFS will provide nine (9) RTUs to monitor eight (8) lift stations and (1) Wastewater Treatment Plant. No control is included in any of the nine (9) RTUs. DFS will manufacture nine (9) RTUs, and provide alarm programming. DFS will ship the RTU and Antenna equipment (delivery) to the City, and the City shall hire a contractor directly to perform physical installation of the equipment and related structures/material. After installation by City/others is complete, DFS will provide field services for startup and commissioning in support of the provided RTUs.

SEQUENCE OF INSTALLATION

- Submittal/Mobilization
- Construction and testing of the RTU, with alarm programming.
- Shipment of RTU/Antenna equipment for installation by City/others.
- Startup and Commissioning services.
- Close out and Final Documentation.

Understanding of Installation - The understanding is that the current system will be maintained and operational while the new TAC II SCADA System is being installed. Both systems will be operation during the installation process.

The new system will be brought over in phases to prevent breaks in coverage and operational readiness.

Phase 1 - Installations of Antennas and related structures/material is by City/Others, and for the following locations. All azimuths are in degrees magnetic, and antenna height is feet above ground level (XX' agl).

- Barton Middle School Lift Station. 155° 35' agl.
- Indian Paint Brush Lift Station. 210° 35' agl.
- Kensington Trails Lift Station. 221° 21' agl.
- Southlake Ranch Lift Station. 228° 21' agl.
- Trails (Mason Wood) Lift Station. Collinear Omni 10' agl.
- Bunton Creek Lift Station. 255° 21' agl.
- Bradford Meadows Lift Station. 94° 21' agl.
- Hemphill Lift Station. 311' 21.' agl.
- Wastewater Treatment Plant. 288° 21' agl.

Phase 2 - RTU Installations, by City/Others. Installation of all RTUs and related material (structures, conduit, wire, grounding, etc.) is by City/Others. Please review the quotation notes and I/O requirements listed below. Installation of wires in conduit between panels will be installed to be terminated and dressed during switch over.

Phase 3 - Startup. Once all RTU, grounding, conduit, identified wire and any required instrumentation installations are complete by City/Others, DFS will schedule startup services.

DETAILS OF REQUIREMENTS
When the process variable transducer registers a reading to generate an alarm condition based on the defined set point, in excess of 60 seconds, the assigned alarm will be generated.

GENERAL SYSTEM OPERATIONAL ASPECTS
Device controllers with automatic algorithms will maintain the following basic and operational criteria. Each device will be monitored for Local/Remote (HOA in Auto equals "Remote") and Status if available. If a controlled device is not equipped with a HOA switch it will always be considered in Remote. If a controlled device is not equipped with a status it will always be considered as operating correctly. The controls for each device will include a Manual/Auto and a Stop/Start, Open/Close or other appropriate control. The digital input from the device's HOA determines its availability for control by the SCADA system, "Remote" being the permissive signal for SCADA control. A software Manual/Auto control dictates whether the device will be controlled manually or automatically via SCADA. The device is considered available to the automatic process when it is in "Remote" and "Auto" and the device has not failed. A device is considered "failed" when it has been called to operate by the automatic process and the device status inputs indication has not operated as expected in excess of 60 seconds. To clear a device fail simply place the device back into "Manual" or "Local" until the fail has cleared.

All set points residing in the PLC will have default factory set points when shipped. The set points can then be modified by an operator using a custom screen as needed. The new set points will be retained in the PLC in the event of a power cycle.

GRAPHICAL DISPLAYS
Custom graphical displays of telemetry/project data can take many forms. The graphical displays provide for under the proposal are P&ID type in nature. The screen/displays will show the basics of the process flow and instrumentation placement in this flow. They will also provide for control of the devices using a standardized set of control objects used by DFS. The control operators have color coded meaning and are used consistently across all DFS customer platforms. Other forms of graphical displays that more closely represent a pictorial view, or physical presence of a customer site, are available and can be ordered in addition to the P&ID type screen displays provided for in this proposal.

ADDITIONAL DETAILS
We understand the existing RTU100 at the WWTP will be decommissioned.

The Utility/Contractor will be required to provide personnel to make the site available when work is scheduled. Any instrumentation or structural installations for mounting of the RTUs is to be performed by the Utility/Contractor.

Radio Study General Exception - The antenna requirements are based on our radio study. Actual calculations of the radio study data are performed by DFS software using proprietary algorithms and trade secrets, these calculations will not be provided. Radio summary of information and topological studies are general in nature and will be provided under this proposal during the submittal process when requested.

BILL OF MATERIAL & SERVICES

1. (8) LIFT STATION RTU (RTU101-109)

Sites: Barton Middle School Lift Station, Indian Paint Brush Lift Station, Kensington Trails Lift Station, Southlake Ranch Lift Station, Trails (Mason Wood) Lift Station, Bunton Creek Lift Station, Bradford Meadows Lift Station, Hemphill Lift Station.

Each site includes the following:

- RTU Panel & Antenna
  - (1) Enclosure White SS, 36" x 30" x 10"
  - (1) Inner Panel, 33" x 27"
  - (1) Modular Backplane (MBP001)
  - (1) Telemetry Interface Module/radio (TIM007)
  - (1) Power Supply Module (PSM003)
  - (1) Programmable Logic Controller (PLC800)
  - (1) PLC By-Pass Card (PBC001)
  - (1) Digital Monitor Module (DMM002)
  - (1) Digital Control Module (DCM003-2)
  - (1) Analog Monitor Module (AMM002)
  - (3) 7.0 Ah Battery w/shelf
  - (5) 120V DPDT Octal Relay w/Base
  - (1) 10, 15, 20 Amp Breaker
  - (1) Light Kit
  - (1) Meanwell MDR-100-24 Power Supply
  - (1) Edco PHC-036 Surge Protector w/Base
  - (2) Edco PC642C-036 Surge Protector w Base
  - (1) RTU Surge Protection (TFS, SPS, & Polyphaser)
  - (1) Lot Terminal Hardware inside RTU
  - (1) RTA209 Yagi Antenna
  - (1) 80' RTC400 Coaxial Cable w/Connectors

- Hardwired I/O List

DIGITAL INPUT (DI)	DIGITAL OUTPUT (DO)	ANALOG INPUT (AI)	ANALOG OUTPUT (AO)
PUMP 1 STATUS	4 DO WIRED SPARE	WET WELL LEVEL	NO AOs ARE PROVIDED
PUMP 2 STATUS		PUMP 1 CURRENT	
PUMP 3 STATUS OR SPARE		PUMP 2 CURRENT	
WET WELL HIGH LEVEL		PUMP 3 CURRENT OR	
WET WELL LOW LEVEL		SPARE	
GENERATOR STATUS			
AC POWER			
12 DI WIRED SPARE			

2. (1) ONSITE STARTUP SERVICES FOR ALL 8 LS RTU SITES

This Onsite Startup Services includes a total of three (3) trips, with up to 32 hours onsite for each trip. This item is for sites: Barton Middle School Lift Station, Indian Paint Brush Lift Station, Kensington Trails Lift Station, Southlake Ranch Lift Station, Trails (Mason Wood) Lift Station, Bunton Creek Lift Station, Bradford Meadows Lift Station, Hemphill Lift Station.

3. WASTEWATER TREATMENT PLANT (WWTP - RTU200)

This site includes the following:

- RTU Panel & Antenna System

    (1) Enclosure White SS, 48" x 36" x 10"
    (1) Inner Panel, 45" x 33"
    (2) Modular Backplane (MBP001)
    (1) Telemetry Interface Module/radio (TIM007)
    (1) Power Supply Module (PSM003)
    (1) Programmable Logic Controller (PLC800)
    (1) PLC By-Pass Card (PBC001)
    (1) Digital Control Module (DCM003-1)
    (7) Analog Monitor Module (AMM002)
    (3) 7.0 Ah Battery w/shelf
    (9) 120V DPDT Octal Relay w/Base
    (1) 10, 15, 20 Amp Breaker
    (1) Light Kit
    (1) Meanwell MDR-100-24 Power Supply
    (1) Edco PHC-036 Surge Protector w/Base
    (14) Edco PC642C-036 Surge Protector w Base
    (1) RTU Surge Protection (TFS, SPS, & Polyphaser)
    (1) RTA209 Yagi Antenna
    (1) Lot RTC400 Coaxial Cable w/Connectors

- Hardwired I/O List

DIGITAL INPUT (DI)	DIGITAL OUTPUT (DO)	ANALOG INPUT (AI)	ANALOG OUTPUT (AO)
PUMP 1 – 8 STATUS	8 DO WIRED SPARE	INFLUENT LEVEL 1	NO AOs PROVIDED
BLOWER 1 – 4 STATUS		INFLUENT LEVEL 2	
CLARIFIER 1 – 2 STATUS		PUMPS 1 – 8 AMPS	
BARSCREEN 1 – 2 FAIL		BLOWER 1 – 4 AMPS	
PHASE FAULT		DO METER 1 – 4	
ATS POSITION		EFF TURBIDITY 1	
AC POWER		EFF TURBIDITY 2	
		EFF CL2 ANALYZER 1	
		EFF CL2 ANALYZER 2	
		EFF AMMONIA	
		EFF DO METER 1	
		EFF DO METER 2	

4. (1) ONSITE STARTUP SERVICES FOR WWTP RTU

This Onsite Startup Services includes a total of one (1) trip, with up to 32 hours onsite. This item is for the WWTP.

5. SPARE PARTS

    (1) Telemetry Interface Module/radio (TIM007)
    (1) Power Supply Module (PSM003)
    (1) Programmable Logic Controller (PLC800)
    (1) Digital Control Module (DCM003-1)
    (1) Digital Control Module (DCM003-2)
    (1) Analog Monitor Module (AMM002)

6. INSTRUMENTATION (NONE) - No instrumentation is provided by DFS.

HARDWIRED I/O REQUIREMENTS

a) All digital inputs to the DFS RTU will be of a dry contact type, terminal connections to be provided by the contractor/others.
b) Mixing of multiple sources of power will not be permitted.
c) All digital outputs from DFS RTU will be dry contacts and provide for 120VAC at 10amp capacity.
d) All analog inputs signals will be 4-20mA and use Shielded Cable.
e) 4-20 mA signals at minimum to provide 500 ohm impedance drive.
f) All pulse input to be dry contact, and mechanically operated.
g) The field terminal blocks in the DFS RTU provide for stranded wire with a maximum size of 14AWG. L1 and Neutral (incoming power) will provide for stranded wire with a maximum of 12AWG

DFS SCOPE OF WORK

DFS will assemble and test the RTUs and any programming in our facility. After assembly is complete, DFS will ship the RTUs to the location designated by the City for installation by City/Others. DFS will complete all configurations at the central site, and provide on-site start-up services.

WORK TO BE PERFORMED BY THE CITY/OTHERS

1. RTU and Antenna installation. All required panel mounting structures, antenna structures, and related hardware are to be provided and installed by others.
2. Conduit, signal and 120 VAC power to the DFS panel will be provided and installed by electrical subcontractor, and in accordance with NEC. Providers of the Electrical Service are responsible for the quality of the power supplied. Any requirements to improve quality; isolation transformer, filtering or UPS shall be provided by others. AC service wires, digital signal wires and analog circuit wires shall not occupy the same conduits. The field terminal blocks in the DFS RTU provide for stranded wire with a maximum size of 12AWG. (also refer to Hardwired I/O Requirements listed above)
3. Provide and install all required instrumentation, including manufacturing of mounting rack/posts and sunshield requirements.
4. Surge protection to protect devices outside of the DFS RTU panel is the responsibility of instrumentation providers, device providers, and/or others. Providers of instrumentation, devices and services are responsible for signal/noise quality to meet the requirements of the control/telemetry system.
5. Conduit for antenna coax cable (if required). This conduit shall be 1" minimum and routed from base of proposed tower installation to DFS RTU panel for coaxial cable. All bends shall conform to NEC for smooth radius (lead sheath) bends 11" min. No LB's or right angle fittings are permitted on this conduit.
6. It is the responsibility of the City to coordinate antenna location.
7. **Grounding and Bonding of the antenna tower/structure, tower ground rod, RTU and Power Utilities ground rod is the responsibility of City/Others. The ground lugs and taps for all need to be bonded together using an uncut, continuous, single 6 AWG solid bare copper wire.**
8. Demolition, removal and/or relocation of existing equipment where required.

▪ **LEAD TIME: (224 DAYS)**
   Submittal: 60 days, after receipt of order
   Submittal Approval by City: 14 days or less
   Equipment: 150 days, after receipt of approved submittal.

- **PRICING & TERMS:**

  This quotation totals $182,637.00. Please review the Quotation Notes listed below. DFS payment terms are NET 30. This proposal will be honored for 150 days. DFS will submit an invoice for each activity and payment schedule is as follows:

  25% Mobilization (Submittal issued)
  55% Delivery of Product
  15% Start Up Services
  5% Completion of Punch List items & Documentation

- **QUOTATION NOTES:**

  1. Only those items and services specifically listed above are included in this bid quotation.
  2. This bid quotation includes 2 copies of the Submittal, and 2 copies of the O & M Manual for each RTU. Additional copies are available at $35.00 each.
  3. Ensuring the site is ready when DFS services are requested is the responsibility of the City.
  4. This quotation identifies work that is the responsibility of City/Others as defined above. It must be noted that if DFS personnel arrive at the job site as scheduled by the City, and the "responsibility of others" work has not been completed, the City will be invoiced an additional round-trip travel charge of $890.00 per trip.
  5. This quotation does not include permitting and associated fees.
  6. DFS employees will not enter "Confined Spaces" and/or "Permit-Required Confined Spaces" as defined by OSHA. Any such requirement will be performed by others.
  7. All electrical equipment to be accessed by DFS employees must be temporarily removed from service during the performance of our scope of work.
  8. This quotation stipulates that DFS existing insurance provider(s) and policy coverage are acceptable. Policy information can be found at http://www.dataflowsys.com/company/documents/insurance-coverage.pdf

SECTION 1 – EXECUTIVE SUMMARY

INTRODUCTION:

The TAC II SCADA System by DFS is designed specifically for water and wastewater applications. Please keep in mind that many of the features and services offered free of charge by DFS are either line item cost and/or reoccurring cost with other SCADA system providers. Such DFS features and services include but are not necessarily limited to:

- o No access limits or charges for additional user seats
- o No annual user fees
- o No annual software license fees
- o No incremental group rates for future points or tags
- o No annual maintenance or annual service contract required
- o No cost for SCADA software and/or module firmware revisions for life - All revisions and updates are free of charge
- o No cost for "call-in" customer service technical support (during normal business hours)
- o No cost for DFS customer service department to utility. Central Site Server telephone modem connection so our technicians can trouble shoot in real time alongside your technicians
- o Multiple communication/protocol drivers and system/user partitioning
- o Three (3) year warranty on DFS hardware (including radio) against lightning and surge damage.

When comparing SCADA systems it is important to consider the life cycle. The life cycle of a SCADA system is determined by manufacture and provider support for software version issues, system durability and availability, as well as compatibility of replacement parts. In most cases, the average life cycle of other SCADA systems is only 10 years. On the other hand, DFS has yet to define our SCADA system's life expectancy. Many of our SCADA systems and products have been in continuous use for nearly 30 years and are still running strong.

A TRUE OBSOLESCENCE-PROOF SYSTEM:

Highlights of a DFS TAC II SCADA System include ease-of-use and obsolescence-proof engineering. Each and every improvement we make to our system hardware and software is downward compatible with every one of our TAC II SCADA Systems, including those installed nearly 30 years ago. Even our oldest customers are able to take full advantage of our latest innovations and improvements. We can find no other manufacturer who has taken such extreme measures to assure the support of their systems and to prevent obsolescence.

The TAC II SCADA System is a continuously evolving system for nearly 34 years, and all new products maintain a downward compatibility with all older versions - allowing a utility to maximize their investment over the long term. Over the years, utilities have purchased new and improved DFS products to expand the "original installation." All DFS products incorporate current state-of-the-art technology, but maintain downward compatibility with older versions, demonstrating an obsolesce-proof design that can be found in no other SCADA system.

All DFS I/O modules, Pump Controllers, Powers Supply Modules and Radio Interface Modules are completely backward compatible with older versions and revisions of like type. New products are designed with pin-for-pin compatibly of like type and require no rewiring, adjustments, straps or configuration adjustments (plug and play).

In addition, DFS provides support and repair for every TAC II SCADA product that we have ever manufactured. DFS does not have "generation systems" with a limited life cycle of availability and support. No matter how old, if we built it we will service it. DFS does not require annual maintenance contacts or renewal support program fees.

AN OPEN ARCHITECTURE SYSTEM

- DFS Hardware and Software supports multiple Modbus Protocols (Modbus ASCII, Modbus RTU and Modbus TCP). The development of a DNP3 protocol support driver is underway.
- The TAC II SCADA System's database is SQL, which is the world's most popular Open Source Database and provides the ability to easily and quickly export data for use in other applications such as CMMS systems, GIS Systems, Microsoft Access, Excel, and many more specialized statistical and mathematical analysis applications.
- The architecture of the TAC II SCADA System and components are straight forward and virtually anyone can be trained to service the system with minimal instruction. The logical simplicity of the SCADA Software and plug-and-play nature of the RTU products allow a user to easily identify a problem module and field replace with a spare. The problem module is simply sent to DFS for factory diagnosis and repair.
- The RTU I/O modules do not have special configuration switches, straps, or programs and can be easily added by the user without assistance from DFS. All RTU I/O modules are interchangeable from one RTU to another, as well as system to system.
- The TCU Pump Controller is user configurable via the onboard keypad & display, via laptop with included software, and even over the radio from the HSS.
- Actual PLC programs and Ladder Logic Programs developed by DFS are provided to user.
- The system supports eight (8) communication drivers, with each driver supporting up to 505 RTUs. There are no additional license fees to expand the system or to utilize multiple drivers.
- The system includes unlimited I/O points (tags).
- The system includes unlimited client seats (workstations) will full development capability (view, configure, build screens, reports, etc.).
- Service and support from DFS is available for the life of the system. Maintenance contracts or annual support programs are not required. Telephone support during normal working hours is offered without charge for the life of the system.
- DFS is willing to train system users to know their systems as well as we do. Our installation procedures do not include practices that require customers contact DFS to service and troubleshoot the system. Although some users prefer this approach, we are willing to train users to the extent they desire. Many system users now buy RTUs and parts direct and perform the installations themselves.

SCADA SOFTWARE & FREE SERVICES FOR LIFE OF SYSTEM:

The existing HT3 SCADA Software is manufactured by DFS and it integrated with the wall-mounted Hyper SCADA Server (HSS). Typical off-the-shelf "Windows PCs" are utilized for HMI operator interface over network and/or telephone line. Great attention has been paid to ease-of-use. The HMI platform is the familiar Microsoft Internet Explorer Browser, which is included free with every Windows PC.

Distinct benefits and savings are unlimited RTU I/O points, unlimited user access seats, built-in reports and trending programs, integrated 911 alarm dial-out, 411 remote user access via telephone, and an open SQL Database. Important to note is there are no on-going costs associated with the use of DFS' HT3 SCADA Software. All updates, revisions, and future releases of the HT3 SCADA software are available free of charge for the life of your system. NO MAINTENANCE CONTRACT REQUIRED! Detailed information is also available at www.scadaserver.com.

WARRANTY AND CUSTOMER SUPPORT:

DFS warrants the proposed Remote Terminal Units (RTUs) to be free from defects in materials and workmanship for a period of one year. All DFS plug-in modules, radios, and power supplies carry an additional two-year return-to-factory warranty and are covered against damage due to lightning and surge the entire three-year period.

Our Service Department operates 24/7/365 to administer all service related issues. Service personnel are full-time DFS employees. DFS telephone tech support is offered free of charge during normal business hours for the life of the system. NO MAINTENANCE CONTRACT REQUIRED!

The existing Hyper SCADA Server (HSS) incorporates a maintenance portal, which will allow DFS to perform remote diagnostics and troubleshooting free of charge during normal business hours for the life of the system. We have found that most service issues can be resolved remotely, resulting in immediate resolution. The existing system also incorporates a "911" alarm dial-out feature. We recommend the use of two (2) separate telephone lines with the HSS for independent use of the 411 and 911 features. At a minimum one telephone line connection to the HSS is required for warranty purposes.

SECTION 2 – VENDOR BACKGROUND AND QUALIFICATIONS

A. EXPERIENCE:

Data Flow Systems Inc. (DFS) DFS was founded in 1981. We have 35 years of experience in the supply and service of SCADA Systems. We have provided hundreds of SCADA Systems and tens of thousands of RTUs to our clients throughout the United States. These systems range from small water control utilities and districts to large county-wide wastewater collection systems.

B. TECHNICAL STAFF

Our headquarters operation consists of a 30,843 square foot facility, employing 70 people for product engineering, product manufacturing, UL508 panel fabrication, PLC programming, HMI screen building, installation and customer, all devoted to the proposed TAC II SCADA System products and related services. Startup commissioning, training and customer service will be performed by our Texas-based personnel located in Flint, Lindale and Austin.

C. FINANCIAL STABILITY

Data Flow Systems, Inc. is a private Subchapter S. Corporation with an average Gross Operating Revenue of 10 million dollars and over 3 million in Assets. Our banking company, Seacoast National Bank, has provided DFS with a revolving credit line in the amount of $750,000. For additional information, please feel free contact DFS Comptroller, Gary Hudson at (321) 259-5009. Financial references for our company may be obtained from our accountant Richard Bonas (321) 255-3499 and/or from our banker Gilbert Russell, Seacoast National Bank (321) 953-2265.

SECTION 3 – CUSTOMER REFERENCES

CITY OF MANOR
Contact: Mike Tuley
Tel. 512.272.5555
Water & Wastewater System

CITY OF MARBLE FALLS
Contact: Jeff Felps
Tel. 830.693.2827
Fresh Water System

CITY OF SAN MARCOS
Contact: Bert Hendrix
Tel. 512.393.8010
Water & Wastewater System

SECTION 4 - IMPLEMENTATION & SUPPORT

1. APPROACH & RESOURCES

Startup services and local customer service will be performed by our Texas-based personnel (located in Flint, Lindale and Austin). The panel fabrication, programming and factory testing will be done at our UL508 panel shop located in Melbourne, Florida. The complete and tested panels will be shipped to the City for physical installation by others.

Also refer to DFS Bid Quotation that is located with the Bid Form for additional information.

2. USER TRAINING APPROACH

DFS is willing to train system users to know their systems as well as we do. Our installation procedures do not include practices that require customers contact DFS to service and troubleshoot the system. Although some users prefer this approach, we are willing to train users to the extent they desire. Many system users now buy RTUs and parts direct and perform the installations themselves.

DFS offers top quality training - at your location or ours - on all DFS hardware and software products. While there is a charge for training courses, we do offer FREE TRAINING to all of our customers twice a year at our Melbourne, Florida facility. Training classes consist of a lecture-based presentation, demonstration and practical exercise. Each student is given time to practice the various activities introduced during the classroom presentation.

3. SERVICE & SUPPORT PHILOSOPHY

DFS has relied heavily on service and support to succeed in the SCADA business. This is the key ingredient to establishing and maintaining a long term relationship with our customers. The following valuable services are available from DFS, most of which are provided free of charge.

- DFS' Service Department is on call 24/7/365. Service call charges are time and material based (no maintenance contract required). Telephone support during normal working hours is offered without charge for the life of the system.

- The Hyper SCADA Server (HSS) incorporates a maintenance-modem that allows DFS to provide on-line factory-assisted remote troubleshooting support via phone line – which is also free service to our customers during normal working hours.

- Most system operational issues are settled over the HSS maintenance-modem and do not require an on-site visit, resulting in immediate resolution of your problem and eliminating on-site visit costs.

- Free updates and future releases of DFS' HT3 SCADA software for the life of your system. In addition, HT3 includes unlimited I/O point count and there is no additional charge for client licenses.

- Upgrades to RTU firmware are provided over the radio link free of charge.

- All DFS Service Department technicians are full-time DFS employees - not third-party instrumentation and control technicians contracted to maintain our systems.

- Two weeks out of each year, DFS offers a Basic Operations training course - free of charge - to all of our customers. This is a one-day eight-hour course and is held in our Melbourne, FL Training Facility.

4. **ONGOING SERVICES & SUPPORT**

   See statements from above responses.

5. **HELP DESK**

   DFS maintains an online Help Desk that enables you to find solutions to problems you are having with any DFS product. If you can't find a solution, you can submit the problem to DFS' Service Department. Using DFS Help Desk, you can:

   o Submit new incidents (problem to be solved).
   o View a brief summary list of all incidents.
   o View incident details, including a complete description of the problem and current status.
   o Have interactive Web conversations with the support staff.
   o Update your contact information.
   o Search the knowledge base.
   o Search for existing support incidents.

   We strongly recommend that you use Microsoft Internet Explorer to gain access to Help Desk. Before using Help Desk for the first time, we recommend you visit Using Help Desk for an overview of the system's features and operation. (http://www.dataflowsys.com/support/help-desk-instructions.php)

6. **SERVICE & TROUBLESHOOTING**

   • **Normal Hours Support**
     Normal hours for the Customer Service Department are Monday-Friday, 7:00am to 4:00pm central time. To reach a technician during these hours, contact our Customer Service Call Coordinator by Phone @ 321-259-5009 Ext 1117. Our Customer Service Call Coordinator will open a Service Ticket and assign your call to a Customer Service Technician. You should receive a call from your assigned technician within 30 minutes.

   • **After-hours Support (On-Call)**
     For support after regular business hours, call 321-288-1959. Your call will be automatically forwarded to the cell phone of the on-call technician. (Non-warranty after-hours support is billable if system access or a site visit is required.)

   • **Web-based Support (Online Help Desk)**
     Non-urgent (low priority) issues can be submitted to our Customer Service Department through our Online Help Desk. For each incident submitted through Online Help Desk, data is collected and a ticket is opened. A technician is assigned by the Customer Service Manager following review of the incoming ticket. Web-based Help Desk is primarily used by customers to monitor open ticket status, however the review of past closed ticket information is also available to the user. You can expect a response from our Customer Service Department within one day. When submitting an issue via Online Help Desk, please provide a brief and detailed description of the problem, the software release of your SCADA system, and the problem area. Do not use Online Help Desk for Urgent support requests. Urgent service requests should always occur through our Customer Service Call Coordinator at 321-259-5009 Ext 1117, or 321-288-1959 after regular business hours.

- **Remote Access and On-Site Support**

  When possible, our Customer Service Department will solve your problem by remotely accessing your system via telephone or Virtual Private Network (VPN). With remote access, DFS can provide the technical guidance while you, the user, perform the activity. The goal of remote access is to get your system up and running quickly and avoid the cost of an onsite visit. If a remote solution isn't possible, a Customer Service technician can visit your site. Most site visits are covered under warranty if they are within a year of installation and DFS Start-Up date. Site visits may require a purchase order (PO) if the site has been installed over a year or did not obtain a DFS Start-Up at installation.

- **Spare Parts**

  We recommend that each customer maintain a sufficient supply of system spares to minimize the length of downtime. The modularity of the DFS SCADA system enables you to easily remove and replace a damaged module. By having a spare module on hand, it is possible for you to get your system up and running in little more than the time it takes you to drive to the site. To help you build your spare parts stock, DFS offers Advanced Exchange Equipment in 30-day segments. Billing for Advance Exchange Equipment may be put towards the purchase of a spare. The goal of this program is to minimize the downtime caused by lack of onsite spare parts.

- **See attached resume (H.R. "Skip" Hall III)**

H.R. "SKIP" HALL III

Flint, TX
Phone: (903) 216-1343
Email: Skip@dataflowsys.com

Skills Summary

Detail-oriented control integrator with 25+ years' experience in all aspects of process related electrical and instrumentation with the primary focus on water and waste water systems. Sixteen years as an employee of Data Flow Systems, Inc. Project Manager for dozens of radio-based Supervisory Control and Data Acquisition Systems specifically designed for water and waste water applications.

Relevant Experience

- 16+ years Water and Wastewater Process Experience.

- Radio Frequency (RF) Path Studies, RF Systems Testing (Grounding, VSWR, Forward/Reflective Power, Fade Margin, EMI/RFI).

- Control System Design, Analog/Digital Circuit Testing, Electrical Integration to Existing Systems, Systems Simulation Testing, Programmable Logic Controller (PLC) programming.

- Communications technologies; Radio, serial (RS-232, RS-485) and Ethernet.

- Human Machine Interface (HMI) Development.

- AutoCAD, MS Office, Project Documentation.

- Fluent with Main Frame Operating Systems, primarily Linux.

- Service and maintenance of varied water and wastewater control systems.