

Utility Committee Meeting

AGENDA

March 3, 2015

I. CALL TO ORDER

II. MATTERS BEFORE COMMITTEE

- 1. <u>Disclosure Potential Conflict of Interest Related to FY2015 CDBG Application</u>
- 2. <u>Discussion / Approval Out of State Travel for SGA Conference</u>
- 3. Approval Purchase of Vehicle with Articulating Aerial Device
- 4. <u>Discussion / Approval Solar Policies and Tariff</u>

III. ADJOURN



Utility Committee Meeting

AGENDA

March 3, 2015

Item:
Disclosure - Potential Conflict of Interest Related to FY2015 CDBG Application Department:
Additional Information:
Financial Impact:
Budgeted Item:
Recommendation / Request:

Viewing Attachments Requires Adobe Acrobat. Click here to download.

Attachments / click to download

□ <u>Disclosure Letter</u>



Post Office Box 1249 • Monroe, Georgia 30655 Telephone 770-267-7536 • Fax 770-267-2319

Greg Thompson, Mayor L. Wayne Adcock, Vice Mayor

March 4, 2015

Mr. Steed Robinson, Director Office of Community Development Georgia Department of Community Affairs 60 Executive Park South NE Atlanta. GA 30329-2231

Dear Mr. Robinson:

This letter is to address the Conflict of Interest regulations required by the Community Development Block Grant Program. I am currently a City Council Member of the City of Monroe and I own the following properties under my company, GA Greenlands, LLC, in the City's proposed FY2015 CDBG Target Area:

- 117 5th Street
- 120 5th Street
 121 5th Street
 122 5th Street
- 108 6th Street

- 110 6th Street 112 6th Street 118 6th Street

- 121 6th Street

Additionally, I hold a 50% share of the company, HL Creek, LLC, which owns the following properties in the City's proposed FY2015 CDBG Target Area:

- 114 5th Street
- 118 5th Street
 109 6th Street

At the February 10, 2015 City Council Meeting, I stated the conflict of interest regarding my property ownership in the CDBG Target Area before the Council and abstained from discussing and voting on the CDBG Resolution. Further, I fully disclosed my conflict of interest at the City Council Meeting on March 3, 2015. Please be advised that I will continue to abstain from voting on any issues concerning this project, if funded. Moreover, I was not involved in the selection of the proposed CDGB Target Area. The Director of Water & Gas, the Project Engineer, and the Grant Consultants determined the project Target Area based on the severity of need.

If you have any questions, please contact Mrs. Beth Thompson, Accounting Division Director.

Sincerely,

Nathan Purvis, Council Member City of Monroe

Beth Thompson, Accounting Division Director CC: Rachel Baker, Allen-Smith Consulting



Utility Committee Meeting

AGENDA

March 3, 2015

Item:
Discussion / Approval - Out of State Travel for SGA Conference Department:
Additional Information:
Financial Impact:
Budgeted Item:
Recommendation / Request:

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Attachments / click to download

□ SGA Conference Info

Beverly Harrison

Subject:

FW: Early Bird Registration - SGA Spring Gas Conference & Expo

From: SGA News [mailto:news@southerngas.org] Sent: Thursday, February 12, 2015 3:36 PM

To: Rodney Middlebrooks

Subject: Early Bird Registration - SGA Spring Gas Conference & Expo











March 23-25, 2015

Sheraton Charlotte Hotel - Charlotte, NC



EARLY-BIRD REGISTRATION

Registration - Register now to receive an early bird registration discount (Through February 20th)

Who Should Attend?

- Field and Supervisor level operating professionals can choose from more than 20 operations focused workshops.
- Women will not want to miss SGA's first event designed especially for them, the Women and Leadership Workshop.
- Supervisor and Manager Level operating professionals would benefit from attending:
 - o Everything DIM Workshop
 - o TIM Spring Roundtable
- Engineering Professionals will want to consider Gas 201: Distribution System Design for System Expansion and Reinforcement and Gas 101: An Introduction to Natural Gas Distribution.
- Those who get work done through others will want to consider:
 - Managing Within The Law
 - Leadership Skills for Frontline Managers

- Newcomers to the industry, or those looking for an understanding of the industry from wellhead to burner tip would benefit from attending Introduction to the Natural Gas Industry.
- Accounting professionals will benefit from attending:
 - o Accounting Roundtable
 - o Property Accounting Workshop
- Sales and Marketing Professionals will gain a great deal of information and learn new ideas during the Sales and Marketing Seminar.

Click Here to view the conference brochure which includes information on all workshops, seminars, and roundtables.

Hotel

Sheraton Charlotte Hotel

555 South McDowell St. Charlotte, NC 28204

Room Rate: \$132.00 (Single/Double Occupancy)

Reserve: Click Here or Call (704) 372-4100 (Ask for SGA or Southern Gas Association Rate)

Charlotte, NC

Click Here to view the weather.

Click Here for the visitors bureau.

Our records indicate that your current profile information is as follows:

Name: Rodney Middlebrooks

Company: Georgia Utility Training Academy

Address: 2200 Hwy 83 Monroe, GA 30655

Phone: (404) 427-3482

To update your personal profile, visit mySGA. Users may also modify their username & password.

Copyright © 2014 Southern Gas Association. All Rights Reserved.
3030 LBJ Freeway, Suite 1500 Dallas, TX 75234

Phone: 972-620-8505 | Fax: 972-620-1613 | Email: memberservices@southerngas.org
If you no longer want to receive our emails, please Manage Subscriptions



Utility Committee Meeting

AGENDA

March 3, 2015

Item:
Approval - Purchase of Vehicle with Articulating Aerial Device Department:
Additional Information:
Financial Impact:
Budgeted Item:
Recommendation / Request:

Viewing Attachments Requires Adobe Acrobat. Click here to download.

Attachments / click to download

- □ <u>Vehicle Info</u>
- ☐ Altec Quote
- □ NUECO Quote
- Global Rental Quote

Committee Purchase Request 2015 CIP Purchase - \$100,000.00

Telecommunications Vehicle with Articulating Aerial Device Purchase Request

COMPANY	TOTAL
Altec Industries, Inc.	\$96,683.00
National Utility Equipment Company, LLC	\$101,347.00
Global Rental Co., Inc.	\$97,673.00
Terex Utilities	no bid

The City of Monroe Electric and Telecommunications Department is requesting approval to purchase a telecommunications vehicle with articulating device. This vehicle will replace the 1998 Ford F800 TECO aerial truck, which was condemned by the manufacturer in 2013 from all aerial line work in the future. This truck will be used for other purposes or sent to surplus depending on the determined usage. As a replacement for this vehicle, we are requesting the purchase of the Altec Industries, Inc. model AT37G with a 2014 Dodge 5500 chassis.

The bid advertisement was placed online from February 16^{th} to February 23^{rd} and three bids were submitted by the deadline.



Telecommunications Vehicle with Articulating Aerial Device

February 16, 2015

Below are the items of which we wish to have bid to procure a Telecommunications Vehicle with Articulating Aerial Device for the City of Monroe Telecommunications Department. All submitted bids should follow instructions, provide pricing and be complete in scope as requested by the City of Monroe. Detail may be provided with each line item, and in some cases will be required as an explanation to the approach of execution of that particular item. These bids are to be submitted by mail, email attachment, or in person, no later than February 23, 2015 at 5:00 pm.

The items of requested bid are as follows:

- Telescopic/Articulating Aerial Device
- Continuous Rotation
- Compensated Articulating Arm
- Telescoping Upper Boom
- Hydraulic Boom Extension
- Insulating, ANSI Category C, 46 kV and Below
- Insulating Control System, Differentiated Controller
- Single Fiberglass Platform, minimum 24 x 24 x 42 in (610 x 610 x 1067 mm), preferred 24 x 30 x 42 in (610 x 762 x 1067 mm)
- Platform Capacity, minimum 350 lb (159 kg), preferred 400 lb (181 kg) with Rotator
- Platform Cover
- Platform Liner
- Platform Rotator 180°
- Hydraulic Platform Leveling, Master/Slave Leveling
- Tool Circuit at Platform
- Platform Access from the Ground
- Fall Protection System
- Emergency Lowering Valve
- Back-up Alarm
- Fully Metered Single Handle Upper Control
- Full Pressure, Open Center Hydraulic System
- Wheel Chocks
- Safety & Instructional Decals
- Documentation of all Testing according to ANSI Requirements
- Placard stating Standard Operating Specifications and Requirements
- Secondary Stowage System
- Engine Start/Stop
- Outriggers, Vertical
- Operator Manuals Provided
- Warranty Provided to include: Structural, Parts and Labor

- Post Style Pedestal Mounting, Reservoir, Site Gauge
- Body fabrication from A40 grade 100% zinc alloy coated steel
- Lights/Reflectors conform to FMVSS #108 light package (Title 49 United States Code, Chapter 301)
- Walking Surfaces coated in Non-Skid Paint
- Unit in WHITE, Powder Coat Unit in WHITE

The bidder MUST also supply the above bid package on the following chassis:

- 2014 Model Year Dodge 5500 Cummins 6.7L Turbo Diesel 4x4 Regular Cab
- Aisin AS68RC Automatic Transmission
- GVWR of not less than 18,000lbs
- Front Axle Rating of not less than 7,000lbs, Rear Axle Rating of not less than 13,500lbs
- Cruise Control
- Block Heater
- Unit in WHITE

The bidder MUST provide information for the following items:

- Bid Proposal for a Telecommunications Vehicle with Articulating Aerial Device
- Estimated Delivery Time
- Freight Cost (if included please note)
- Specifications on Articulating Aerial Device Unit
- Specifications on Body provided in bid proposal to include all doors, storage, locking systems, etc.
- Specifications on Body and Chassis Accessories in bid proposal to include all hitches, towing devices, safety features, rest requirements of platform and boom, chassis torsion bars, etc.
- Supplemental Form (if attachment provided by City of Monroe with bid package)
- Receipt of Addenda (if addenda provided by City of Monroe in addition to bid package)

All bids are to be submitted as a complete bid proposal, with any additional item(s) requested included. Bids will be evaluated and firms will be contacted with any questions following bid submission. The City of Monroe reserves the right to reject any or all bids. We thank you in advance for your bid submission and welcome any questions you may have during the process.

Chris Bailey
Purchasing Agent
City of Monroe
P.O. Box 1249
Monroe, GA 30655
(770) 266-5406



February 16, 2015

Ship To:

Quote Number:

Attachment number 2 \nPage 277004-1

Altec, Inc.

Bill To:

City of Monroe (GA) 420 N Broad St Monroe, GA 30655

Altec Quotation Number

Account Manager: Inside Sales Rep:

City of Monroe (GA)

Monroe, GA 30655

420 N Broad St

277004

Tim Luker

Kasey Whitaker

ltem

Description

Qty

1

Unit

- ALTEC Model AT37G telescoping/articulating continuous rotation aerial device with an insulating articulating arm, insulating telescopic upper boom, and the patented ISO-Grip insulating system at the boom tip. Includes the following features:
 - A. Ground to bottom of platform height: 37.8 feet
 - B. Working height: 42.8 feet
 - C. Maximum reach to edge of platform. Side Mounted Platform: 26.6 feet. End Mounted Platform: 28.3 feet (at 14.4 foot platform height).
 - D. Telescopic boom extension: 9 feet 8 inches
 - E. Continuous rotation
 - F. Insulating Aerial Device, ANSI Category C, 46kV and Below
 - G. Articulating Arm: Articulation is from -7 to 90 degrees. Insulator provides 12 inches of isolation.
 - H. Compensation System: By raising the articulating arm only, the telescopic boom maintains its relative angle in relation to the ground. The work position is achieved through a single function operation.
 - I. Telescoping upper boom: Articulation is from -25 to 75 degrees.
 - J. Master/ Slave Leveling: Platform automatically maintains level during boom articulation through a lifetime master/slave hydraulic leveling system that requires no major preventive maintenance.
 - K. The INSULATING UPPER CONTROL SYSTEM includes a single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers.
 - Cone set of tool outlets at the platform providing up to 5 gpm of flow for open center tools
 - M. Hydraulic System: Open center system operating at 5gpm and 2,400 psi.
 - N. Unit is painted with a powder coat paint process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion.
 - O. Structural Warranty all of the following applicable major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables.
 - P. Manuals: Two (2) operator and Maintenance/Parts manuals
- 2. AT37G Unit Model

1



<u>ltem</u>	<u>Description</u>	<u>Qty</u>
3.	Post style pedestal mounting	1
4.	Poly Reservoir, Pedestal Mounted, 7 Gallon; Includes Sight Gauge.	1
5 .	Single, One (1) Man, Fiberglass Platform; End Mounted with 180 degree rotator. $24 \times 30 \times 42$ inches, includes hydraulic tilt.	1
6.	Two (2) Platform Steps	1
7.	Soft vinyl platform cover with retention strap	1
8.	Platform liner for a 24 x 30 x 42 inch platform	1
9.	Platform Capacity, 400LBS.	1
10.	Altec Patented ISO-Grip Insulating 4 Function, Proportional Speed, Upper Control Handle - with safety interlock and interlock guard. Forward/back operates upper boom in/out, tiller operates rotation CW/CCW, up/down operates upper boom up/down, and twist operates lower arm up/down. Platform leveling is controlled with a separate interlocked control handle.	1
11.	Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms and platform. Secondary Stowage & Start/Stop is activated with an air plunger at the platform and switch at the lower control station.	1
12.	Manual lowering valve located at the boomtip. For use in emergency situations to allow the operator to lower the boom to the ground	1
13.	Powder coat unit Altec White.	1
	Unit & Hydraulic Acc.	
14.	HVI-22 Hydraulic Oil (Standard).	9
15.	Standard Pump For PTO	1
16.	Hot shift PTO for automatic transmission	1
	<u>Body</u>	
17.	108 Inch Universal Small Aerial Body for a 60 Inch CA Chassis with 38 Inch Long Side Access Tailshelf to Meet the Following Specifications:	1

- A. Basic body fabricated from A40 grade 100% zinc alloy coated steel
- В. All doors are full, double paneled, self-sealed with built-in drainage.
- C. Electro-zinc plated, steel hinge rods extend full length of door.

Attachment number 2 \nPage



<u>Item</u> <u>Description</u> <u>Qty</u>

- D. Door hinges are zinc alloy material attached with rivets
- E. All doors contain stainless steel, flush mounted, paddle activated rotary style latches with two-stage locking, including keyed locks and adjustable strikers.
- F. Heavy-gauge welded steel frame construction with smooth galvaneal floor.
- G. All edges are either rolled or folded for strength and safety
- H. Door header drip rail at top for maximum weather protection.
- I. Neoprene or rolled fenders on wheel fender panels.
- J. Steel treated for improved primer bond and rust resistance.
- K. Automotive underseal applied to body.
- L. Automotive type non-porous door seals fastened to the door facing.
- M. 108 Inch Body Length
- N. 40 Inch Body Height (Standard)
- O. 94 Inch Body Width (Standard)
- P. 20 Inch Body Compartment Depth (Standard)
- Q. Body Color White (Standard)
- R. Finish Paint Body At Body Manufacturer (Standard)
- S. Electro Cathodic Emersion Primer Required
- T. 8 Inch Body Cross-members (Standard)
- U. No Treadplate On Compartment Tops
- V. 6 Inch tall wood tailboard installed at the rear of body cargo area
- W. No Compartment Lighting Supplied by the Body Manufacturer
- X. Stainless Steel Rotary Paddle Latch With Lock (Standard)
- Y. Master Body Locking System (Standard)
- Z. No Chock Holders in Line Body Fender Panel Required (Standard)
- AA. Gas Shock Type Rigid Door Holders For Vertical Doors (Standard)
- AB. Chains On Horizontal Doors
- AC. Hot Stick Shelf Full Length (Right Side Only)
- AD. Drop-Down Hot Stick Door For One (1) Shelf (Right Side)
- AE. Two (2) Hot Stick Brackets
- AF. 1st Vertical Street Side (LH) Two (2) Adjustable Shelf With Removable Dividers On 4 Inch Centers
- AG. 1st Horizontal Street Side (LH) One (1) Fixed Shelf With Removable Dividers On 8 Inch Centers
- AH. Rear Vertical Street Side (LH) Six (6) Adjustable Locking Swivel Hooks
- Al. 1st Vertical Curb Side (RH) Seven (7) Adjustable Locking Swivel Hooks, Louvered Panel Installed in Cargo Wall
- AJ. 1st Horizontal Curb Side (RH) Vacant
- AK. Rear Vertical Curb Side (RH) Two (2) Adjustable Shelf With Removable Dividers On 4 Centers
- AL. Aluminum Rock Guards Installed at Bottom
- AM. 38" Tailshelf with Integrated Side Access Steps, Two Wheel Chock Holders, and Smooth Galvaneal Floor Installed at Rear of Body

Body and Chassis Accessories

ICC Underride Protection
 Combination 2 Ball (10,000 LB MGTW) And Pintle Hitch (16,000 LB MGTW)
 Set Of Eye Bolts for Trailer Safety Chain, installed one each side of towing device mount.



Altec, Inc.

<u>ltem</u>	<u>Description</u>	<u>Qty</u>			
21,	Platform Rest, Rigid with Rubber Tube	1			
22.	Boom Rest for a Telescopic Unit	1			
23.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1			
24.	Mud Flaps With Altec Logo (Pair)	1			
25.	Safety Harness And 4.5' Lanyard (Fits Medium To Xlarge) Includes Pouch and Placards	1			
26.	5 LB Fire Extinguisher With Light Duty Bracket, Installed	1			
27.	Triangular Reflector Kit, Installed	1			
28.	Front Torsion Bar Installed On Chassis	1			
29.	Rear Torsion Bar Installed On Chassis	1			
30.	Appropriate counterweight added for stability.	1			
31.	Slope Indicator Assembly For Machine Without Outriggers	1			
32.	Vinyl manual pouch for storage of all operator and parts manuals	1			
	Electrical Accessories				
33.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED With LED Reverse Lights)	1			
34.	Altec Standard Amber LED Strobe Light With Brush Guard Post Mounted On Streetside Front Compartment Top	1			
35.	Single tone back up alarm installed between the chassis frame rails at the rear of the chassis. To work in conjunction with chassis reverse drive system	1			
36.	6-Way Trailer Receptacle (Pin Type) Installed At Rear	1			
37.	Dash panel rocker switches supplied with Dodge Chassis, 4 auxiliary switches supplied in up fitting package from Dodge	1			
38.	PTO Indicator Light Installed In Cab	1			
39.	Start/Stop/Throttle Module, 12 Volt System	1			
	<u>Finishing Details</u>				
40 .	Focus Factory Build	1			



59.

60.

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65.

Cummins 6.7L Turbo Diesel (Dodge)

GVWR 18,000 LBS

Hydraulic Brakes

7,000 LBs Front Axle Rating

13,500 LBs Rear Axle Rating

Park Brake In Rear Wheels

Aisin AS68RC Automatic Transmission (Dodge Chassis)

Altec, Inc. <u>ltem</u> **Description** Qty 41. Powder Coat Unit Altec White 1 42. Finish Paint Body Accessories Altec White 43. Apply Non-Skid Paint to all walking surfaces 44. **English Safety And Instructional Decals** 1 45. Vehicle Height Placard - Installed In Cab 46. Dielectric test unit according to ANSI requirements. 47. Stability test unit according to ANSI requirements. 1 48. Placard, HVI-22 Hydraulic Oil 49. Inbound Freight 50. Altec Stock/Global Spec <u>Chassis</u> 51. Altec Supplied Chassis 1 **52**. 2014 Model Year 1 53. Dodge 5500 54. 4x4 55. Chassis CA Length - 60" 56. Regular Cab 57. Chassis Color - White 58. Chassis Wheelbase Length - 141 inch

Item #3

1

1

1



Quote Number:

Attachment number 2 \nPage 6

Altec, Inc.

<u>ltem</u>	<u>Description</u>	Qty
66.	Single Horizontal Exhaust Right Hand	1
67.	98R - Operator Commanded Regeneration (OCR)	1
68.	No Idle Engine Shut-Down Required	1
69.	Cruise Control	1
70.	Block Heater	1
71.	Ambulance Prep Package	1
	Additional Pricing	
72 .	Stock Unit	1
73.	Miscellaneous Standard Altec Warranty: One (1) year parts warranty, one (1) year labor warranty, ninety (90) days warranty for travel charges, limited lifetime structural warranty	1
		Total: \$96,683.00
Altec li	ndustries, Inc.	
BY		
Ka	asey Whitaker	
Notes: 1	Altec Standard Warranty:	
	One (1) year parts warranty.	
	One (1) year labor warranty.	
Ninety (90) days warranty for travel charges.		
	or so long as the initial	

Warranty on structural integrity of the following major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables.

Bidder is to supply a self-directed, computer based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit.

2

3

9

Quote Number:

Attachment number 2 \nPage 277004-1

Altec, inc.

Altec offers its standard limited warranty with the Altec supplied components which make up the Altec Unit and its installation, but expressly disclaims any and all warranties, liabilities, and responsibilities, including any implied warranties of fitness for a particular purpose and merchantability, for any customer supplied parts

Altec designs and manufactures to applicable Federal Motor Vehicle Safety and DOT standards Altec takes pride in offering solutions that provide a safer work environment for our customers. In an effort to focus on safety, we would like to ensure that the following items are offered to you as part of the attached quotation package:

Outrigger pads (When Applicable)
Fall Protection System
Fire extinguisher/DOT kit
Platform Liner (When Applicable)
Back up alarm
Wheel Chocks

The aforementioned equipment is traditionally offered in our new equipment quotations, unless requested otherwise by the customer. If you find that any of these items have not been listed as priced options in the body of your quotation and are required by your company, we would encourage you to contact your Altec Account Manager and have an updated quotation developed for you. These options must be listed as individual options in the body of the quotation for them to be supplied by Altec.

Unless otherwise noted, all measurements used in this quote are based on a 40 inch (1016mm) chassis frame height and standard cab height for standard configurations.

F.O.B. - Customer Site

Changes made to this order may affect whether or not this vehicle is subject to F.E.T. A review will be made at the time of invoicing and any applicable F.E.T. will be added to the invoice amount.

Price does not reflect any local, state or Federal Excise Taxes (F.E.T). The quote also does not reflect any local title or licensing fees. All appropriate taxes will be added to the final price in accordance with regulations in effect at time of invoicing.

Interest charge of 1/2% per month to be added for late payment.

Delivery: 270-300 days after receipt of order PROVIDING:

A. Order is received within 14 days from the date of the quote. If initial timeframe expires, please contact your Altec representative for an updated delivery commitment,

B. Chassis is received a minimum of sixty (60) days before scheduled delivery.

C. Customer approval drawings are returned by requested date.

D. Customer supplied accessories are received by date necessary for compliance with scheduled delivery.

E. Customer expectations are accurately captured prior to releasing the order. Unexpected additions or changes made at a customer inspection will delay the delivery of the vehicle.

Altec reserves the right to change suppliers in order to meet customer delivery requirements, unless specifically identified, by the customer, during the quote and or ordering process.

Trade-in offer is contingent upon equipment being maintained to DOT (Department of Transportation) operating and safety standards. This will include, but not limited to tires, lights, brakes, glass, etc. If a trade-in is not maintained to DOT standards, additional transportation expenses will apply and could be invoiced separately.

All equipment, i.e., jibs, winches, pintle hooks, trailer connectors, etc., are to remain with the vehicle unless otherwise agreed upon in writing by both parties. Altec Industries reserves the right to re-negotiate its trade-in offer if these conditions are not met.

Customer may exercise the option to rescind this agreement in writing within sixty (60) days after receipt of purchase order. After that time Altec Industries will expect receipt of trade-in vehicle upon delivery of new equipment as part of the terms of the purchase order.

Titles for trade-in equipment should be given to the appropriate Altec Sales associate or forwarded to Altec Nueco at address 1730 Vanderbilt Road, Birmingham, AL 35234.



10

11

Quote Number:

Attachment number 2 \nPage 8 277004-1

Altec, Inc.

After the initial warranty period, Altec Industries, Inc. offers mobile service units, in-shop service and same day parts shipments on most parts from service locations nationwide at an additional competitive labor and parts rate. Call 877-GO-ALTEC for all of your Parts and Service needs.

Please email Altec Capital at finance@altec.com or call 888-408-8148 for a lease quote today.

12 Please direct all questions to your account manager.

February 18, 2015

Ship To: City of Monroe (GA) 420 N Broad St Monroe, GA 30655

Bill To: City of Monroe (GA) 420 N Broad St Monroe, GA 30655

NUECO Quotation Number

33789-9

Account Manager:

Jason Janoulis

Inside Sales Rep:

Jarrod Bains

ltem

Description

Quantity

1

Unit

1. ALTEC Model AT37G telescoping/articulating continuous rotation aerial device with an insulating articulating arm, insulating telescopic upper boom, and the patented ISO-Grip insulating system at the boom tip. Includes the following features:

Ground to bottom of platform height: 37.8 feet

Working height: 42.8 feet

Maximum reach to edge of platform. Side Mounted Platform: 26.6 feet, End

Mounted Platform: 28.3 feet (at 14.4 foot platform height).

Telescopic boom extension: 9 feet 8 inches

Continuous rotation

Insulating Aerial Device, ANSI Category C, 46kV and Below

Articulating Arm: Articulation is from -7 to 90 degrees. Insulator provides 12 inches of isolation.

Compensation System: By raising the articulating arm only, the telescopic boom maintains its relative angle in relation to the ground. The work position is achieved through a single function operation.

Telescoping upper boom: Articulation is from -25 to 75 degrees.

Master/ Slave Leveling: Platform automatically maintains level during boom articulation through a lifetime master/slave hydraulic leveling system that requires no major preventive maintenance.

The INSULATING UPPER CONTROL SYSTEM includes a single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers.

One set of tool outlets at the platform providing up to 5 gpm of flow for open center tools

Hydraulic System: Open center system operating at 5gpm and 2,400 psi. Unit is painted with a powder coat paint process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Structural Warranty all of the following applicable major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables.

Manuals: Two (2) operator and Maintenance/Parts manuals



<u>ltem</u>	<u>Description</u>	Quantity
2.	AT37G Unit Model	1
3.	Post style pedestal mounting	1
4.	Poly Reservoir, Pedestal Mounted, 7 Gallon; Includes Sight Gauge.	1
5.	Single, One (1) Man, Fiberglass Platform; End Mounted with 180 degree rotator. $24 \times 30 \times 42$ inches, includes hydraulic tilt.	1
6.	Two (2) Platform Steps	1
7.	Soft vinyl platform cover with retention strap	1
8.	Platform liner for a 24 x 30 x 42 inch platform	1
9.	Platform Capacity, 400LBS.	1
10.	Altec Patented ISO-Grip Insulating 4 Function, Proportional Speed, Upper Control Handle - with safety interlock and interlock guard. Forward/back operates upper boom in/out, tiller operates rotation CW/CCW, up/down operates upper boom up/down, and twist operates lower arm up/down. Platform leveling is controlled with a separate interlocked control handle.	1
11.	Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms and platform. Secondary Stowage & Start/Stop is activated with an air plunger at the platform and switch at the lower control station.	1
12.	Manual lowering valve located at the boomtip. For use in emergency situations to allow the operator to lower the boom to the ground	1
13.	Powder coat unit Altec White.	1
	Unit & Hydraulic Acc.	
14.	HVI-22 Hydraulic Oil (Standard).	9
15.	Standard Pump For PTO	1
16.	Hot shift PTO for automatic transmission	1
	Body	
17.	108 Inch Universal Small Aerial Body for a 60 Inch CA Chassis with 38 Inch Long Side Access Tailshelf to Meet the Following Specifications:	1



<u>Item</u> <u>Description</u> Quantity

Basic body fabricated from A40 grade 100% zinc alloy coated steel

All doors are full, double paneled, self-sealed with built-in drainage.

Electro-zinc plated, steel hinge rods extend full length of door.

Door hinges are zinc alloy material attached with rivets

All doors contain stainless steel, flush mounted, paddle activated rotary style latches with two-stage locking, including keyed locks and adjustable strikers.

Heavy-gauge welded steel frame construction with smooth galvaneal floor.

All edges are either rolled or folded for strength and safety

Door header drip rail at top for maximum weather protection.

Neoprene or rolled fenders on wheel fender panels.

Steel treated for improved primer bond and rust resistance.

Automotive underseal applied to body.

Automotive type non-porous door seals fastened to the door facing.

108 Inch Body Length

40 Inch Body Height (Standard)

94 Inch Body Width (Standard)

20 Inch Body Compartment Depth (Standard)

Body Color - White (Standard)

Finish Paint Body At Body Manufacturer (Standard)

Electro Cathodic Emersion Primer Required

8 Inch Body Cross-members (Standard)

No Treadplate On Compartment Tops

6 Inch tall wood tailboard installed at the rear of body cargo area

No Compartment Lighting Supplied by the Body Manufacturer

Stainless Steel Rotary Paddle Latch With Lock (Standard)

Master Body Locking System (Standard)

No Chock Holders In Line Body Fender Panel Required (Standard)

Gas Shock Type Rigid Door Holders For Vertical Doors (Standard)

Chains On Horizontal Doors

Hot Stick Shelf Full Length (Right Side Only)

Drop-Down Hot Stick Door For One (1) Shelf (Right Side)

Two (2) Hot Stick Brackets

1st Vertical Street Side (LH) - Two (2) Adjustable Shelf With Removable Dividers On 4 Inch Centers

1st Horizontal Street Side (LH) - One (1) Fixed Shelf With Removable Dividers On 8 Inch Centers

Rear Vertical Street Side (LH) - Six (6) Adjustable Locking Swivel Hooks

1st Vertical Curb Side (RH) - Seven (7) Adjustable Locking Swivel Hooks,

Louvered Panel Installed in Cargo Wall

1st Horizontal Curb Side (RH) - Vacant

Rear Vertical Curb Side (RH) - Two (2) Adjustable Shelf With Removable Dividers On 4 Centers

Aluminum Rock Guards Installed at Bottom

38" Tailshelf with Integrated Side Access Steps, Two Wheel Chock Holders, and Smooth Galvaneal Floor Installed at Rear of Body

Body and Chassis Accessories



<u>ltem</u>	<u>Description</u>	Quantity
18.	ICC Underride Protection	1
19.	Combination 2 Ball (10,000 LB MGTW) And Pintle Hitch (16,000 LB MGTW)	1
20.	Set Of Eye Bolts for Trailer Safety Chain, installed one each side of towing device mount.	1
21.	Platform Rest, Rigid with Rubber Tube	1
22.	Boom Rest for a Telescopic Unit	1
23.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1
24.	Mud Flaps With Altec Logo (Pair)	1
25.	Safety Harness And 4.5' Lanyard (Fits Medium To Xlarge) Includes Pouch and Placards	1
26.	5 LB Fire Extinguisher With Light Duty Bracket, Installed	1
27.	Triangular Reflector Kit, Installed	1
28.	Front Torsion Bar Installed On Chassis	1
29.	Rear Torsion Bar Installed On Chassis	1
30.	Appropriate counterweight added for stability.	1
31.	Slope Indicator Assembly For Machine Without Outriggers	1
32.	Vinyl manual pouch for storage of all operator and parts manuals	1
	Electrical Accessories	
33.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED With LED Reverse Lights)	1
34.	Altec Standard Amber LED Strobe Light With Brush Guard Post Mounted On Streetside Front Compartment Top	1
35.	Single tone back up alarm installed between the chassis frame rails at the rear of the chassis. To work in conjunction with chassis reverse drive system	1
36.	6-Way Trailer Receptacle (Pin Type) Installed At Rear	1
37.	Dash panel rocker switches supplied with Dodge Chassis, 4 auxiliary switches supplied in up fitting package from Dodge	1
38.	PTO Indicator Light Installed In Cab	1 Item # 3



<u>ltem</u>	<u>Description</u>	Quant	tity
39.	Start/Stop/Throttle Module, 12 Volt System	1	
	Finishing Details		
40.	Focus Factory Build	1	
41.	Powder Coat Unit Altec White	1	
42.	Finish Paint Body Accessories Altec White	1	
43.	Apply Non-Skid Paint to all walking surfaces	1	
44.	English Safety And Instructional Decals	1	
45.	Vehicle Height Placard - Installed In Cab		
46.	Dielectric test unit according to ANSI requirements.	1	
47.	Stability test unit according to ANSI requirements.	1	
48.		1	
	Placard, HVI-22 Hydraulic Oil	1	
49.	Inbound Freight	1	
50.	Altec Stock/Global Spec	1	
	<u>Chassis</u>		
51.	Altec Supplied Chassis	1	
52 .	2014 Model Year	1	
53.	Dodge 5500	1	
54.	4x4	1	
55.	Chassis CA Length - 60"	1	
56.	Regular Cab	1	
57.	Chassis Color - White	1	
58.	Chassis Wheelbase Length - 141 inch	1	
59 .	Cummins 6.7L Turbo Diesel (Dodge)	1	
60.	Aisin AS68RC Automatic Transmission (Dodge Chassis)	1	Item # 3
	We Wich To Thonk You For Civing He The	-	

<u>ltem</u>	<u>Description</u>	Quantity
61.	GVWR 18,000 LBS	1
62.	7,000 LBs Front Axle Rating	1
63.	13,500 LBs Rear Axle Rating	1
64.	Hydraulic Brakes	1
65.	Park Brake In Rear Wheels	1
66.	Single Horizontal Exhaust Right Hand	1
67.	98R - Operator Commanded Regeneration (OCR)	1
68.	No Idle Engine Shut-Down Required	1
69.	Cruise Control	1
70.	Block Heater	1
71.	Ambulance Prep Package	1
	Additional Pricing	
72 .	Stock Unit	1
	<u>Miscellaneous</u>	
73.	Standard Altec Warranty: One (1) year parts warranty, one (1) year labor warranty, ninety (90) days warranty for travel charges, limited lifetime structural warranty	1
		T-1-1 6404 047 00

Total: \$101,347.00

Notes:

Altec Standard Warranty:

One (1) year parts warranty.

One (1) year labor warranty.

Ninety (90) days warranty for travel charges.

Warranty on structural integrity of the following major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables.

Bidder is to supply a self-directed, computer based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit.



Global Rental Co., Inc. 33 Inverness Center Pkwy. Suite 250 Birmingham, Alabama 35242 205/991-7972 • Fax 205/991-9377

Account Manager: Inside Sales Rep:

Jim Kenan Brian Mathews

<u>ltem</u>	<u>Description</u>	<u>Qty</u>
	<u>Unit</u>	

- ALTEC Model AT37G telescoping/articulating continuous rotation aerial device with an insulating articulating arm, insulating telescopic upper boom, and the patented ISO-Grip insulating system at the boom tip. Includes the following features:
 - A. Ground to bottom of platform height: 37.8 feet
 - B. Working height: 42.8 feet
 - C. Maximum reach to edge of platform. Side Mounted Platform: 26.6 feet. End Mounted Platform: 28.3 feet (at 14.4 foot platform height).
 - D. Telescopic boom extension: 9 feet 8 inches
 - E. Continuous rotation
 - F. Insulating Aerial Device, ANSI Category C, 46kV and Below
 - **G.** Articulating Arm: Articulation is from -7 to 90 degrees. Insulator provides 12 inches of isolation.
 - H. Compensation System: By raising the articulating arm only, the telescopic boom maintains its relative angle in relation to the ground. The work position is achieved through a single function operation.
 - 1. Telescoping upper boom: Articulation is from -25 to 75 degrees.
 - J. Master/ Slave Leveling: Platform automatically maintains level during boom articulation through a lifetime master/slave hydraulic leveling system that requires no major preventive maintenance.
 - K. The INSULATING UPPER CONTROL SYSTEM includes a single handle controller incorporating high electrical resistance components that is dielectrically tested to 40 kV AC with no more than 400 microampers of leakage. The control handle is green in color to differentiate it from other non-tested controllers.
 - L. One set of tool outlets at the platform providing up to 5 gpm of flow for open center tools
 - M. Hydraulic System: Open center system operating at 5gpm and 2,400 psi.
 - N. Unit is painted with a powder coat paint process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion.
 - O. Structural Warranty all of the following applicable major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables.
 - P. Manuals: Two (2) operator and Maintenance/Parts manuals

<u>ltem</u>	Description	Qty	
3.	Post style pedestal mounting	1	
4.	Poly Reservoir, Pedestal Mounted, 7 Gailon; Includes Sight Gauge.	1	
5.	Single, One (1) Man, Fiberglass Platform; End Mounted with 180 degree rotator. 24 x 30 x 42 inches, includes hydraulic tilt.	1	
6.	Two (2) Platform Steps	1	
7.	Soft vinyl platform cover with retention strap	1	
8.	Platform liner for a 24 x 30 x 42 inch platform	1	
9.	Platform Capacity, 400LBS.	1	
10.	Altec Patented ISO-Grip Insulating 4 Function, Proportional Speed, Upper Control Handle - with safety interlock and interlock guard. Forward/back operates upper boom in/out, tiller operates rotation CW/CCW, up/down operates upper boom up/down, and twist operates lower arm up/down. Platform leveling is controlled with a separate interlocked control handle.	.1	
11.	Engine Start/Stop & Secondary Stowage System: 12 VDC powered motor and pump assembly for temporary operation of the unit in a situation wherein the primary hydraulic source fails. Electric motor is powered by the chassis battery. This feature allows the operator to completely stow the booms and platform. Secondary Stowage & Start/Stop is activated with an air plunger at the platform and switch at the lower control station.	. 1	
12.	Manual lowering valve located at the boomtip. For use in emergency situations to allow the operator to lower the boom to the ground	1	
13.	Powder coat unit Altec White.	1	
	Unit & Hydraulic Acc.		
14.	HVI-22 Hydraulic Oil (Standard).	9	
15.	Standard Pump For PTO	1	
16.	Hot shift PTO for automatic transmission	1	
	<u>Body</u>		
17.	108 Inch Universal Small Aerial Body for a 60 Inch CA Chassis with 38 Inch Long Side Access Tailshelf to Meet the Following Specifications:	1	
	 A. Basic body fabricated from A40 grade 100% zinc alloy coated steel B. All doors are full, double paneled, self-sealed with built-in drainage. C. Electro-zinc plated, steel hinge rods extend full length of door. D. Door hinges are zinc alloy material attached with rivets E. All doors contain steinless steet flush recent described. 		Item # 3

All doors contain stainless steel, flush mounted, paddle activated rotary style latches with two-stage locking, including keyed locks and adjustable strikers.

Ε.

	Description	uty	
F.	Heavy-gauge welded steel frame construction with smooth galvaneal floor.		
G.	All edges are either rolled or folded for strength and safety		
Н.	Door header drip rail at top for maximum weather protection.		
ı.	Neoprene or rolled fenders on wheel fender panels.		
J.	Steel treated for improved primer bond and rust resistance.		,
K.	Automotive underseal applied to body.		
L.	Automotive type non-porous door seals fastened to the door facing.		
M.	108 Inch Body Length		
N.	40 Inch Body Height (Standard)		
Ο.	94 Inch Body Width (Standard)		
Р.	20 Inch Body Compartment Depth (Standard)		
Q.	Body Color - White (Standard)		
R.	Finish Paint Body At Body Manufacturer (Standard)		
S.	Electro Cathodic Emersion Primer Required		
Т.	8 Inch Body Cross-members (Standard)		
IJ.	No Treadplate On Compartment Tops		
٧.	6 Inch tall wood tailboard installed at the rear of body cargo area		
W.	No Compartment Lighting Supplied by the Body Manufacturer		
Χ.	Stainless Steel Rotary Paddle Latch With Lock (Standard)		
Υ.	Master Body Locking System (Standard)		
Z.	No Chock Holders In Line Body Fender Panel Required (Standard)		
AA. AB.	Gas Shock Type Rigid Door Holders For Vertical Doors (Standard) Chains On Horizontal Doors		
AC.	Hot Stick Shelf Full Length (Right Side Only)		
AD.	Drop-Down Hot Stick Door For One (1) Shelf (Right Side)		
AE.	Two (2) Hot Stick Brackets		•
AF.	1st Vertical Street Side (LH) - Two (2) Adjustable Shelf With Removable Dividers		
Α,.	On 4 Inch Centers		
AG.	1st Horizontal Street Side (LH) - One (1) Fixed Shelf With Removable Dividers On		
	8 Inch Centers		
AH.	Rear Vertical Street Side (LH) - Six (6) Adjustable Locking Swivel Hooks		
AI.	1st Vertical Curb Side (RH) - Seven (7) Adjustable Locking Swivel Hooks, Louvered Panel Installed in Cargo Wall		
AJ.	1st Horizontal Curb Side (RH) - Vacant		
AK.	Rear Vertical Curb Side (RH) - Two (2) Adjustable Shelf With Removable Dividers		
	On 4 Centers		
AL.	Aluminum Rock Guards Installed at Bottom		
AM.	38" Tailshelf with Integrated Side Access Steps, Two Wheel Chock Holders, and		
	Smooth Galvaneal Floor Installed at Rear of Body		
	Body and Chassis Accessories		
ICC U	Inderride Protection	1	, ,
0 l-	in the Carlo		
Comb	ination 2 Ball (10,000 LB MGTW) And Pintle Hitch (16,000 LB MGTW)	1	
Set Of	Feye Bolts for Trailer Safety Chain, installed one each side of towing device mount.	1	
Dla#-	em Boot Bigid with Bulbler Tube		
ria(10)	rm Rest, Rigid with Rubber Tube	1	Item # 3
Boom	Rest for a Telescopic Unit	1	

<u>ltem</u>

18.

19.

20.

21.

22.

<u>ltem</u>	<u>Description</u>	Qty	
23.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1	
24.	Mud Flaps With Altec Logo (Pair)	1	
25.	Safety Harness And 4.5' Lanyard (Fits Medium To Xlarge) Includes Pouch and Placards	1	
26.	5 LB Fire Extinguisher With Light Duty Bracket, Installed	1	
27.	Triangular Reflector Kit, Installed	1	
28.	Front Torsion Bar Installed On Chassis	1	
29.	Rear Torsion Bar Installed On Chassis	1	
30.	Appropriate counterweight added for stability.	1	
31.	Slope Indicator Assembly For Machine Without Outriggers	1	
32.	Vinyl manual pouch for storage of all operator and parts manuals	1	
	Electrical Accessories		
33.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED With LED Reverse Lights)	1	
34.	Altec Standard Amber LED Strobe Light With Brush Guard Post Mounted On Streetside Front Compartment Top	1	
35.	Single tone back up alarm installed between the chassis frame rails at the rear of the chassis. To work in conjunction with chassis reverse drive system	1	
36.	6-Way Trailer Receptacle (Pin Type) Installed At Rear	1	
37.	Dash panel rocker switches supplied with Dodge Chassis, 4 auxiliary switches supplied in up fitting package from Dodge	1	
38.	PTO Indicator Light Installed In Cab	1	
39.	Start/Stop/Throttle Module, 12 Volt System	1	
	Finishing Details		
40.	Focus Factory Build	1	
41.	Powder Coat Unit Altec White	1	
42.	Finish Paint Body Accessories Altec White	1	
43.	Apply Non-Skid Paint to all walking surfaces	1	Item # 3

<u>ltem</u>	<u>Description</u>	Qty	
44.	English Safety And Instructional Decals	1	
45.	Vehicle Height Placard - Installed In Cab	1	
46.	Dielectric test unit according to ANSI requirements.	1	
47.	Stability test unit according to ANSI requirements.	1	
48.	Placard, HVI-22 Hydraulic Oil	1	
49.	Inbound Freight	1	
50.	Altec Stock/Global Spec	1	
	<u>Chassis</u>		
51.	Altec Supplied Chassis	1	
52.	2014 Model Year	1	
53.	Dodge 5500	1	
54.	4x4	1	
55.	Chassis CA Length - 60"	1	
56.	Regular Cab	1	
57.	Chassis Color - White	1	
5 8.	Chassis Wheelbase Length - 141 inch	1	
59,	Cummins 6.7L Turbo Diesel (Dodge)	1	
60.	Aisin AS68RC Automatic Transmission (Dodge Chassis)	1	
61.	GVWR 18,000 LBS	1	
62.	7,000 LBs Front Axle Rating	1	
63.	13,500 LBs Rear Axle Rating	1	•
64.	Hydraulic Brakes	1	
65.	Park Brake In Rear Wheels	1	
66.	Single Horizontal Exhaust Right Hand	1	
37.	98R - Operator Commanded Regeneration (OCR)	1	
38 .	No Idle Engine Shut-Down Required	1	Item # 3
39 .	Cruise Control	1	

<u>ltem</u>	<u>Description</u>	Qty
7 0.	Block Heater	1
71.	Ambulance Prep Package	1
	Additional Pricing	
72.	Stock Unit	1
	<u>Miscellaneous</u>	
73.	Standard Altec Warranty: One (1) year parts warranty, one (1) year labor warranty, ninety (90) days warranty for travel charges, limited lifetime structural warranty	1
	(55) Suy Construction and Market Wallett	
		Total: \$97,673.00
Global	Rental Co., Inc.	
BY		
Br	ian Mathews	
Notes: 1	Altec Standard Warranty:	
	One (1) year parts warranty.	
	One (1) year labor warranty.	
	Ninety (90) days warranty for travel charges.	
	Warranty on structural integrity of the following major components is to be warranted fo purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structure weldments, pedestals, subbases and turntables.	r so long as the initial res, outrigger
	Bidder is to supply a self-directed, computer based training (CBT) program. This progrinstruction in the safe operation of this aerial device. This program will also include an OSHA requirements related to the proper use and operation of this unit.	am will provide basic d explain ANSI and
	Altec offers its standard limited warranty with the Altec supplied components which ma and its installation, but expressly disclaims any and all warranties, liabilities, and responsing implied warranties of fitness for a particular purpose and merchantability, for any customs.	nsibilities, including
	Altec designs and manufactures to applicable Federal Motor Vehicle Safety and DOT s Altec takes pride in offering solutions that provide a safer work environment for our cust focus on safety, we would like to ensure that the following items are offered to you as p quotation package:	

Outrigger pads (When Applicable)

Fall Protection System
Fire extinguisher/DOT kit
Platform Liner (When Applicable)
Back up alarm
Wheel Chocks

The aforementioned equipment is traditionally offered in our new equipment quotations, unless requested otherwise by the customer. If you find that any of these items have not been listed as priced options in the body of your quotation and are required by your company, we would encourage you to contact your Altec Account Manager and have an updated quotation developed for you. These options must be listed as individual options in the body of the quotation for them to be supplied by Altec.

Unless otherwise noted, all measurements used in this quote are based on a 40 inch (1016mm) chassis frame height and standard cab height for standard configurations.

F.O.B. - Customer Site

Changes made to this order may affect whether or not this vehicle is subject to F.E.T. A review will be made at the time of invoicing and any applicable F.E.T. will be added to the invoice amount.

Price does not reflect any local, state or Federal Excise Taxes (F.E.T). The quote also does not reflect any local title or licensing fees. All appropriate taxes will be added to the final price in accordance with regulations in effect at time of invoicing.

Interest charge of 1/2% per month to be added for late payment.

Delivery: 270-300 days after receipt of order PROVIDING:

A. Order is received within 14 days from the date of the quote. If initial timeframe expires, please contact your Altec representative for an updated delivery commitment.

B. Chassis is received a minimum of sixty (60) days before scheduled delivery.

C. Customer approval drawings are returned by requested date.

D. Customer supplied accessories are received by date necessary for compliance with scheduled delivery.

E. Customer expectations are accurately captured prior to releasing the order. Unexpected additions or changes made at a customer inspection will delay the delivery of the vehicle.

Altec reserves the right to change suppliers in order to meet customer delivery requirements, unless specifically identified, by the customer, during the quote and or ordering process.

Trade-in offer is contingent upon equipment being maintained to DOT (Department of Transportation) operating and safety standards. This will include, but not limited to tires, lights, brakes, glass, etc. If a trade-in is not maintained to DOT standards, additional transportation expenses will apply and could be invoiced separately.

All equipment, i.e., jibs, winches, pintle hooks, trailer connectors, etc., are to remain with the vehicle unless otherwise agreed upon in writing by both parties. Altec Industries reserves the right to re-negotiate its trade-in offer if these conditions are not met.

Customer may exercise the option to rescind this agreement in writing within sixty (60) days after receipt of purchase order. After that time Altec Industries will expect receipt of trade-in vehicle upon delivery of new equipment as part of the terms of the purchase order.

Titles for trade-in equipment should be given to the appropriate Altec Sales associate or forwarded to Altec Nueco at address 1730 Vanderbilt Road, Birmingham, AL 35234.

After the initial warranty period, Altec Industries, Inc. offers mobile service units, in-shop service and same day parts shipments on most parts from service locations nationwide at an additional competitive labor and parts rate. Call 877-GO-ALTEC for all of your Parts and Service needs.

Please email Altec Capital at finance@altec.com or call 888-408-8148 for a lease quote today.

Please direct all questions to your account manager.

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12



Utility Committee Meeting

AGENDA

March 3, 2015

Item:
Discussion / Approval - Solar Policies and Tariff Department:
Additional Information:
Financial Impact:
Budgeted Item:
Recommendation / Request:

Viewing Attachments Requires Adobe Acrobat. Click here to download.

Attachments / click to download

□ Solar Info



DISTRIBUTED GENERATION TARIFF

<u>PAGE</u>	EFFECTIVE DATE	REVISION	PAGE NO.
1 of 2	Bills Rendered for the Month of March, 2015	20150202	8.00

AVAILABILITY:

Applicable to customers in all areas served by the City of Monroe (the City) and subject to its service rules, regulations, terms, policies and procedures, as amended from time to time, which are incorporated herein by this reference, and desiring to sell electrical energy to the City produced by a distributed generation facility, which must be eligible for participation subject to the terms and provisions of The Georgia Cogeneration and Distributed Generation Act of 2001 or successor legislation (the "DG Act").

A distributed generation facility must:

- 1. Be owned (or leased) and operated by an existing Customer for production of electric energy, and
- 2. Be located on the Customer's premises, and
- 3. Be connected to and operate in parallel with the City's distribution facilities, and
- 4. Be intended primarily to offset part or all of the Customer's generator's requirement for electricity, and
- 5. Have peak generating capacity of not more than 10 kW for residential applications and not more than 100 kW for commercial applications
- 6. Use solar photovoltaic system, wind, fuel cell, or hydro generation

MONTHLY METERING COST:

	7-100 poi
Single Directional	
Single-Phase	\$4.50 per month
Poly-phase	\$11.00 per month

The City Electric Department will install single directional metering or bi-directional metering depending on the customer's method of installation. All installed costs for metering and associated equipment will be paid by the customer at the time service is initiated under this policy.

Bi-directional metering is defined as measuring the amount of electricity supplied by the City and the amount fed back to the City by the customer's distributed generation facility during the billing period using the same meter. Bi-directional metering shall be used where distributed generation facilities are connected to the City on the customer's side of the customer's meter.

Single directional metering shall be defined as measuring electricity produced or consumed during the billing period, in accordance with normal metering practices. Single directional metering shall be used where distributed generation facilities are connected to the City's distribution system on the City's side of the customer's meter.

MONTHLY CAPACITY COST:

The City requires each Customer with a distributed generation facility to pay for monthly Stand-By Capacity charges based on the Nameplate Capacity Rating in kW of the Customer's system.

Stand-by Capacity Charge

Residential

Including Residential, Residential Multi-unit and Church	\$10.00 per kW per month
Commercial	\$13.00 per kW per month

DISTRIBUTED GENERATION TARIFF (Continued)

<u>PAGE</u>	EFFECTIVE DATE	REVISION	PAGE NO.
2 of 2	Bills Rendered for the Month of March, 2015	20150202	8.10

PAYMENT FOR ENERGY:

Bi-directional metering

- 1. When electricity supplied by the City exceeds electricity generated by the Customer's distributed generation, the electricity shall be billed by the City in accordance with the applicable tariff(s).
- 2. When electricity generated by the Customer's distributed generation system exceeds electricity supplied by the City, the Customer shall be billed for appropriate Customer charges for that billing period and credited for excess kWh generated during the billing period at the avoided energy cost.

Single directional metering

- When electricity are generated by the Customer's distributed generation facility, the Customer shall be compensated for these kWh's based on avoided energy costs as determined by the City. The City will only compensate the Customer for avoided energy kWh's as determined by metered energy delivered to the City's distribution system.
- 2. The Customer's net bill will be calculated using the City calculation for avoided energy cost (as described below) credited to the Customer, netted against the billing period charges for the Customer's regular service (according to the applicable tariff) based on actual metered energy.

Avoided Energy Cost

Payments by the City to the Customer for the billing period metered avoided energy kWh's will be computed by the City in its sole discretion based on the average monthly wholesale market price as determined by the Municipal Electric Authority of Georgia (MEAG Power), the City's Wholesale Energy provider.

In the event the customer develops a credit balance during a billing period, the amount will remain as a credit on the customer's account. Credit balances remaining at the end of the City's fiscal year will be cleared by the issuance of a check for the credit balance to the customer. Mid-year clearance of account credit balances will be at the City's discretion.

SAFETY, POWER QUALITY, AND INTERCONNECTION REQUIREMENTS:

The customer shall be responsible for ensuring a safe and reliable interconnection with the City and all costs incurred therein. The City has available, upon request, the following documents that must be completed and approved in their entirety prior to interconnection by the customer to the City's distribution system:

- 1. Application for Interconnection of Distributed Generation Facility
- 2. Interconnection Agreement
- 3. Electrical Power Exchange Agreement

The provisions in all documents outlined above are incorporated into this Tariff in their entirety. For the avoidance of doubt, Customer shall be deemed to have agreed to such provisions by applying for service under this Tariff.

The City will only be required to purchase energy from eligible distributed generation facilities on a first-come, first-served basis until the cumulative generating capacity of all renewable energy sources from all Customers equals the percentage of the City's annual peak demand in the previous year as set forth in O.C.G.A. § 46-3-56(a). Additional energy may be purchased by the City in its sole discretion at a cost agreed to by it and the Customer provider. The City shall at no time be required to purchase energy from Customers in excess of amounts required by the DG Act.

The City reserves the right to separate the Customer generator's equipment from City lines and facilities when, in the City's judgment, the continued parallel operation is unsafe or may cause damage to persons or property. Upon such separation, the City shall promptly notify the Customer generator so that any unsafe condition can be corrected.

City of Application for Interconnection of Distributed Generation Facility		
The following application must be completed in electric department at least 30 day interconnection date so that the City will have a addition, applicable permits must be obtained for Department of Building Safety prior to installate associated equipment. The undersigned herewit interconnection services required for the distributelow.	s prior to the anticipated mple time to process the request. In com the City of on of any distributed generation and h applies for metering and	
Application Fee: Generators rated at 10 kW or less Generators rated at greater than 10 kW	\$50 (Non-refundable) Based on engineering estimate	
APPLICANT CONTACT INFORMATION		
Name:(Same Name as shown for the City Electric Electric Service Address:	ic Account Billing)	
Customer Account #:		
Contact Person (if different than above)		
E-mail Address:		
Phone#:		
CONSULTING ENGINEER OR CONTRACTOR/	INSTALLER INFORMATION	
Company Name:		
Name:		
Address:		
E-mail Address:		
Phone#:		

GENERATING FACILITY/INVERTER INFORMATION

Generator Type: (circle one) <u>Photovoltaic</u> <u>Wind</u> <u>Fuel Cell</u> <u>Hydro</u> <u>Other</u>
Manufacturer:
Model Name and Number:
kW Rating: kVA Rating:
Interconnection Voltage:
Will you supply the necessary var requirements? (Circle one) Yes No
Disconnect Switch Manufacturer/Model Number:
Disconnect Switch Rating: THD: Maximum Fault Current:
External Disconnect: (circle one) Yes No If yes, location:
Will the system export power? (Circle one) Yes No Rated Frequency:
ONE-LINE DIAGRAM AND ADDITIONAL INFORMATION
One-Line Diagram Attached: (circle one) Yes No
Product Literature Attached: (circle one) Yes No
Obtained Electrical Permit: (circle one) Yes No
EXISTING ELECTRIC SERVICE
Main Panel Ampere Rating:
Main Panel Voltage Rating:
Service Character (circle one) Single phase Three phase

DISTRIBUTED GENERATION INSTALLATION INFORMATION

Is the normal operation of this generator intended to provide power to meet base load requirements, demand management, standby power, back-up power, or other? (Pleas describe):
Estimated In-Service Date: Estimated Interconnection Date:
By completing and submitting this Application, Applicant agrees to all service rules, regulations, terms, policies and procedures, as amended from time to time, which are incorporated herein by this reference.
Printed Name of Applicant:
Signature: Date
TO BE FILLED OUT BY CITY OFELECTRIC PERSONNEL
Contact Person:
Phone Number: Fax Number:
E-mail Address:
Application accepted for review: (circle one) Yes No If no, why:

CITY OF			
INTERCONNECTION AGRED FOR INTERCONNECTION A DISTRIBUTED GENERATIO	ND PARALLEL OP		ss
THIS AGREEMENT is made and between the City of			y and
Name		(hereafter "Customer")	
Customer Electric Service Address			
Customer Information	System Inst	aller Information	
Name:	_ Company na	ame:	
Address:	Installer nar	me:	
Telephone:	Address:		
Electric Account #:	Telephone: _		

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. Scope and Purpose of Agreement

This Agreement describes only the conditions under which the City and the Customer agree that the distributed generating facility or facilities described in Exhibit A may be interconnected to and operated in parallel with the City electric distribution system. Other services the Customer may require from the City are covered under separate agreements.

The following exhibits are incorporated and made a part of this Agreement:

Exhibit A: Description of Customer's Distributed Generation Equipment/Facility

Exhibit B: Section A -Authorization to Connect OR Section B -Non-Authorization.

2. Term and Termination

2.1 This Agreement shall continue for a period of one (1) year, effective the date of first operation of the power exchange system, but no later than three months after the City has installed the proper electric metering. This Agreement shall automatically renew for additional one year periods following the expiration date if neither party gives the other notice of termination at least

ninety (90) days in advance of the expiration date of the original term or any one year extension thereof.

- **2.2** Either party may terminate this Agreement at any time by providing 90 days written notice to the other party. In the event of a sale of the Customer's premises, then this Agreement will terminate upon that sale.
- **2.3** The City may terminate this Agreement at any time for violation of this Agreement upon written notice to the Customer.
- **2.4** At the time of termination of this Agreement for any reason, the City will perform lock out procedures to disconnect the Customer's System from the City's electric system.

3. Summary and Description of Customer's Distributed Generation Equipment/Facility to be Included in Exhibit A.

- **3.1** The Customer's eligible Distributed Generation System is a self-contained electric generation system including direct current disconnect apparatus, if applicable, alternating current disconnect/lockout, over-current protective device, and all related electrical equipment upstream of the over-current protective device, as set forth on Exhibit A (the "System"). The System begins and continues up-stream towards the distributed generation from the overcurrent protective device on the Customer's premises. However, the meter socket and related electrical connects are part of the System and are the responsibility of the Customer [i.e. all equipment from the main disconnect except the meter is Customer equipment].
- 3.2 Capacity of the Distributed Generation equipment is: _____kW.
 3.3 The expected annual energy production of the Distributed Generation equipment is _____kWh.
 3.4 The expected date of initial operation of the Distributed Generation equipment is: _____.

4. Installation and Permitting

4.1 Without limiting the provisions of paragraph 22, the Customer and the System must comply with all applicable National Electric Code (NEC), UL and IEEE requirements, including, but not limited to:

UL 1741-Standard for Static Inverters and Charge Controllers for Use with Photovoltaic Systems.

IEEE Standard 1547 (2003): Standard for Interconnecting Distributed Resources with Electric Power Systems. [NOTE: UL 1741 will soon be incorporated into IEEE 1547].

Other organizations, such as the Canadian Standards Association (CSA), test to UL 1741. If the inverter is tested by an organization other than Underwriters Laboratories, the test data must be submitted to the City.

The Customer at the Customer's expense must: 1) obtain all necessary electrical permits for installation of the System and 2) obtain and maintain any government authorizations or permits required for the operation of the System. The Customer must reimburse the City for any and all losses, damages, claims, penalties, or liability the City incurs as a result of Customer's failure to obtain or to maintain any governmental Authorizations and permits required for construction and operation of the Customer's System.

- **4.2** The Customer or its contractor must construct the System as specified in the attached Exhibit A.
- **4.3** A manual, lockable, load-break disconnect switch that provides a clear indication of the switch position must be available with the System at or near the Customer's main point of service from the City's electric system to provide a point of electrical separation between the Customer's System and the City's electric system. The City will approve the location of the disconnect switch. The disconnect switch must be easily visible, mounted separately from the metering equipment, readily accessible to the City personnel at all times, and capable of being locked in the open position with the City's lock. The City may open the disconnect switch thereby isolating the Customer's System from the City electric system for any reason that the City deems necessary including, but not limited to, maintenance or emergency work, the System adversely affecting other customers of the City, failure of the System to comply with codes/regulations, the System creating hazardous or unsafe conditions, the Customer's failure to pay utility bills when due, and failure to comply with the UL Standards in Section 4.1 above.
- **4.4** Power Quality Requirements. All power quality parameters (i.e., voltage, flicker, frequency, distortion) are specified at the point of common coupling (PCC) unless otherwise stated. The following requirements must be met:
 - **4.4.1.** Voltage the System must be capable of operating within normal voltage operating limits of 106-132 volts (88 -110% nominal 120V). This range results in trip points at 105 volts and 133 volts. Response to abnormal voltages should be as follows:

Voltage (at PCC)	Maximum Trip Time
V < 50%	10 cycles
$50\% \le V < 88\%$	120 cycles
88% < V < 110%	normal operation
110% < V < 120%	60 cycles
V ≥ 120%	10 cycles

4.4.2 Flicker – The System shall not create objectionable flicker for other the City customers. Flicker is considered objectionable when it either causes a modulation of the light level of lamps sufficient to be irritating to humans or causes equipment malfunction. See IEEE 519-1992.

- **4.4.3** Frequency The System must have a fixed frequency range of 59.3 to 60.5 Hz. When the interconnected system frequency is outside this range, the System shall cease to energize the City connection within 1-cycle.
- **4.4.4** Waveform Distortion (Harmonics) The System must have low current-distortion levels to ensure that no adverse effects are caused to other equipment connected to the City's electric system. When the System is serving balanced linear loads, harmonic current injection into the City's network shall not exceed when measured in accordance with IEEE Std 1547:

Harmonics h<11 $11 \le h<17$ $17 \le h<23$ $23 \le h<35$ $35 \le h$ per cent 4.0 2.0 1.5 0.6 0.3

Maximum Total Demand Distortion (TDD) 5.0%

Even harmonics are to be limited to 25% of the odd harmonics shown above.

- **4.4.5** Power Factor The System must operate at a power factor >0.85 (leading or lagging) when output is greater than 10% of full load.
- **4.4.6** Islanding Protection The System must cease to energize the utility line when the inverter is subjected to islanding conditions. The System must immediately, completely and automatically disconnect from the City's electric system in the event of a fault on the Customer's System or loss of source on the City's electric system. The City, at its own discretion and expense, may conduct periodic testing of anti-islanding. Anti-islanding is a means by which the Customer's System will cease to generate when it is still connected to the isolated (due to fault clearing or other switching) section of the City electric system.
- **4.5** The Customer's over-current protective device (Breaker) at the service panel must be dedicated and must be capable of interrupting the maximum available fault current. The Breaker shall be clearly marked to indicate power source and connection to the City's electric system. The City will provide and attach an additional label to the manual load-break disconnect switch, which is described in Subsection 4.3 above.
- **4.6** The Customer, at the Customer's expense, must pay for any additional equipment required to connect the System to the City's electric system.

5. Written Authorization Required to Connect System

The Customer may not connect the System to the City's electric system until: 1) completion of the City's "Application for Interconnection of Distributed Generation Facility", 2) completion of the City's "Electrical Power Exchange Agreement", 3) this "Interconnection Agreement" has been fully executed by the parties, and 4) the System has been tested and approved. The City may have representatives present at the initial testing of the Customer's System and may

perform (at its own expense) whatever testing of the Customer's System that the City deems necessary.

After written authorization to connect the System to the City's electric system has been given, the Customer shall make no changes or modifications in the System or of its mode of operation without the prior written approval of the City.

6. Warranty is Neither Expressed nor Implied

The City's inspection and approval, if any, of the System is solely for the City's benefit and does not constitute a warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer or leased by the Customer from third parties, including without limitation the System and any structures, wires, appliances or devices appurtenant thereto.

7. Indemnity and Liability

- **7.1** The Customer releases and agrees to indemnify, defend and hold harmless the City, its agents, officers, employees and volunteers from and against all damages, claims, actions, causes of action, demands, judgments, costs, expenses of every kind and nature, predicated upon injury to or death of any person or loss of or damage to any property, arising, in any manner, from the Customer's activities, actions or omissions related to this Agreement.
- **7.2** Nothing in this Agreement shall be construed as a waiver by the City of any rights, immunities, privileges, monetary limitations to judgments, and defenses available to the City under law.

8. Location of System

The System will be installed at the Customer's premises located at

The Customer cannot relocate and connect the System at another premises or physical location without filing a new interconnection application with the City or requesting modifications to this Agreement allowing for connection at the alternate location. In the event that such approval is given, any relocation and installation of the System will be at the Customer's sole expense.

9. Access to Premises

The Customer will provide the City access to the Customer's premises to (i) inspect the Customer's System, (ii) to read and to replace meters, (iii) to open the load-break disconnect switch, and (iv) to disconnect the interconnection facilities at the City's meter or transformer.

10. Maintenance of Equipment

The Customer, at the Customer's sole cost and expense, will maintain the System including, but not limited to, all over-current protective equipment, in a safe and prudent manner and in conformance with all applicable laws, codes and regulation, including, but not limited to, the requirements of Section 4

above. The Customer must retain all records for such maintenance. These records must be available to the City for inspection at all reasonable times.

11. Safety

The Customer agrees to install, operate and maintain the System in a safe and prudent manner and in conformance with all applicable laws, codes and regulations including, but not limited to, those contained in Section 4 above.

12. Assignment

This Agreement may not be assigned by the Customer without the prior written consent of the City, which may be withheld in its sole discretion. In the event of a sale of the Customer's premises, then this Agreement will terminate upon that sale. If the new Customer desires to continue receiving Service, the new Customer must enter into a new, separate agreement with the City.

13. Force Majeure

Neither party will be liable for delays in performing its obligations to the extent that the delay is caused by an unforeseeable condition beyond its reasonable control without fault or negligence, including but not limited to, riots, wars, floods, fires, explosions, acts of nature, acts of government, or labor disturbances.

14. Severability

If any provision of this Agreement is found to be illegal or unenforceable, then the remaining provisions of this Agreement will remain in full force and effect, and such term or provision will be deemed stricken for as long as it remains illegal or unenforceable.

15. Governing Law and Venue

15.1 Any tribunal enforcing this Agreement shall apply and construe it according to the laws of the State of Georgia.

15.2 In the event of any dispute over the A	greement's terms and conditions,
the exclusive venue and jurisdiction for any	litigation, arising there under will
be in the Superior Court of Co	unty, Georgia, and, if necessary for
exclusive federal questions, the United State	s District Court. The Customer
waives any objection to jurisdiction or venue	of any action instituted pursuant
to this section and may not assert any defen	se in any such action based on lack
of jurisdiction or venue or based upon Forur	n Non Conveniens. The Customer
waives any bond or surety or security upon	such bond or surety which, but for
this waiver, might be required by the City.	

16. Survival

The provisions of this Agreement with respect to indemnification and liability will survive the termination of this Agreement.

17. Notices and Other Communications

Except as otherwise provided in this Agreement or as may be specified by the parties in writing, any notice or other communication required under this Agreement must be in writing and must be sent by registered or certified United

States mail, or by messenger, or by facsimile, or by other electronic means to the addresses below. Any such notice or other communication must be addressed as follows and, if so addressed, will be effective upon actual receipt.

Customer:	Name:
	Title:
	Address:
	Phone:
	Fax:
	Email:
City:	Name:
	Title:
	Address:
	Phone:
	Fax:
	Email:

18. Entire Agreement

This Agreement, together with its attachments, constitutes the entire agreement between the parties and supersedes all previous written or oral communications, understandings and agreements between the parties unless specifically stated otherwise within this Agreement. This Agreement may only be amended by a written agreement signed by both parties. Email and all other electronic (including voice) communications from the City in connection with this Agreement are for informational purposes only. No such communications is intended by the City to constitute either an electronic record or an electronic signature or to constitute any agreement by the City to conduct a transaction by electronic means. Any such intention or agreement is expressly disclaimed.

19. Acknowledgements Regarding Agreement

By signing below, the Customer acknowledges understanding of the terms of this Agreement and that the Customer may not connect the System to the City's electric system until the Customer has received written authorization to connect from the City. Within 60 days after notice from the Customer that the System is ready for interconnection to the City's electric system, the City will inspect the System and will provide a written authorization to connect the System or a statement that the System may not be connected because of noncompliance with this Agreement.

20. Compliance With Ordinances And Regulations

The Customer shall perform all obligations under this Agreement in strict compliance with all applicable federal, state, and City laws, rules, statutes, charter provisions, ordinances and regulations, and any other applicable law and the City's service rules, regulations, terms, policies and procedures, as amended from time to time, which are incorporated herein by this reference.

21. Beneficiaries

This Agreement is for the sole benefit of and binds the parties, their successors and assigns. This Agreement affords no claim, benefit or right of action to any third party. Any party besides the City or the Customer receiving services or benefits under this Agreement is only an incidental beneficiary.

22. Status of Customer

The Customer shall perform all operations under this Agreement as an independent Contractor, and not as an agent or employee of the City. No the City official or employee shall supervise the Customer. The Customer will exercise no supervision over any employee or official of the City. The Customer shall not represent that Customer is an employee or agent of the City in any capacity. The Customer has no right to Worker's Compensation benefits from the City or its insurance carriers or funds.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year set forth below.

City of	
City Official	Customer Signature
Print Name	Print Name

Date:	Date:	

Exhibit A

To the Agreement for Interconnection and Parallel Operation of Small Distributed
Generation Resources 10 kW or less between the City of
And Customer:

Insert description of System

Exhibit B

To the Agreement for Interconnection and Parallel Oper Generation Resources 10 kW or less between the City of And Customer:	
Section A: Authorization. The System may be connected	ted to the City's electric system
The System has been inspected and tested and the Cus the System to the City's electric system.	tomer is authorized to connect
Signed by:	
Printed Name	
Printed Title	
Date	
OR	
Section B: Non-Authorization . The System cannot be system.	connected to the City's electric
The System does not comply with the Interconnection A Operation of Small Distributed Resources and the Interconnect the System to the City's electric system.	
Signed by:	
Printed Name	
Printed Title	
Date	

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CITY OF		
INTERCONNECTION AGREIFOR INTERCONNECTION A GENERATION EQUIPMENT	ND PARALLEL OP	ERATION OF DISTRIBUTED TER THAN 10kW
THIS AGREEMENT is made and between the City of	d entered into this	day of,, by and(hereafter "the City") and
Name		(hereafter "Customer")
Customer Electric Service Address		
Customer Information	System Inst	aller Information
Name:	_ Company n	ame:
Address:	Installer na	me:
Telephone:	Address:	
Electric Account #:	Telephone: _	

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. Scope and Purpose of Agreement

This Agreement describes only the conditions under which the City and the Customer agree that the distributed generating facility or facilities described in Exhibit A may be interconnected to and operated in parallel with the City electric distribution system. Other services the Customer may require from the City are covered under separate agreements.

The following exhibits are incorporated and made a part of this Agreement:

- Exhibit A: Description of Customer's Distributed Generation Equipment/Facility
- Exhibit B: Renewable Energy System Interconnection Diagram
- Exhibit C: Section A -Authorization to Connect OR Section B -Non-Authorization.

2. Term and Termination

- **2.1** This Agreement shall continue for a period of one (1) year, effective the date of first operation of the power exchange system, but no later than three months after the City has installed the proper electric metering. This Agreement shall automatically renew for additional one year periods following the expiration date if neither party gives the other notice of termination at least ninety (90) days in advance of the expiration date of the original term or any one year extension thereof.
- **2.2** Either party may terminate this Agreement at any time by providing 90 days written notice to the other party. In the event of a sale of the Customer's premises, then this Agreement will terminate upon that sale.
- **2.3** The City may terminate this Agreement at any time for violation of this Agreement upon written notice to the Customer.
- **2.4** At the time of termination of this Agreement for any reason, the City will perform lock out procedures to disconnect the Customer's System from the City's electric system.

3. Summary and Description of Customer's Distributed Generation Equipment/Facility to be Included in Exhibit A.

- **3.1** The Customer's eligible Distributed Generation System is a self-contained electric generation system including direct current disconnect apparatus, if applicable, alternating current disconnect/lockout, over-current protective device, and all related electrical equipment upstream of the over-current protective device, as set forth on Exhibit A (the "System"). The System begins and continues up-stream towards the distributed generation from the over-current protective device on the Customer's premises. However, the meter socket(s) and related electrical connects are part of the System and are the responsibility of the Customer [i.e. all equipment from the main disconnect except the meter is Customer equipment]. Systems powered from renewable energy shall include a second "Production" meter as indicated in Appendix B.
- 3.2 Capacity of the Distributed Generation equipment is: _____kW.
 3.3 The expected annual energy production of the Distributed Generation equipment is _____kWh.
 3.4 The expected date of initial operation of the Distributed Generation equipment is: _____.

4. Installation and Permitting

- **4.1** Without limiting the provisions of paragraph 22, the Customer and the System must comply with all applicable National Electric Code (NEC), UL and IEEE requirements, including, but not limited to:
- UL 1741-Standard for Static Inverters and Charge Controllers for Use with Photovoltaic Systems.

IEEE Standard 1547 (2003): Standard for Interconnecting Distributed Resources with Electric Power Systems. [NOTE: UL 1741 will soon be incorporated into IEEE 1547].

Other organizations, such as the Canadian Standards Association (CSA), test to UL 1741. If the inverter is tested by an organization other than Underwriters Laboratories, the test data must be submitted to the City.

The Customer at the Customer's expense must: 1) obtain all necessary electrical permits for installation of the System and 2) obtain and maintain any government authorizations or permits required for the operation of the System. The Customer must reimburse the City for any and all losses, damages, claims, penalties, or liability the City incurs as a result of Customer's failure to obtain or to maintain any governmental Authorizations and permits required for construction and operation of the Customer's System.

- **4.2** The Customer or its contractor must construct the System as specified in the attached Exhibit A.
- **4.3** A manual, lockable, load-break disconnect switch that provides a clear indication of the switch position must be available with the System at or near the Customer's main point of service from the City's electric system to provide a point of electrical separation between the Customer's System and the City's electric system. The City will approve the location of the disconnect switch. The disconnect switch must be easily visible, mounted separately from the metering equipment, readily accessible to the City personnel at all times, and capable of being locked in the open position with the City's lock. The City may open the disconnect switch thereby isolating the Customer's System from the City electric system for any reason that the City deems necessary including, but not limited to, maintenance or emergency work, the System adversely affecting other customers of the City, failure of the System to comply with codes/regulations, the System creating hazardous or unsafe conditions, the Customer's failure to pay utility bills when due, and failure to comply with the UL Standards in Section 4.1 above.
- **4.4** Power Quality Requirements. All power quality parameters (i.e., voltage, flicker, frequency, distortion) are specified at the point of common coupling (PCC) unless otherwise stated. The following requirements must be met:
 - **4.4.1.** Voltage the System must be capable of operating within 6% the nominal supply voltage. The Customer shall provide automatic means of disconnecting the System from the City's electric system within one second if the voltage cannot be maintained within this tolerance.
 - **4.4.2** Flicker The System shall not create objectionable flicker for other the City customers. Flicker is considered objectionable when it either causes a modulation of the light level of lamps sufficient to be irritating to humans or causes equipment malfunction. See IEEE 519-1992.

- **4.4.3** Frequency The System must have a fixed frequency range of 59.5 to 60.5 Hz. When the interconnected system frequency is outside this range, the System shall cease to energize the City connection within 12 cycles.
- **4.4.4** Waveform Distortion (Harmonics) The System must have low current-distortion levels to ensure that no adverse effects are caused to other equipment connected to the City's electric system. When the System is serving balanced linear loads, harmonic current injection into the City's network shall not exceed when measured in accordance with IEEE Std 1547:

Maximum Total Demand Distortion (TDD) 5.0%

Even harmonics are to be limited to 25% of the odd harmonics shown above.

Voltage harmonics shall be limited to 3% for individual harmonics with a maximum Total Harmonic Distortion (THD voltage) of 5%.

- **4.4.5** Power Factor The System must operate at a power factor >0.85 (leading or lagging) when output is greater than 10% of full load.
- **4.4.6** Islanding Protection The System must cease to energize the utility line when the inverter is subjected to islanding conditions. The System must immediately, completely and automatically disconnect from the City's electric system in the event of a fault on the Customer's System or loss of source on the City's electric system. The City, at its own discretion and expense, may conduct periodic testing of anti-islanding. Anti-islanding is a means by which the Customer's System will cease to generate when it is still connected to the isolated (due to fault clearing or other switching) section of the City electric system.
- **4.4.7** Isolation Transformer– In order to minimize possible adverse effects on other City customers, a power transformer is usually required between the System and City–owned equipment. This transformer is usually connected in such a manner as to isolate the zero sequence circuit of the System from the zero sequence circuit of the City's electric system. An Interconnection Study will determine the transformer connection and grounding configuration required, and whether a dedicated City–owned transformer will be required to connect the System to the City's electric system.

- **4.5** The Customer's over-current protective device (Breaker) at the service panel must be dedicated and must be capable of interrupting the maximum available fault current. The Breaker shall be clearly marked to indicate power source and connection to the City's electric system. The City will provide and attach an additional label to the manual load-break disconnect switch, which is described in Subsection 4.3 above.
- **4.6** The Customer, at the Customer's expense, must pay for any additional equipment required to connect the System to the City's electric system.

5. Written Authorization Required to Connect System

The Customer may not connect the System to the City's electric system until: 1) completion of the City's "Application for Interconnection of Distributed Generation Facility", 2) completion of the City's "Electrical Power Exchange Agreement", 3) this "Interconnection Agreement" has been fully executed by the parties, and 4) the System has been tested and approved. The City may have representatives present at the initial testing of the Customer's System and may perform (at its own expense) whatever testing of the Customer's System that the City deems necessary.

After written authorization to connect the System to the City's electric system has been given, the Customer shall make no changes or modifications in the System or of its mode of operation without the prior written approval of the City.

6. Warranty is Neither Expressed nor Implied

The City's inspection and approval, if any, of the System is solely for the City's benefit and does not constitute a warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer or leased by the Customer from third parties, including without limitation the System and any structures, wires, appliances or devices appurtenant thereto.

7. Indemnity and Liability

- **7.1** The Customer releases and agrees to indemnify, defend and hold harmless the City, its agents, officers, employees and volunteers from and against all damages, claims, actions, causes of action, demands, judgments, costs, expenses of every kind and nature, predicated upon injury to or death of any person or loss of or damage to any property, arising, in any manner, from the Customer's activities, actions or omissions related to this Agreement.
- **7.2** Nothing in this Agreement shall be construed as a waiver by the City of any rights, immunities, privileges, monetary limitations to judgments, and defenses available to the City under law.

8. Location of System

The System will be installed at the Customer's premises located at

in the physical location specified or depicted in the attached Exhibit A. The Customer cannot relocate and connect the System at another premises or physical location without filing a new interconnection application with the City or requesting modifications to this Agreement allowing for connection at the alternate location. In the event that such approval is given, any relocation and installation of the System will be at the Customer's sole expense.

9. Access to Premises

The Customer will provide the City access to the Customer's premises to (i) inspect the Customer's System, (ii) to read and to replace meters, (iii) to open the load-break disconnect switch, and (iv) to disconnect the interconnection facilities at the City's meter or transformer.

10. Maintenance of Equipment

The Customer, at the Customer's sole cost and expense, will maintain the System including, but not limited to, all over-current protective equipment, in a safe and prudent manner and in conformance with all applicable laws, codes and regulation, including, but not limited to, the requirements of Section 4 above. The Customer must retain all records for such maintenance. These records must be available to the City for inspection at all reasonable times.

11. Safety

The Customer agrees to install, operate and maintain the System in a safe and prudent manner and in conformance with all applicable laws, codes and regulations including, but not limited to, those contained in Section 4 above.

12. Assignment

This Agreement may not be assigned by the Customer without the prior written consent of the City, which may be withheld in its sole discretion. In the event of a sale of the Customer's premises, then this Agreement will terminate upon that sale. If the new Customer desires to continue receiving Service, the new Customer must enter into a new, separate agreement with the City.

13. Force Majeure

Neither party will be liable for delays in performing its obligations to the extent that the delay is caused by an unforeseeable condition beyond its reasonable control without fault or negligence, including but not limited to, riots, wars, floods, fires, explosions, acts of nature, acts of government, or labor disturbances.

14. Severability

If any provision of this Agreement is found to be illegal or unenforceable, then the remaining provisions of this Agreement will remain in full force and effect, and such term or provision will be deemed stricken for as long as it remains illegal or unenforceable.

15. Governing Law and Venue

15.1 Any tribunal enforcing this Agreement shall apply and construe it according to the laws of the State of Georgia.

15.2 In the event of any dispute over the Agreement's terms and conditions, the exclusive venue and jurisdiction for any litigation, arising there under will be in the Superior Court of _____ County, Georgia, and, if necessary for exclusive federal questions, the United States District Court.

The Customer waives any objection to jurisdiction or venue of any action instituted pursuant to this section and may not assert any defense in any such action based on lack of jurisdiction or venue or based upon Forum Non Conveniens. The Customer waives any bond or surety or security upon such bond or surety which, but for this waiver, might be required by the City.

16. Survival

The provisions of this Agreement with respect to indemnification and liability will survive the termination of this Agreement.

17. Notices and Other Communications

Except as otherwise provided in this Agreement or as may be specified by the parties in writing, any notice or other communication required under this Agreement must be in writing and must be sent by registered or certified United States mail, or by messenger, or by facsimile, or by other electronic means. Any such notice or other communication must be addressed as follows and, if so addressed, will be effective upon actual receipt.

Customer:	Name:
	Title:
	Address:
	Phone:
	Fax:
	Email:

City:	Name:					
	Title:					
	Address:					
	Phone:					
	Fax:					
	Email:					

18. Entire Agreement

This Agreement, together with its attachments, constitutes the entire agreement between the parties and supersedes all previous written or oral communications, understandings and agreements between the parties unless specifically stated otherwise within this Agreement. This Agreement may only be amended by a written agreement signed by both parties. Email and all other electronic (including voice) communications from the City in connection with this Agreement are for informational purposes only. No such communications is intended by the City to constitute either an electronic record or an electronic signature or to constitute any agreement by the City to conduct a transaction by electronic means. Any such intention or agreement is expressly disclaimed.

19. Acknowledgements Regarding Agreement

By signing below, the Customer acknowledges understanding of the terms of this Agreement and that the Customer may not connect the System to the City's electric system until the Customer has received written authorization to connect from the City. Within 60 days after notice from the Customer that the System is ready for interconnection to the City's electric system, the City will inspect the System and will provide a written authorization to connect the System or a statement that the System may not be connected because of noncompliance with this Agreement.

20. Compliance With Ordinances And Regulations

The Customer shall perform all obligations under this Agreement in strict compliance with all applicable federal, state, and City laws, rules, statutes, charter provisions, ordinances and regulations, and any other applicable law and the City's service rules, regulations, terms, policies and procedures, as amended from time to time, which are incorporated herein by this reference.

21. Beneficiaries

This Agreement is for the sole benefit of and binds the parties, their successors and assigns. This Agreement affords no claim, benefit or right of action to any third party. Any party besides the City or the Customer receiving services or benefits under this Agreement is only an incidental beneficiary.

22. Status of Customer

The Customer shall perform all operations under this Agreement as an independent Contractor, and not as an agent or employee of the City. No City official or employee shall supervise the Customer. The Customer will exercise no supervision over any employee or official of the City. The Customer shall not represent that Customer is an employee or agent of the City in any capacity. The Customer has no right to Worker's Compensation benefits from the City or its insurance carriers or funds.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year set forth below.

City of	_
City Official	Customer Signature
Print Name	Print Name
Date:	Date:

Exhibit A

To the Agreement for Interconnection and Parallel Operation of Small Distributed	
Generation Resources 10 kW or greater between the City of	
And Customer:	_

Insert description of System

Exhibit BRenewable Energy System Interconnection Diagram

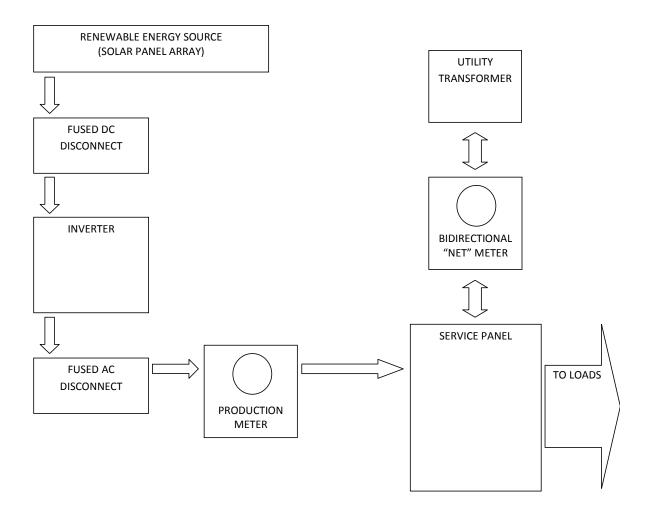


Exhibit C

To the Agreement for Interconnection and Parall Resources 10 kW or greater between the City of And Customer:	-
Section A: Authorization. The System may be	connected to the City's electric system.
The System has been inspected and tested and the System to the City's electric system.	the Customer is authorized to connect
Signed by:	
Printed Name	-
Printed Title	-
Date	-
OR	
Section B: Non-Authorization . The System car system.	anot be connected to the City's electric
The System does not comply with the Interconne Operation of Distributed Generation and the Int connect the System to the City's electric system.	erconnection Customer cannot
Signed by:	
Printed Name	-
Printed Title	-
Date	_

CITY OF		
Electrical	Power Exchange Agreement	

THIS AGREEMENT is made and entered into this between the City of	day of,, by and(hereafter "the City") and
Name	(hereafter "Customer")
Customer Electric Service Address	

WITNESSETH

WHEREAS, Customer owns the above noted property, and owns/leases or permits to operate an associated system on such property that has the capability of generating electricity of the quality and type that can be provided to the City, and

WHEREAS, the City is a municipal utility duly established with authority to serve electrical needs to this property; and

WHEREAS, Customer desires to sell to the City excess electrical energy, that which at any given time could exceed the electrical energy consumed on the Customer's property; and

WHEREAS, the City desires to purchase such excess electrical energy,

NOW, therefore, in consideration of the terms, conditions, covenants, agreements and obligations herein stated, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, it is mutually agreed by and between the parties hereto as follows:

1. OBLIGATIONS OF THE CITY

At the Customer's expense, the City will install single directional metering or bidirectional metering depending on the Customer's method of installation. All installed related costs for metering and associated equipment will be paid by the Customer at the time service is initiated under this Agreement.

Bi-directional metering is defined as measuring the amount of electricity supplied by the City and the amount fed back to the City by the Customer's distributed generation facility during the billing period using the same meter. Bi-directional metering shall be used where distributed generation facilities are connected to the City on the Customer's side of the Customer's meter.

Single directional metering shall be defined as measuring electricity produced or consumed during the billing period, in accordance with normal metering practices. Single directional metering shall be used where distributed generation facilities are connected to the City's distribution system on the City's side of the Customer's meter.

Bi-directional metering

- 1. When billing period kWh's supplied by the City exceeds kWh's generated by the Customer's distributed generation, the electricity shall be billed by the City in accordance with the applicable tariff(s).
- 2. When billing period kWh's generated by the Customer's distributed generation system exceeds kWh's supplied by the City, the Customer shall be billed for appropriate Customer charges for that billing period, and **credited** for any excess kWh's generated during the billing period in accordance with the City approved <u>Distributed Generation -Renewable Energy Rate</u>.

Single directional metering

- 1. When billing period kWh's are generated by the Customer's distributed generation facility, the Customer shall be compensated for these kWh's based on avoided energy costs as determined by the City. The City will only compensate the Customer for avoided energy kWh's as determined by metered energy delivered to the City's distribution system.
- 2. The billing period Customer's net bill will be calculated using the City calculation for avoided energy compensation (as described above) credited to the Customer, netted against the billing period charges for the Customer's regular service (according to the applicable tariff) based on actual metered energy.

The City will only be required to purchase energy from eligible distributed generation facilities on a first-come, first-served basis until the cumulative generating capacity of all renewable energy sources from all Customer's equals 0.2% of the City's annual peak demand in the previous year. Additional energy may be purchased by the City at a cost agreed to by it and the Customer.

In the event the Customer develops a credit balance during a billing period, the account will be cleared by the issuance of a check for the credit balance to the Customer.

The City reserves the right to separate Customer's equipment from the City's lines and facilities if, in the exclusive opinion of the City engineering staff, continued parallel operation is unsafe or may cause damage to persons or property. Upon such separation, the City shall promptly notify Customer so that any unsafe condition can be corrected.

2. OBLIGATIONS OF CUSTOMER

Customer agrees and warrants:

- a) That it has full power and authority to execute and deliver this Agreement and all documents contemplated hereunder, and to assure full performance and compliance.
- b) That the Customer will pay for the electrical power exchanged as provided by this Agreement according to the applicable City tariffs.
- c) That the Customer shall supply the City with appropriate electrical interconnection plans, which must be designed to protect the safety of the City and the general public, and which must be pre-approved by the City. Included in these plans must be the requirement that the Customer-owned interconnection equipment must disconnect from the City's electrical system upon the absence of City utility power. Customer must complete the City "Application for Interconnection of Distributed Generation Facility" and the City "Interconnection Agreement".
- d) That the Customer agrees to provide the City access to the metering equipment, and agrees to cooperate with the City for any special, temporary metering intended to monitor energy flows.
- e) That the Customer agrees to allow the City to use data gathered from this installation for public use, such as newsletter articles, presentation, or other similar uses. Customer's name will be protected if requested in writing by Customer, for such use.
- f) That the Customer agrees to pay for any incremental City metering or electrical distribution system costs necessitated by this Agreement.
- g) That the Customer will provide, install, own/lease and maintain such power exchange and interconnection equipment that provides for the safe interconnection to the City's system.
- h) That the Customer's installed distributed generation and interconnection equipment will operate safely at the time of installation and throughout the term of the Agreement.
- i) That the Customer will notify the City of any changes to the Customer's system (size change, generation change, or change in interconnection equipment). Technical information on any changes in Customer's equipment must be provided to the City and pre-approval received from the City prior to Customer connection and operation of such equipment.
- j) That the Customer shall comply at all times with applicable law, including without limitation, City's service rules, regulations, terms, policies and procedures, as amended from time to time, which are incorporated herein by this reference,

3. TERM

This Agreement shall continue for a period of one (1) year, effective the date of first operation of the power exchange system, but no later than three months after the City has installed the proper electric metering. This Agreement shall automatically renew for additional one year periods following the expiration date if neither party gives the other notice of termination at least ninety (90) days in advance of the expiration date of the original term or any one year extension thereof.

4. COMPENSATION AND BILLING

Customer	and	the	City	agree	to	pay	for	the	electrical	power	exchanged	per	the
applicable	rates	and	sche	dules a	as a	ppro	ved	the C	City of		•		

5. RENEWABLE ENERGY CREDITS

The Customer shall have the option of retaining the Renewable Energy Credits (RECs) (which represent the environmental attributes of the renewable energy generated by the Customer's distributed generation equipment) or transferring ownership of the RECs to the City, as indicated by initial below.

 Customer	elects to	retain R	enewable Ł	nergy C	reaits, o	r	
 Customer	elects to	transfer	Renewable	Energy	Credits	to the	e City

6. <u>LEGAL STATUS</u>

It is understood and agreed that no agency, employment, joint venture or partnership is created hereby between the parties hereto; that the City is not an affiliate of the Customer; and that neither party, nor its agents or employees, shall be deemed to be agent of the other, nor shall either party have the right, power or authority to act for the other party in any manner to create obligations or debts which would be binding upon the other party.

7. RIGHT TO TERMINATE

- a) Prior to the end of the term of this Agreement, as set forth in Section 3 hereof, including any extensions or renewals, this Agreement shall by terminated as follows:
 - i. In the event Customer fails to comply with any material provision of this Agreement ("Default") which Default shall not have been cured within thirty (30) business days after written notice.
 - ii. This Agreement shall terminate if the City is denied the right to serve the Property by a court, by a public body or by a state agency or if the City determines that it is legally impermissible for it to serve the Property.
 - iii. At the City's option in the event of any conveyance of the property by Customer.
- b) If this Agreement is terminated for any reason, the City shall have the right, but not the obligation, to disconnect or remove any city equipment within a reasonable period of time following termination.
- c) The City reserves the right to inspect and test the Customer's equipment and system operation at any time before activation or during the term of this Agreement to ensure proper operation and compliance with safety requirements. This Agreement may be terminated by the City if in the exclusive opinion of the City engineering staff the system is unsafe or otherwise not operating in compliance with this Agreement and any technical requirements contained herein.

8. LIABILITY AND INDEMNIFICATION

- a) Customer hereby agrees to indemnify the City against, and to hold the City harmless of and from any and all liability, claims, loss, damage and expense, including, without limitation, reasonable attorney fees and costs which the City may suffer or incur, by reason of any breach of any warranty or representation made by Customer, or by reason of any action or proceeding asserted or instituted, arising from such breach, or asserted by any tenant or third party claiming rights under this Agreement or otherwise related to this Agreement.
- b) Customer and its successors shall hold the City harmless from any damages caused by Customer, its agents, its residents or occupants, unless such damages shall result from the City's gross negligent installation or maintenance of any or all of the City's electrical system.
- c) Nothing in this Agreement shall be construed as a waiver by the City of any rights, immunities, privileges, monetary limitations to judgments, and defenses available to the City under law.

9. SUCCESSORS

This Agreement, shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors, heirs and assigns.

10. NOTICES AND PAYMENTS

Any and all payments, notices or other communications provided for herein shall be delivered at the addresses as first set forth above or any other address which may be specified in writing by the parties hereto. All notices required to be given hereunder shall be given in writing, sent by certified mail, return receipt requested, and shall be deemed effective five (5) days after such mailing.

11. GOVERNING LAW

This Agreement shall be construed in accordance with and governed by the laws of the State of Georgia and the exclusive venue for all actions arising out of this Agreement (including any action for declaratory relief) shall be in ______ County, Georgia.

12. ENTIRE AGREEMENT

This Agreement constitutes the entire understanding between the parties and contains all the covenants made between the parties with respect to the subject matter hereof. This Agreement supersedes any and all other agreements between the parties, either oral or in writing, with respect to the subject matter hereof.

13. AMENDMENTS

This Agreement may be amended, changed or modified only by written amendment executed by the parties hereto. No waiver of any provision of this Agreement shall be valid unless in writing and signed by the party charged.

14. CUSTOMER'S REMEDIES

The exclusive and sole remedy of the Customer shall be receipt of payment for the value of electricity generated by Customer and provided to the City.

15. <u>LIMITED LIABILITY</u>

Neither party to this Agreement shall be liable for the other's lost profits or special, incidental, or consequential damages, whether in an action in contract or tort, even if the party has been advised by the other party of the possibility of such damages.

16. FORCE MAJEURE

Neither party will be deemed to be in breach of this Agreement if it is unable to perform its obligations hereunder as a result of the occurrence of a failure of equipment or facilities, an event of "force majeure," or other causes beyond such party's reasonable ability to control.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year set forth below.

City of	
Authorized Signature	Customer Signature
Printed Name	Printed Name
Date:	Date:

Frequently Asked Questions about Solar PV (photovoltaic) Systems

- Q: What size PV system would be best for my home or business?
 - A: PV system size is limited by the amount of available space you have at your property. You should also consider electrical consumption history when sizing a system.
- Q: How much space does a PV system need?
 - A: Figure about 100 square feet per kW of nominal capacity.
- Q: How much does a PV system cost installed?
 - A: The installed cost can vary depending on the technology and location, but typically costs \$5,000 \$7,000 per kW.
- Q: If I generate more power than I consume, how much will I be paid for my excess energy?

 A: Your electric provider will set this rate and it is typically the avoided cost of generation. You may be
 - responsible for metering and billing costs.
- Q: Can I use my PV system as a backup during a power outage?
 - A: Most PV systems are "grid-tied" and therefore only operate when utility power is available.
- Q: How long does a PV system last?
 - A: Solar panels typically last about 20 years while maintaining 80% efficiency.
- Q: Can I install a PV system myself?
 - A: You can, but it is recommended you choose a qualified system installer. Compliance with local building and electrical codes may be required.
- Q: Is regular maintenance required for PV systems?
 - A: Yes, the panels should be cleaned as necessary to remove anything that can block the sun.
- Q: Where can I find a qualified, licensed contractor to install my PV system?
 - A: You should choose an installer that is certified by the North American Board of Certified Energy Practitioners. http://www.nabcep.org/certified-installer-locator?state=GA
- Q: Is there a federal tax credit for residential solar installations?
 - A: An uncapped 30% federal income tax credit is available to homeowners for solar equipment placed in service before January 1, 2017. Detailed information about this credit can be found at the Database of State Incentives for Renewable Energy. http://www.dsireusa.org/

