

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (“MOU”) shall be deemed effective this ___ day of _____, 2010, by and between the Suwannee River Water Management District (“SRWMD”), the City of Gainesville, Florida d/b/a Gainesville Regional Utilities (“GRU”), the City of Alachua (“City”), and Gainesville Renewable Energy Center, LLC (“GREC LLC”). This MOU implements the terms and conditions that SRWMD, GRU, City and GREC LLC (collectively “Parties”) will use to promote the use of Reclaimed Water at the proposed Gainesville Renewable Energy Center (“Energy Center”) and thereby reduce the use of groundwater.

The purpose of this MOU is to, among other things, implement Condition 9 of the May 20, 2010 SRWMD staff report of the GREC LLC site certification. This staff report is attached hereto as Exhibit ‘A’.

1. The City’s wastewater treatment plant (“WWTP”) produces treated effluent (“Reclaimed Water”) that may be used for cooling and potentially other purposes in an electrical power plant. The City wishes to provide its Reclaimed Water to the proposed Energy Center that GREC LLC plans to build. The Energy Center will be located on an approximately 131-acre site, which GRU will lease to GREC LLC at GRU’s Deerhaven Generating Station. GREC LLC plans to use Reclaimed Water at the Energy Center, and SRWMD and GRU support GREC LLC’s use of Reclaimed Water, because it will reduce the use of groundwater by the Energy Center. The Parties are entering into this MOU because the Parties wish to ensure that the City of Alachua will deliver Reclaimed Water from the City’s WWTP to the Energy Center by January 1, 2013.

2. The City agrees that it will use its best efforts to identify and obtain state, federal and other grants to pay the capital costs associated with the construction of the proposed pipeline from the City’s Reclaimed Water system to the “point of connection” to the Energy Center. Capital costs include not only the actual construction cost for the proposed pipeline, but also include the engineering, designing, and survey activities necessary to construct the pipeline. GRU and GREC LLC agree to use their best efforts to assist the City in identifying and obtaining these grants. This may include serving as an applicant or co-applicant on a grant application.

3. If the City is unable to obtain sufficient grants to pay for the capital costs to construct the proposed pipeline, GREC LLC and/or GRU shall pay any and all of the capital costs that are not covered by such grants; provided, however, GREC LLC and/or GRU's obligation to pay is subject to the terms and conditions contained in this MOU. Under no circumstances will the City be responsible to pay any of the capital costs associated with the construction of the pipeline that are not covered by grants.

4. If GREC LLC and/or GRU need to provide part or all of the capital costs for the proposed pipeline, the City shall estimate the total amount of such capital costs and the City shall prepare a preliminary schedule for the payment of these costs. GREC LLC and GRU shall jointly review the City's capital cost estimates and determine how the capital costs will be allocated between them. The City and GREC LLC and/or GRU shall jointly review and agree upon the proposed amounts and schedule for the payments, prior to the commencement of construction of the proposed pipeline.

5. GREC LLC and/or GRU shall deliver to the City a written notice to proceed when GREC LLC is ready to have the City move forward with the design, permitting, and construction of the proposed pipeline. It is anticipated that the Parties will seek grant funds during the first half of 2011 and thus the notice to proceed may not be issued until July 1, 2011. The notice to proceed may be delayed until December 1, 2011 if it appears reasonably likely that the additional time will enable the City to obtain additional grants. A copy of the notice to proceed shall be provided to SRWMD.

6. The City's pipeline and the associated pumps, tanks, and other facilities shall be installed, fully operational, and ready to provide Reclaimed Water to the Energy Center no later than January 1, 2013, unless otherwise agreed in writing by all Parties.

7. During the initial start-up, commissioning, and testing of the Energy Center, GREC LLC shall give reasonable advance notice to the City concerning the estimated amount of Reclaimed Water that will be needed by the Energy Center and the anticipated schedule for needing the Reclaimed Water at the Energy Center. The City shall use its best efforts to provide Reclaimed Water to the Energy Center in compliance with GREC LLC's requests.

8. After the Energy Center commences commercial operations, the City shall use its best efforts to provide Reclaimed Water to the Energy Center and GREC LLC shall use its best efforts to accept the Reclaimed Water. The Parties' goal is to minimize the use of ground water at the Energy Center by maximizing the use of Reclaimed Water. However, the Parties recognize and agree that the

City has the right to provide its Reclaimed Water to the City's other customers and, therefore, the City has the right to determine when and how much of the City's Reclaimed Water will be available to the Energy Center. Similarly, the Parties recognize and agree that there will be periods of time when GREC LLC cannot accept or has limited ability to accept Reclaimed Water (e.g., the Energy Center is temporarily shut down or operating at less than full capacity). Prior to the use of ground water, GREC LLC shall use the maximum amount of Reclaimed Water feasible. If a reduction in water use is necessary, GREC LLC shall reduce its groundwater use to the fullest extent necessary and feasible prior to reduction of Reclaimed Water. The amount of Reclaimed Water used by the Energy Center will be provided to SRWMD in conjunction with the operating reports of daily groundwater pumpage on a quarterly basis.

9. GREC LLC shall pay to the City a reasonable usage charge per thousand gallons (kgal) for the Reclaimed Water that is provided to the Energy Center. The kgal usage charge shall be based on the following factors:

- (a) The actual or mutually agreed upon estimate of the cost incurred by the City to operate and maintain facilities required to provide the Reclaimed Water to the Energy Center;
- (b) The actual or mutually agreed upon estimate of the cost incurred by the City to maintain, repair, renew, and replace, as necessary, the facilities used to provide the City's Reclaimed Water to the Energy Center; and
- (c) The City's usual and customary overhead expense percentage, which shall include the transfer of funds from the City's Wastewater Collection and Treatment Division, Public Services Department to the City's General Fund, and which shall be applied as a percentage to the sum of items (a) and (b) above.

The kgal usage charge paid by GREC LLC shall not include any capital costs for the pipeline and other facilities used to provide Reclaimed Water to the Energy Center. The kgal usage charge paid by GREC LLC shall not exceed the lowest kgal usage charge for Reclaimed Water paid by any other entity receiving the City's Reclaimed Water.

10. The City's proposed pipeline shall extend from the City's Reclaimed Water system to the "point of connection". The point of connection will be designated by GREC LLC in consultation with the City and GRU. The City shall, in consultation with the Parties, determine the route for the proposed pipeline.

The City shall select the route that is the lowest cost alternative, when evaluated in light of the anticipated capital, operating, maintenance, permitting, and other costs associated with the construction and operation of the City's proposed pipeline.

11. The City shall design, permit, construct, own, operate, and maintain the pipeline from the City's Reclaimed Water system to the point of connection to the Energy Center. The City shall be solely responsible for providing the materials, personnel, and supervision necessary to satisfy its obligations under this MOU.

12. GREC LLC shall design, permit, construct, own, operate, and maintain the pipeline and all associated facilities that are needed to transport the Reclaimed Water from the point of connection at the boundary of the Energy Center's site to the proposed electrical power plant. GREC LLC shall be solely responsible for providing the materials, personnel, and supervision necessary to satisfy its obligations under this MOU.

13. The Parties recognize that the City's WWTP does not currently have the capacity to provide all of the Reclaimed Water that will be required for the operation of the Energy Center. The City's WWTP is expected to provide approximately 0.4 to 0.6 million gallons per day (mgd) of Reclaimed Water and the Energy Center will need approximately 1.4 mgd on an annual average basis; however, the Parties acknowledge that population growth will influence the volume of available Reclaimed Water, which may therefore lead to an increase of available Reclaimed Water. Also, the Parties acknowledge that GRU is evaluating the feasibility of, and may, in the exercise of its sole discretion, build a new water reclamation facility and/or pipeline from an existing reclamation facility that would be capable of providing additional Reclaimed Water to the Energy Center in the future. GRU will provide written notification to the City when it elects to proceed with said project. In the event such additional Reclaimed Water from GRU becomes available to the Energy Center, the Parties agree to reopen and reevaluate the terms of this MOU so that GRU and the City can maximize the beneficial reuse of their Reclaimed Water.

14. This MOU shall remain in effect for the life of the Energy Center. This MOU also may be amended or renewed and extended with the written consent of the Parties.

15. Notwithstanding anything else contained herein, GREC LLC and/or GRU shall not be obligated to pay the City for the proposed pipeline unless GREC LLC commences construction of the Energy Center. Notwithstanding anything else contained herein, the City shall not be obligated to construct the

proposed pipeline unless GREC LLC and/or GRU gives written notice authorizing the City to proceed. In accordance with paragraphs 3 and 4 above, the City is not responsible to pay, or advance, any capital costs for the construction of the proposed pipeline and the City and GREC LLC and/or GRU shall jointly review and agree upon the proposed amounts and schedule for the payments. Thereafter, the City shall not be obligated to continue with the construction of the proposed pipeline unless GREC LLC and/or GRU make timely payments to the City, in advance of anticipated cash flow needs, in compliance with the payment schedule established pursuant to paragraph 4, above.

16. Subject to the other provisions contained herein, the City shall determine the amount of the capital costs and usage charge that GREC LLC and/or GRU shall pay for the construction of the proposed pipeline and the purchase of the City's Reclaimed Water. GREC LLC and/or GRU shall have the right to review the calculations and records used by the City to determine the amount of any payment or usage charge requested by the City. If GREC LLC and/or GRU dispute any portion of any payment or usage charge requested by the City, GREC LLC and/or GRU shall pay the undisputed amount and immediately discuss its concerns with the City. If GREC LLC and/or GRU and the City are unable to agree, they may jointly select a qualified independent engineer licensed to practice in the State of Florida ("the Independent Engineer") to evaluate their respective claims and determine whether the proposed payment or usage charge is consistent with the provisions of this MOU. If the Independent Engineer concludes that the proposed payment or usage charge is appropriate, GREC LLC and/or GRU shall promptly pay the disputed amount, plus interest from the date when such payment was due initially. The cost of the Independent Engineer's services shall be shared and paid equally by GREC LLC and GRU.

17. Except as otherwise provided below, this MOU shall not be assigned by any party without the prior written consent of the other parties, which consent shall not be unreasonably withheld. GREC LLC may assign or collaterally assign some or all of its rights and obligations under this MOU in connection with a financing of the Energy Center. The City and SRWMD agree to provide such legal opinions and consents as may be reasonably necessary and reasonably requested by GREC LLC in connection with such financing.

18. The execution of this MOU shall be subject to the approval of the governing boards of SRWMD, City, and GRU. The effective date of this MOU shall be the date first written above, which shall be the date when the MOU has been executed by all of the Parties.

19. This MOU shall not conflict with or diminish the applicability of any of the conditions of the May 20, 2010, SRWMD staff report for the GREC LLC site

certification, which is attached to this MOU. This MOU does not limit the rights of SRWMD to change or modify the conditions of the site certification.

20. Notwithstanding anything herein to the contrary, this MOU shall be interpreted as a firm commitment, by the Parties, to use their best efforts at all times to conserve groundwater by using all means reasonably available to them, to use Reclaimed Water for operating GREC LLC's cooling tower.

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For Gainesville Regional Utilities:

By: Robert E. Hunzinger
General Manager

Dated: 7/9/2010

Approved as to Form and Legality

Raymond O. Manasco Jr.
Utilities Attorney

For the City of Alachua:

By: Traci L. Cain
City Manager of City of Alachua

Dated: 8/9/10

Approved as to Form ~~and Legality~~

Marian B. Rush
City Attorney of City of Alachua

For the Suwannee River
Water Management District:

By: David Still
Executive Director

Dated: _____

Approved as to Form and Legality:

Tom W. Brown
SRWMD General Counsel

For Gainesville Renewable Energy Center, LLC:

By: James S. Gordon
Chief Executive Officer

Dated: 7/8/2010

STAFF REPORT**WATER USE PERMIT APPLICATION**

DATE: May 20, 2010

PROJECT: Gainesville Renewable Energy Center

APPLICANT:

Gainesville Renewable
Energy Center
75 Arlington Street, 5th Floor
Boston, MA 02116

PERMIT APPLICATION NO.: 2-09-00040

DATE OF APPLICATION: December 1, 2009

APPLICATION COMPLETE: March 2, 2010

DEADLINE FOR AGENCY REPORT: June 14, 2010

MANAGER/MEMBER DETAIL:

AMERICAN RENEWABLES, LLC 75 ARLINGTON STREET, 5 TH FLOOR BOSTON, MA 02116	MGRM
FRANK GETMAN 1 NEW HAMPSHIRE AVE – STE 207 PORTSMOUTH, NH 03801	MGR
JAMES GORDON 75 ARLINGTON STREET – STE 704 BOSTON, MA 02116	MGR
KAORU USAMI TYR ENERGY INC 7500 COLLEGE BLVD – STE 650 OVERLAND PARK, KS 66210	MGR

Project Review Staff

Kevin Wright and Carlos D. Herd, P.G., have reviewed the application.

Project Location

The withdrawal facilities are located in Township 8 South, Range 19 East, Section 27, Alachua County, adjacent to the Deerhaven Generating Station (map attached).

Project Description

The District received a water use permit application, which was included within the site certification application for the Gainesville Renewable Energy Center (GREC) on December 1, 2009. The applicant requests a groundwater withdrawal from the upper Floridan aquifer for power production. The operation will use two proposed production wells and two potable wells located within GREC property.

GREC's proposed wellfield consists of two 14-inch diameter production wells, both with a capacity of 1,250 gallons per minute (gpm). The potable wells will consist of two 5-inch diameter wells, both with a capacity of 20 gpm. GREC's proposed average daily use will be 1.4 million gallons per day (mgd).

Demonstration of Need

GREC's primary consumption of water will be evaporative cooling towers. Other uses include boiler water make up, dust control, effluent disposal, and indoor needs. GREC has provided a water balance demonstrating annual needs.

GREC will initiate groundwater usage in July 2012 at a rate of 0.1 mgd, and will increase to 1.4 mgd by November 2013 when plant is fully operational.

Gainesville Regional Utilities will voluntarily reduce their average allocated quantities associated with the Deerhaven Generating Station by 1.4 mgd. The site certification for Deerhaven Generating Station was issued on May 16, 1978.

Water Conservation

As a low impact development design, GREC is incorporating a zero liquid discharge system. A zero liquid discharge system will minimize water that is traditionally discharged to an open water body. A zero liquid discharge system also promotes efficient use of water.

Permit Duration

The water use associated with GREC will be permitted through the Florida Department of Environmental Protection's Siting Coordination Office with a duration of the life of the facility.

Evaluation of Conditions for Issuance of Permit**Will the project interfere with any presently existing legal use of water?**

[ref. 40B-2.301(1)(b)]

The applicant has provided reasonable assurance that the project will not interfere with any presently existing legal use of water.

Is the project consistent with the public interest?

[ref. 40B-2.301(1)(c)]

The applicant has provided reasonable assurance that the project is consistent with the public interest.

Is the project reasonable-beneficial?

[ref. 40B-2.301(1)(a)]

The applicant has provided reasonable assurance that the project reasonable-beneficial based on the following criteria.

The use is in such quantity and of such quality as is necessary for economic and efficient use.

[ref. 40B-2.301(2)(a)]

The applicant has provided reasonable assurance that the use is in such quantity and of such quality as is necessary for economic and efficient use.

The use is for a purpose that is both reasonable and consistent with the public interest.

[ref. 40B-2.301(2)(b)]

The applicant has provided reasonable assurance that the use is for a purpose that is both reasonable and consistent with the public interest.

The source of water is capable of producing the requested amounts and appropriate quality of water.

[ref. 40B-2.301(2)(c)]

The applicant has provided reasonable assurance that the source of water is capable of producing the requested amounts and appropriate quality of water.

The use will not degrade the source from which it is withdrawn.

[ref. 40B-2.301(2)(d)]

The applicant has provided reasonable assurance that the use will not degrade the source from which it is withdrawn.

The use will not cause or contribute to flooding.

[ref. 40B-2.301(2)(e)]

The applicant has provided reasonable assurance that the use will not cause or contribute to flooding.

The use will not harm offsite land uses.

[ref. 40B-2.301(2)(f)]

The applicant has provided reasonable assurance that the use will not harm offsite land uses.

The use will not cause harm to wetlands or other surface waters.

[ref. 40B-2.301(2)(g)]

The applicant has provided reasonable assurance that the use will not cause harm to wetlands or other surface waters. This determination was made using the District's regional groundwater model.

The use will not cause or contribute to a violation of either minimum flows or levels.

[ref. 40B-2.301(2)(h)]

The applicant has agreed to enter into an Agreement with Suwannee River Water Management District, City of Alachua and Gainesville Regional Utilities to initially provide approximately 400,000 gpd of reclaimed water to offset a portion of the proposed plants cooling water needs. This Agreement will act as a mitigation strategy to provide reasonable assurance that the use will not cause or contribute to a future violation of either minimum flows or levels. Staff modeled the proposed average daily withdrawal of 1.0 mgd of groundwater and found that with use of 400,000 gpd of reclaimed water, there were no adverse impacts to the Santa Fe River or other natural features. This determination was made by a predictive simulation using the District's regional groundwater model.

The use will not cause or contribute to a violation of state water quality standards in waters of the state as set forth in Chapters 62-301, 32-302, 62-520, and 62-550, F.A.C.

[ref. 40B-2.301(2)(i)]

The applicant has provided reasonable assurance that the use will not cause or contribute to a violation of state water quality standards in waters of the state as set forth in Chapters 62-301, 32-302, 62-520, and 62-550, F.A.C.

The use is otherwise a reasonable-beneficial use as defined in Section 373.019(2), F.S., with consideration given to the factors set forth in subsection 62-40.410(2), F.A.C.

[ref. 40B-2.301(2)(j)]

The applicant has provided reasonable assurance that the use is otherwise a reasonable-beneficial use as defined in Section 373.019(2), F.S., with consideration given to the factors set forth in subsection 62-40.410(2), F.A.C.

Site Certification Limiting Conditions

Staff recommends the following limiting conditions be included in the permit site certification:

1. Gainesville Renewable Energy Center shall provide to the District monthly operating reports showing daily groundwater pumpage no later than 10 working days after the end of each quarter. The Suwannee River Water Management District water use permit number 09-00040 shall be displayed on all reports.
2. If water use causes or contributes to a violation of Minimum Flows and Levels (MFLs), the District reserves the right to curtail future withdrawal rates or otherwise modify the site certification as described in the recovery or prevention strategy associated with the MFL.
3. If water use causes adverse impacts to occur, the District reserves the right to curtail future withdrawal rates or otherwise modify the site certification. Adverse impacts include:
 - a. Cumulative reduction in well water levels that impairs the ability of the well to produce water;
 - b. Cumulative reduction in levels in an adjacent water body such as a lake, pond, or retention/detention area that impairs the designated function of the water body or the ability for a permitted withdrawal facility to produce water;
 - c. Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water use, resulting in harm due to a reduction in water quality;
 - d. Land collapse or subsidence caused by reduction in water levels;
 - e. Damage to crops and other types of vegetation;
 - f. Harm to a naturally occurring water body such as lake, pond, or wetland by reducing water levels or changing the hydroperiod; and,
 - g. Harm to the natural system including damage to habitat for endangered or threatened species, or species of special concern.
4. Gainesville Renewable Energy Center shall maintain an accurate, non-resettable, totalizing flow meter(s) at each water withdrawal point. The meters shall be accurate to within 5 percent of actual flow. The meters shall be calibrated at a minimum every 5 years with a report of the calibration submitted to the District within 30 days of completion. Meters found to be outside the 5 percent flow measurement requirement shall be repaired or replaced within 30 days of discovery. The District shall be notified of any broken meters within 10 days of discovery, and the reported flow shall be estimated and submitted to the District for the time the meter was out of service.
5. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the Permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and

a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

6. Gainesville Regional Utilities will reduce allocated quantities for Deerhaven Generating Station by 1.4 mgd.
7. Gainesville Renewable Energy Center shall monitor and report groundwater levels continuously at one centrally located well as approved by the District. The groundwater monitoring program shall be implemented at least one year prior to operation. The data shall be submitted no later than 10 working days after the end of each quarter. The reference datum should be North American Vertical Datum of 1988 (NAVD 88).
8. Gainesville Renewable Energy Center (GREC) shall provide to the District a written implementation plan and schedule for the use of reclaimed water from the City of Alachua to replace as much of the groundwater withdrawals as practicable for cooling purposes no later than 3 years after the commencement of operations. The plan shall include the identification of the supply of reclaimed water, the anticipated uncommitted amount of the supply, the plans, facilities, and estimated costs for providing the reclaimed water to the GREC site, and the schedule to begin the use of the reclaimed water no later than 5 years after the commencement of operations. Based on the District's review and approval of the implementation plan and schedule, GREC shall implement the plan for the use of reclaimed water according to the approved schedule, and the conditions of the certification shall be modified to require the use of reclaimed water.
9. In the event that an uncommitted, reasonable reclaimed water supply becomes available or is definitively scheduled to become available at the GREC site boundary to meet all or part of the cooling tower makeup water needs prior to the required schedule above, GREC shall provide the District a written implementation plan and schedule for using the reclaimed water. Based on the District's review and approval of the plan and schedule, GREC shall implement the plan and the conditions of the certification shall be modified to require the use of reclaimed water to reduce groundwater use.
10. If reclaimed water is used to supply all or part of the cooling tower makeup needs, groundwater use shall continue to be allowed for plant process and potable water use and, to the extent necessary, as supplemental or standby water supply for cooling tower makeup.