AJAE Appendix: Challenges to the Development of a Dedicated Energy Crop

Francis M. Epplin, Christopher D. Clark, Roland K. Roberts, and Seonghuyk Hwang

July 26, 2007

Note: The material contained herein is supplementary to the article named in the title and published in the American Journal of Agricultural Economics (AJAE).

Francis M. Epplin is Charles A. Breedlove Professor of Agricultural Economics at Oklahoma State University, Christopher D. Clark is Assistant Professor and Roland K. Roberts is Professor at the University of Tennessee, and Seonghuyk Hwang is a graduate research assistant at Oklahoma State University.
Appendix

The materials contained in this Appendix are the documents used in a competitive bidding process by the University of Tennessee Institute of Agriculture to award contracts to farmers for the production of switchgrass. The process began with a solicitation of bids through a Request for Proposals. To comply with University guidelines, the bids were divided into a cost and a non-cost bid, which were required to be submitted separately. The non-cost bid consisted of a questionnaire designed to evaluate the bidder’s ability to produce switchgrass and their suitability for the project. The contract was structured so that the first page doubled as the cost bid. A copy of the Request for Proposals, Non-cost Bid and Contract follow.
A. General Requirements

1. Issuing Office

This RFP is issued by the Department of Agricultural Economics, 302 Morgan Hall, 2621 Morgan Circle, Knoxville, TN 37996, (865)524-7466, which will be the sole point of contact for purposes of information concerning this RFP.

2. Submitting Proposals

(a) The vendor is to deliver this proposal in the form and detail specified in this request to the Department of Agricultural Economics, 302 Morgan Hall, 2621 Morgan Circle, Knoxville, TN 37996 by February 22, 2005.
(b) Proposals will be opened on February 23, 2005 at 10:00 AM.
(c) The cost and non-cost sections of the proposal (as described below) must be submitted as separate items.

3. Accepting or Rejecting Proposals

The University reserves the right to reject any and all proposals and/or to further negotiate with any potential vendor after proposals are opened.

4. Terms

The attached form contract that will govern the relationship between the vendor and the University includes the University's standard terms and conditions. The vendor must also meet federal and other State contractual requirements.

5. Analyzing Proposals

The contract will be awarded to the vendor who submits the proposal most advantageous to the University, considering the following criteria:
(a) Geographic location
(b) Prior experience
(c) Resources to perform the work adequately
(d) Acreage allotted
(e) Prior use of land, and
(f) Price.
6. **Evaluation Criteria (if applicable)**

The proposal criteria will be evaluated in the following manner: Vendors who (i) propose to grow the switchgrass in Henry, Benton, Carroll, Gibson or Weakley counties, (ii) have experience growing and harvesting forage grasses, (iii) have the resources necessary to perform the work adequately, (iv) are willing to allocate a quantity of acres that will allow the University to meet its research objectives, (v) propose to use commercially-cropped land to grow the switchgrass, and (vi) bid a lower per acre price, will be favored. For the purposes of comparing prices among bids, the University will assume that each acre will produce five and one-half (5.5) tons of switchgrass per year for the term of the contract.

7. **Period of Contract**

The contract will cover the term from March 15, 2005 to March 14, 2009.

9. **Maintaining Records**

For three years, the vendor must maintain documentation for all charges to the University under the contract. These records will be subject to audit.

10. **Approving a Contract**

No contract will be binding on the University until approved by the President or a Vice President (or designee by the Vice President for Business and Finance).

12. **Payments**

Payments under the contract will be made after sixty (60) days an invoice is submitted. The final payment will not be made until after the performance is complete.

14. **Subcontracting**

If any part of the work is or is to be subcontracted, the vendor's proposal should provide a description of the subcontracting organization and the contractual arrangements. All subcontractors will be subject to University approval. The successful vendor will also furnish the corporate or company name and the names of the officers or principals of companies proposed as subcontractors by the vendor.

B. **Proposal Format and Content**

1. **Non-Cost Proposal**
This section contains information relating to the vendor's qualifications and capabilities to perform the services described in the attached contract. To submit the Non-Cost Proposal, vendors should complete the attached questionnaire titled Non-Cost Proposal, place it in the envelope labeled Non-Cost Proposal, and return it as directed above in the self-addressed, stamped envelope.

2. **Cost Proposal** (to be submitted separately)

   The form contract is attached. To submit the Cost Proposal, vendors should: fill in the spaces for their name, property address and county, and bid amounts on the first page of the contract; sign the contract and fill in their name, address, telephone number and social security number; and then place the contract in the envelope labeled Contract (Cost Proposal) and return it as directed above in the self-addressed, stamped envelope. The blank space for acres will be filled in by the University, but will not be above the maximum, or below the minimum, acreage stated by the vendor on the Non-Cost Proposal.

C. **Description and Scope of Services Requested**

   The attached contract describes the services to be provided by the vendor to the University.
THE UNIVERSITY OF TENNESSEE
INSTITUTE OF AGRICULTURE

NON-COST PROPOSAL

Name: _______________________________  Date: ________________

Address:  _____________________________  Phone: _______________

_________________________________________________________________

Please circle the correct answer and/or fill in the blank.

1. In what county is the property on which you propose to grow switchgrass located?

2. What is the **minimum** number of acres you are willing to commit to growing switchgrass for the term of the contract *at the amounts you stated in the cost-proposal*?

3. What is the **maximum** number of acres you are willing to commit to growing switchgrass for the term of the contract *at the amounts you stated in the cost-proposal*?

4. Have you ever grown and harvested a forage grass?
   a. Yes
   b. No

5. Are you currently growing and harvesting a forage grass?
   a. Yes
   b. No

6. Do you own or have access to a 5'x6' hay baler?
   a. Yes
   b. No

7. Do you own the equipment necessary to load bales of switchgrass onto a flatbed trailer pulled by an eighteen-wheeler?
   a. Yes
   b. No
8. Do you have a place to store bales of switchgrass that can be accessed by an eighteen-wheeler?
   a. Yes
   b. No

9. Do you either (i) own the land on which you propose to grow switchgrass or (ii) rent the land pursuant to a signed, written lease with a term that expires on or after the date the attached contract expires and the terms of which allow you to grow switchgrass?
   a. Yes
   b. No

10. What was the land on which you propose to grow switchgrass used for in 2004?
     a. Row crop   Crop grown ___________________________
     b. Hay
     c. Pasture
     d. Idle
     e. Other   Please describe ___________________________

11. What was the land on which you propose to grow switchgrass used for in 2003?
     a. Row crop   Crop grown ___________________________
     b. Hay
     c. Pasture
     d. Idle
     e. Other   Please describe ___________________________

12. Have you read and are you willing and able to execute the attached contract as written?
    a. Yes
    b. No
THE UNIVERSITY OF TENNESSEE

CONTRACT

This Contract, made and entered into on ________________, documents the agreement between The University of Tennessee (hereinafter University) and ________________________________ (hereinafter Contractor).

This Contract consists of this cover page, a page containing the University's Standard Terms and Conditions and a single page of Additional Terms and Conditions. Terms contained on this cover page and the University’s Standard Terms and Conditions shall prevail over those of any attachment unless otherwise stated under "Other terms" below.

Contractor agrees to grow switchgrass for the University on that portion of real property located at ___________________, in ____________ County ("Contractor’s Property") indicated on the field layout map attached hereto and incorporated herein as Exhibit A, and which is comprised of ______ acres (the “Test Acreage”), for the term of this Contract pursuant to both the Standard and the Additional Terms and Conditions attached hereto and incorporated herein, and using management practices defined by University of Tennessee Extension.

The period of performance under this contract is from March 15, 2005 through March 14, 2009. However, the University may terminate this Contract by giving the Contractor at least thirty (30) days written notice before the effective termination date, in which event the Contractor shall be entitled to receive equitable compensation for satisfactory authorized work completed as of the termination date.

During the term hereof, the University will compensate Contractor $_______ per acre of Test Acreage (as defined in the Additional Terms and Conditions) per year and (plus) $_______ per ton of switchgrass harvested from the Test Acreage each year. For the purposes of calculating payments due to Contractor under this Contract, the University shall use a global positioning system (GPS) to calculate the number of acres (to the nearest tenth of an acre) included in the Test Acreage.

Other payment terms: All such payments shall be made no later than sixty (60) days after receipt of invoice from Contractor. Contractor shall send University a single invoice each year for both the per acreage and per ton compensation.

The University’s maximum liability under this Contract is $__________________.

Other terms (N/A if none): See Additional Terms and Conditions attached hereto and incorporated herein.

In witness of their acceptance of the terms of this agreement, the parties have had this Contract executed by their duly authorized representatives.
<table>
<thead>
<tr>
<th>FOR CONTRACTOR:</th>
<th>FOR UNIVERSITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Department Name</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Name (Printed)</td>
<td>Responsible Account</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>Administrative Signature</td>
</tr>
<tr>
<td></td>
<td>(Optional)</td>
</tr>
<tr>
<td></td>
<td>Authorized Official</td>
</tr>
<tr>
<td>Telephone Number</td>
<td></td>
</tr>
<tr>
<td>SSN or Fed. Id. No.</td>
<td></td>
</tr>
</tbody>
</table>
STANDARD TERMS AND CONDITIONS

1. The University is not bound by this Contract until it is approved by the appropriate University official(s) indicated on the signature page of this Contract.

2. This Contract may be modified only by a written amendment which has been executed and approved by the appropriate parties as indicated on the signature page of this Contract.

3. The Contractor shall not assign this Contract or enter into a subcontract for any of the services performed under this Contract without obtaining the prior written approval of the University.

4. Unless otherwise indicated on the reverse, if this Contract provides for reimbursement for travel, meals or lodging, such reimbursement must be made in accordance with University travel policies.

5. The Contractor warrants that no part of the total Contract amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as officer, agent, employee, subcontractor, or consultant to Contractor in connection with any work contemplated or performed relative to this Contract, and that no employee or official of the State of Tennessee holds a controlling interest in the Contractor. If the Contractor is an individual, the Contractor certifies that he/she is not presently employed by the University or any other agency or institution of the State of Tennessee; that he/she has not retired from or terminated such employment within the past six months; and that he/she will not be so employed during the term of this Contract.

6. The Contractor shall maintain documentation for all charges against the University under this Contract. The books, records and documents of the Contractor, insofar as they relate to work performed or money received under this Contract, shall be maintained for a period of three (3) full years from the date of the final payment, and shall be subject to audit, at any reasonable time and upon reasonable notice, by the University or the Comptroller of the Treasury, or their duly appointed representatives. These records shall be maintained in accordance with generally accepted accounting principles.

7. No person on the grounds of disability, age, race, color, religion, sex, national origin, veteran status or any other classification protected by Federal and/or Tennessee State constitutional and/or statutory law shall be excluded from participation in, or be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract. The Contractor shall, upon request, show proof of such non-discrimination, and shall post in conspicuous places, available to all employees and applicants, notice of nondiscrimination.
8. The Contractor, being an independent contractor, agrees to carry adequate public liability and other appropriate forms of insurance, and to pay all taxes incident to this Contract. The University shall have no liability except as specifically provided in this Contract.

9. The Contractor shall comply with all applicable Federal and State laws and regulations in the performance of this Contract.

10. This Contract shall be governed by the laws of the State of Tennessee, which provide that the University has liability coverage solely under the terms and limits of the Tennessee Claims Commission Act.

11. The Contractor shall avoid at all times any conflict of interests between his/her duties and responsibilities as a Contractor and his/her interests outside the scope of any current or future Contracts. The following principles define the general parameters of a conflict of interests prohibited by the University: (a) A Contractor’s outside interests shall not interfere with or compromise his/her judgment and objectivity with respect to his/her duties and responsibilities to the University; (b) A Contractor shall not make or influence University decisions or use University resources in a manner that results in: (i) Financial gain outside any current or future Contracts for either the Contractor or his/her relatives or (ii) Unfair advantage to or favored treatment for a third party outside the University; and (c) A Contractor’s outside financial interests shall not affect the design, conduct, or reporting of research.

12. The Contractor certifies that he/she has no conflicts of interests and has disclosed in writing the following: (i) Any partners or employees of the Contractor who are also employees of the University; (ii) Any relatives of the Contractor’s partners or employees who work for the University; and (iii) Any outside interest that may interfere with or compromise his/her judgment and objectivity with respect to his/her responsibilities to the University.

13. If the Contractor fails to perform properly its obligations under this Contract or violates any term of this Contract, the University shall have the right to terminate this Contract immediately and withhold payments in excess of fair compensation for completed services. The Contractor shall not be relieved of liability to the University for damages sustained by breach of this Contract by the Contractor.

14. It is understood by the Contractor that the University will possess all rights to any creations, inventions, other intellectual property, and materials, including copyright or patents in the same, which arise out of, are prepared by, or are developed in the course of the Contractor’s performance under this Contract. The Contractor and the University acknowledge and agree that the Contractor’s work under this Contract shall belong to the University as "work-made-for-hire" (as such term is defined in U.S. Copyright Law).
ADDITIONAL TERMS AND CONDITIONS

WHEREAS, the University is performing scientific research on the production of energy from switchgrass pursuant to a grant obtained from the United States Department of Energy, and the production of switchgrass by a select number of Tennessee farmers for use in tests to be performed by or at the discretion of the University is a necessary component of this research; and

WHEREAS, Contractor has agreed to participate in this research by growing switchgrass on the Test Acreage pursuant to the terms and conditions hereof.

I. The University shall furnish Contractor with sufficient seed to sow the Test Acreage. While the University agrees to use every reasonable effort to obtain reliable seed, the University gives no warranty, express or implied, as to the quality, or productiveness of the seed furnished.

II. Contractor agrees to:
   A. Prepare all of the land within the Test Acreage and plant the switchgrass on all such land in a timely fashion, as weather conditions permit. In the event the University determines that the Test Acreage needs to be re-seeded in the second year, the University shall furnish such seed and Contractor shall plant such seed in a timely fashion, as weather conditions permit.
   B. Manage carefully the growing switchgrass, including weed control, fertilizing and all other matters relating to the production of switchgrass, at the proper season and in the best manner possible, in consultation with, and subject to the approval and satisfaction of, the University and the University’s representatives. Contractor specifically agrees to use reasonable efforts to control weeds in the Test Acreage, including such methods as are recommended by the University or the University’s representatives.
   C. Refrain from using the Test Acreage for any other purposes during the term of this Contract without the University’s prior written consent, which consent shall not be unreasonably withheld.
   D. Harvest and bale the switchgrass, using a mesh wrap or triple tying the bales and otherwise, at a time and in a manner mutually agreeable to the University and the Contractor.
   E. Collect the harvested bales of switchgrass at a place on or near Contractor’s Property, mutually agreed upon by the parties, and load the switchgrass onto such truck(s) or trailer(s) as are furnished by the University. The University shall be responsible for weighing the bales and transporting them off Contractor's Property once they have been loaded. Bale weight will be determined by weighing a sample of the bales harvested.
   F. Comply with all local, state, and federal laws and regulations related to groundwater contamination, the application of herbicides, fungicides,
pesticides and fertilizers, hazardous waste storage or disposal, and the cultivation of crops. Contractor shall also follow label directions and all applicator’s licensing requirements in the handling and application of all chemicals.

G. Keep records of the dates and amounts of any and all applications of fertilizers, pesticides, herbicides, fungicides or other chemicals or materials to the Test Acreage, the dates and amount of any hours involved in any and all fieldwork on the Test Acreage, along with the size and type of any equipment used in such fieldwork, and of any and all expenses incurred in the preparation of the Test Acreage and the production and harvesting of the switchgrass.

H. Allow use of the records submitted by Contractor and all such other information pertaining to Contractor’s Property and the production of switchgrass thereon as is reasonably necessary to perform the research and publish and otherwise disseminate the results of such research.

I. Permit the University or its representatives to enter upon Contractor’s Property at any reasonable time for the purpose of consulting with Contractor, viewing, monitoring, measuring, inspecting or analyzing the Test Acreage or switchgrass growing thereon, or for such other purposes as are reasonably necessary to conduct the research, provided that such entry does not interfere with Contractor’s ability to carry out regular farming operations on Contractor’s Property.

II. In the event Contractor fails to properly manage or harvest the switchgrass being grown on the Test Acreage, the University reserves the right, personally or through its designated agents, to enter upon Contractor’s Property and properly care for and harvest the switchgrass, deducting the costs of such care and harvest from any amounts payable to Contractor under this Contract. Neither this reservation of right, nor the exercise thereof, shall limit any other remedies provided by this Contract or that the University may have at law or in equity.

Contractor certifies that he/she is not presently debarred, proposed for debarment, suspended or declared ineligible for covered transactions by any federal agency or department. Contractor also certifies that within the past three years he/she has not been convicted of or had civil judgment rendered against them for a fraudulent contract or transaction, violation of federal or state antitrust laws, or the commission of embezzlement, theft, forgery, bribery, falsifying or destroying records, receiving stolen property, or making false statements.