MISSISSIPPI BAND OF CHOCTAW INDIANS
Alternative Energy Project

Department of Energy
Alternative Energy Conference
October 1, 2002
Denver, CO
Tribal Overview

• 8,900 Tribal Members (50% blood quantum)
• 50% < 18 years of age
• 35,000 acres (non-contiguous)
• 6 Elementary Schools, 2 Middle Schools & 1 Boarding High School
• Police & Fire Department
• Attorney General’s Office & Tribal Supreme Court
Economic Conditions

- 8,000 full-time employees in Mississippi ($1.2 billion impact)
- 1,100 employees in Mexico (NAFTA)
- 15 tribal companies
- Manufacturing, Digital Mapping, Printing, Tourism, etc.
- McDonald’s, Ford, Chrysler, Pepsi-Co, Caterpillar, etc.
- 452 Tribal Members in college
Economic Challenges

• Create meaningful career opportunities for tribal members with college degrees

• Diversify the tribal economy

• Ensure availability of affordable and dependable infrastructure (water, sewer, electricity, telecommunications & roads)

ie, Alternative Energy Project
The Team

• Mississippi Band of Choctaw Indians -- Owner

• Mississippi Alternative Energy Enterprise -- Project Manager

• Mississippi State University, Diagnostic & Instrumentation Lab -- Technical Analysis

• Mississippi State University, Food & Fiber Center -- Business Plan Analysis

• Choctaw Geo Imaging -- Digital Mapping & Spatial Data
Feasibility Study Work Elements

- Resource availability assessment
- Power utilization assessment
- Technology review/assessment

- System design(s)
  - Manpower development assessment
  - Economic assessment
  - MBCI compatibility assessment

- Business/implementation plan
### Technology Assessment

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<th>Process technologies</th>
<th>Evaluation criteria</th>
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<td>Resource availability</td>
<td>Power</td>
<td>Facility can be sized to process available feed</td>
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<td>Poultry litter</td>
<td>Delmarva study</td>
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<td>Litter + wood residues</td>
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<td>Power utilization</td>
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<td>Contiguous areas</td>
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<td>FibroWatt</td>
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<tr>
<td>Power + products</td>
<td>USDA study</td>
<td>Value of output of facility &gt;&gt; value of input</td>
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System Design

• “Venture guidance” system design(s) will be developed for process technologies that satisfy evaluation criteria

• Design will be in sufficient detail to enable meaningful assessments of
  – Capital and operating costs
  – Manpower
  – Environmental impacts

• As much as possible, vendor-supplied information or other existing information will be used

• System design will include:
  – Feed (poultry litter, poultry litter + wood residue)
  – Energy, products, effluents
  – Process operations
  – Auxiliary support functions (e.g., transport of feed material)
Result of Study

• Business / implementation plan sufficient to support decision by MBCI on whether to proceed
THANK YOU!