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National Industrial Competitiveness Through
Energy, Environment, Economics (NICE³)
Grant No. DE-FG48-96R810599
January 1, 1998 through March 31, 1998

The Kansas Department of Health and Environment has been kept apprised of the on-going development of the infrared drying system by Catalytic Industrial Group. The attached technical report outlines the progress made to date. Due to some delays in delivery of manufactured parts, the target for installation of the commercial version has been delayed. The attached report provides an updated timeline. Product testing is expected to commence around the 15-20th of May.

The current schedule indicates that the project should be completed and final reports submitted by the end of the project period, September 30, 1998.

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Progress Report #4, D.O.E. NICE³ Project entitled "Energy and Waste Reduction in the Wood Fiber and Fuel Industry Utilizing a Long Wave Length Catalytic Infrared Drying System".

Report Dated: April 15, 1998

Implementation Date: April 7, 1997

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During the past quarter significant headway was made on the project. The design and fabrication of the material handling system by the subcontractor, Cat-Tech Industries, was completed in late January and was shipped in February to Catalytic Industrial System (CIS) Kansas facility. Unfortunately a part shipped directly from the manufacturer, for mating in Kansas to the unit, was determined to be the wrong size and nearly a month was lost in the process of ordering and receiving the correct parts. In early March the system was ready for agitation testing and performed perfectly. Design of the air circulation system was completed in late March and fabrication and installation of that element is expected to be completed this week (April 15-22). The insulation panels have been designed and ordered and are expected to be on site and ready for installation the last week of April.

In a series of conference phone calls, it was decided to increase the amount of infrared energy input in Zone 1 (the first one third of the 30 foot unit) of the dryer. These zones are presently being redesigned and fabricated and will likely be installed by the 10th of May. Product testing is expected to commence around the 15-20th of May.

Work on the testing protocol was held in check while the discussion on increasing the total energy input was transpiring. It is scheduled to restart on or about May 1.

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