# Natural Resources and Agriculture

## Center for Advanced Combustion Engineering Research

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### Overview

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|---|---|
| Current State Contract | -- |
| Matching Funds | $2,437,720 |
| Cumulative | $11,969,237 |
| Industry Jobs Created | 3 |
| Center Related Jobs | 125 |
| Benefiting Utah Companies Geneva, Utah Power & Light, Questar, Hercules, and Reaction Engineering International | |
| Patents Applied | 1 |
| Patents Issued | -- |
| License Agreements | 20 |

### Technologies

*Combustion process strategies

*Fuel structure reaction mechanisms

*Fuel minerals

*Mechanisms for pollutant formation and control

*Reacting, turbulent flows

*Comprehensive model development

*ACERC 3-dimensional computer simulation of combustion process code (computer-aided design combustion technology)

### Status

*Center recognized as leading the world in combustion research

*Focus on national status as consortium of excellence in combustion

*Continue to host national meetings & guest speakers

*True collaboration between universities

### Economic Impact

*$12 million grant from National Science Foundation from 1989-1994

*Annual budget of $900,000 indirect grants and stipends from industry

*$1,800,000 in supporting contracts

*New spin-off company: Reaction Engineering International

*Annual direct and supported research within the state is $4-5 million per year

*125 university related jobs funded