

**Grant Round Application for LRC LXVIII (68)**

**TECHNICAL ADVISOR COMMENTS  
LRC-LXVIII (68) – A**

**“Lignite Catalytic Hydromethanation Development Project”**

Submitted by: GreatPoint Energy

Request for: \$3,923,884; Total Project Costs; \$7,847,769

Amended Request: Phase I \$458,500; Phase II \$3,489,079 (\$3,923,884)

Amended Request: Phase I Total \$917,000; Phase II \$6,978,158 (\$7,895,158)

**Description of the Project:** GreatPoint Energy proposes to advance catalytic hydromethanation of North Dakota lignite. GreatPoint Energy hydromethanation is a process for converting coal, petroleum coke and biomass directly into high-value, pipeline-quality natural gas while capturing carbon dioxide. In the original application GreatPoint Energy proposed three research and development phases plus project management covering seventeen months. In the amended application, the project was divided in two separate phases.

**Technical Peer Reviewer Comments**

**Peer Reviewer 09-13**

The value of this work is that it will provide an assessment of how lignite will perform in this system relative to coal and petroleum coke.

**Recommendation: Funding May Be Considered**

**Peer Reviewer 09-14**

A six month schedule for Phase I should be do-able. However, challenges arising from lignite could lead to inconclusive results. The proposed work could be performed in the proposed time period.

**Recommendation: Do Not Fund**

**Peer Reviewer 09-15**

The proposer states that ND lignite should be more reactive than PRB and petcoke, and that a significant amount of lignite bench scale work has been done. It is suggested that the proposers provide the test data results and appropriate publications.

**Recommendation: Funding May Be Considered**

**Technical Advisor’s Recommendation: Do Not Fund**

The technical uncertainty associated with the process as applied to lignite does not warrant the level of funding requested. The recommendations from the Peer Reviewers do not support high levels of funding.

**Recommendation: Do Not Fund**

**Conflict of Interest:** Energy and Environmental Research Center