

**(20) Development of a Pilot Scale module for Hydrogen Separation**

The key objective of this two-year effort is to advance Research triangle institute's hydrogen separation membrane technology to a pilot scale unit. The proposed effort will optimize membrane synthesis parameters to reduce the cost of the membranes while meeting the hydrogen flux and selectivity targets as well as to make them robust, long-term, durable, and tolerant to impurities including sulfur species typically present in synthesis gas derived from a variety of feedstocks, e.g. natural gas, coal and biomass feedstocks.

Total project cost: \$1,000,000

Funding request: \$800,000

Project Lead: NYSERDA

Project Participants: North Carolina State Energy Office; Research Triangle Institute; Pall Corporation

Start Date: October 1, 2005

End Date: October 1, 2007

Presentations/Publications

None.

Patents

None.

Progress in Past Quarter and Current Status