APPENDIX B: FY 2006 MERIT REVIEW AND PEER EVALUATION MEETING: PROJECTS NOT REVIEWED

2006 Projects Presented but Not Reviewed

	Title	Name	Organization
ANP-1	H2A New Developments	Margaret Mann	NREL
ANP-2	Impact of Renewables on Hydrogen Transition Analysis	Stephen Lasher	TIAX
ANP-3	Hydrogen Systems Analysis: Validation of "idealized city" models for H2 delivery in urban areas, with real-city data	Joan Ogden	UC Davis
BES/ST-1	Chemical Hydrogen Storage in Ionic Liquid Media	Larry Sneddon	U. of Pennsylvania
BES/ST-2	Control of Hydrogen Release and Uptake in Condensed Phases	Tom Autrey	PNNL
BES/ST-3	From fundamental understanding to predicting new nanomaterials for high capacity hydrogen storage and fuel cell technologies	Jack Fischer	U. of Pennsylvania
BES/ST-4	Metal-Organic Frameworks for Highly Selective Separations	Omar Yaghi	UCLA
BES/ST-5	Addressing Grand Challenges Through Advanced Materials	Millie Dresselhaus	MIT
BES/ST-6	Atomistic Transport Mechanisms in Revisible Complex Metal Hydrides	Peter Sutter	BNL
BES/ST-7	In-Situ Neutron Diffraction Studies of Novel Hydrogen Storage Materials	William Yelon	U. Missouri
BES/ST-8	In-Situ NMR Studies of Hydrogen Storage Systems	Mark Conradi	WUSTL
BES/ST-9	High Throughput Screening of Nanostructured Hydrogen Storage Materials	Gang Chen	MIT
BES/ST-10	Complex Hydrides -- A New Frontier for Future Energy Applications	Vitalij Pecharsky	Ames
BES/ST-11	Molecular Hydrogen Storage in Novel Binary Clathrate Hydrates at Near-Ambient Temperatures and Pressures	Dendy Sloan	Colorado School of Mines
BES/ST-12	Atomistic Mechanisms of Metal-Assisted Hydrogen Storage in Nanostructured Carbon	Nidia Gallego	ORNL
BES/ST-13	A Synergistic Approach to the Development of New Classes of Hydrogen Storage Materials	Jeff Long	LBNL
BES/ST-14	Elucidation of Hydrogen Interaction Mechanisms with Metal-Doped Carbon Nanostructures	Ragaiy Zidan	Savannah River National Lab
BES/ST-15	Characterization of Carbon Nanostructures in Pd Containing Activated Carbon Fibers Using Aberration-Corrected STEM	Nidia Gallego	ORNL

BES/ST-16	Theoretical Investigation of the Energetics of Hydrogen Interaction with Graphene Layers: the Effect of Interlayer Spacing on Hydrogen Storage	Rachel Aga	ORNL
BES/ST-17	Neutron Scattering Aided Studies of the Design, Synthesis and Thermo-dynamics of molecular hydrogen adsorption materials	John Larese	ORNL
BES/ST-18	First-Principles Studies of Phase Stability and Reaction Dynamics in Complex Metal Hydrides	Mei-Yin Chou	Georgia Institute of Technology
BES/ST-19	Crystal and electronic structures of LiNH2 and related compounds	W.B. Yelon	University of Missouri-Rolla
BES/ST-20	Understanding the Role (and Controlling the Behavior) of Transition Metal Dopants in NaAlH4 Systems	Tabbetha Dobbins	Louisiana Tech University
BES/ST-21	Integrated Nanoscale Metal Hydride – Catalyst Architectures for Hydrogen Storage	Yi-Ping Zhao	University of Georgia
BES/ST-22	The Molecular Design Basis for Hydrogen Storage in Clathrate Hydrates	Vijay John	Tulane University
BES/ST-23	First Principles Based Simulation of Hydrogen Interactions in Complex Hydrides	Qingfeng Ge	Southern Illinois University
BES/ST-24	Dehydrogenation of Boron-Nanoclusters	Michael Trenary	University of Illinois at Chicago
BES/ST-25	NMR Studies of Metal Hydrides: MgScHx	Mark Conradi	Washington University
CCP-2	Enabling Hydrogen Transitions - NETL	David Haberman	DOE - NETL; IF, LLC
FCP-1	Center for Intelligent Fuel Cell Materials Design Phase 1	Joe Mausar	Chemsultants International
FCP-2	Poly(p-phenylene Sulfonic Acid)s with Frozen-in Free Volume for use in High Temperature Fuel Cells	Morton Litt	Case Western Reserve University
FCP-3	Poly(cyclohexadiene)-Based Polymer Electrolyte Membranes for Fuel Cell Applications	Jimmy Mays	U of Tennessee
FCP-4	NanoCapillary Network Proton Conducting Membranes for High Temperature Hydrogen/Air Fuel Cells	Peter Pintauro	Case Western Reserve University
FCP-5	Lead Research and Development Activity for High Temperature, Low Relative Humidity Membrane Program	James Fenton	U of Central Florida
FCP-6	Protic Salt Polymer Membranes: High-Temperature Water-Free Proton-Conducting Membranes	Dominic Gervasio	Arizona State
FCP-7	Novel Approaches to Immobilized Heteropoly Acid (HPA) Systems for High Temperature, Low Relative Humidity Polymer-Type Membranes	Andrew Herring	Colorado School of Mines
FCP-10	High Temperature Membrane With Humidification-Independent Cluster Structure	Ludwig Lipp	FuelCell Energy, Inc.

FCP-11	Design and Development of High-Performance Polymer Fuel Cell Membranes	Joyce Hung	General Electric
FCP-12	Dimensionally Stable High Performance Membrane	Han Liu	Giner Inc.
FCP-14	Development of Higher Temperature Membrane and Electrode Assembly for Proton Exchange Membrane Fuel Cell Device	Tony DeCarmine	Oxford Perf. Matls.
FCP-15	Fluoroalkylphosphonic-acid-based proton conductors	Stephen Creager	Clemson
FCP-16	Dimensionally Stable High Temperature Membranes	Cortney Mittelsteadt	Giner Electrochemical Systems
FCP-17	New Proton Conductive Composite Materials with Co-continuous Phases Using Functionalized and Crosslinkable TFE/VDF Fluoropolymers	Serguei Lvov	Penn State
FCP-18	Advanced Materials for Proton Exchange Membranes	James McGrath	Virginia Tech
FCP-19	Characterization of PEMFC Membrane Durability	Robert Moore	U of So. Mississippi
FCP-21	PEM Fuel Cell Freeze Durability and Cold Start Project	Jeremy Meyers	UTC Power
FCP-22	Kettering University Fuel Cell Project	Joel Berry	Kettering University
FCP-23	Sub-Freezing Start-up of a Fuel Cell	Dennis Papadias	ANL
FCP-24	Fuel Cell Testing at the Argonne Fuel Cell Test Facility	Ira Bloom	ANL
FCP-28	Impurity Effects on Membrane-Electrode Assembly Components	Debbie Myers	ANL
FCP-30	Novel, Combinatorial Method for Developing Cathode Catalysts for Fuel Cells	Keith Kepler	Farasis Energy
FCP-31	Improved Fuel Cell Cathode Catalysts Using Combinatorial Methods	Eugene Smotkin	NuVant Systems
FCP-32	University of South Carolina Fuel Cell Design Project	John Van Zee	U of So. Carolina
FCP-33	Powering Cell Phones with Fuel Cells Running on Renewable Fuels	Malcolm Mann	Tekion, Inc.
FCP-34	Complex Coolant Fluid for PEM Fuel Cell Systems	Satish Mohapatra	Advanced Fluids Tech.
FCP-35	DMFC Prototype Demonstration for Comsumer Electronic Applications	Robert Sievers	MTI Micro Fuel Cells
FCP-36	Direct Hydrogen PEMFC Manufacturing Cost Estimation for Automotive Applications	Eric Carlson	TIAX
FCP-37	Mass Production Cost Estimation for Direct H2 PEM Fuel Cell System for Automotive Applications	Brian James	DTI
FCP-38	Economical High Performance Thermoplastic Composite Bipolar Plates	Michael Bortner	Nanosonic, Inc.
FCP-39	DMFC Power Supply for All-Day True-Wireless Mobile Computing	Brian Wells	Polyfuel, Inc.
FCP-41	Development of a kW Prototype Coal-based Fuel Cell	Steven Chuang	University of Akron

PDP-1	Autothermal Cyclic Reforming Based Hydrogen Generating System	Ke Liu	GE Energy
PDP-3	Materials Solutions for Hydrogen Delivery in Pipelines	Subodh K. Das	Secat, Inc.
PDP-4	Biological Systems for Hydrogen Photoproduction	Maria Ghirardi	NREL
PDP-5	Low Cost Hydrogen Production Platform	Tim Aaron	Praxair
PDP-7	Investigation of Bio-ethanol Steam Reforming over cobalt based catalysts	Umit Ozkan	Ohio State U
PDP-9	Carbon Molecular Sieve Membrane as Reactor for Water Gas Shift Reaction	Paul KT Liu	Media & Process Tech.
PDP-11	Maximizing Light Utilization Efficiency & Hydrogen Production in Microalgal Cultures	Tasios Melis	UC Berkeley
PDP-14	Photoelectrochemical Water Systems for H2 Production	John Turner	NREL
PDP-19	Forecourt Storage and Compression Options	Bill Liss	GTI
PDP-20	Photoelectrochemical Generation of Hydrogen Using Sonicated Hybrid Titania Nanotube Arrays	Mano Misra	U of Nev. Reno
PDP-21	Evaluation of Alternative Thermochemical Cycles	Michele Lewis	ANL
PDP-22	UNLV Research Foundation High Temperature Heat Exchanger Development	Tony Hechanova	UNLV
PDP-23	Membrane Applications for Nuclear Hydrogen Production Processes	Brian Bischoff	ORNL
PDP-24	Materials for Nuclear Hydrogen Production Processes: Planning & Coordinating Task	Dane Wilson	ORNL
PDP-25	Hybrid Sulfur Thermochemical Process Development	Bill Summers	SRS
PDP-26	Advanced Water Gas Shift Membrane Reactor	Thomas Vanderspurt	United Technologies Corp
PDP-27	Robust Low-Cost Water-Gas Shift Membrane Reactor for High-Purity Hydrogen Production from Coal-Derived Syngas	Zhijiang Li	Aspen Products Group
PDP-28	The Integration of a Structural Water Gas Shift Catalyst with a Vanadium Alloy Hydrogen Transport Device	Thomas Barton	Western Research Institute
PDP-29	Production and Storage of Hydrogen Using C1 Chemistry	Gerald Huffman	U of Kentucky Consortium
PDP-30	High-Performance, Durable, Palladium-Alloy Membrane for Hydrogen Separation & Purification	Scott Hopkins	Pall Corp.
PDP-35	Production of Hydrogen for Clean and Renewable Sources of Energy for Fuel Cell Vehicles	Xunming Deng	U of Toledo
PDP-37	Production, Fuel Cell, and Delivery Research	Yogi Goswami	U of South Florida
STP-1	High Density Hydrogen Storage System Demonstration Using NaAlH4 Complex Compound Hydrides	Dan Mosher	UTRC

STP-11	Metal Hydride Center of Excellence	Lennie Klebanoff	Sandia-Livermore
STP-13	Electron-Charged Graphite-Based Hydrogen Storage Material	Chinbay Fan	Gas Technology Institute
STP-14	Nanostructured Activated Carbon for Hydrogen Storage	Israel Cabasso	State University of New York
STP-20	DOE Carbon-based Hydrogen Storage Center of Excellence: Center Highlights and NREL Activities	Lin Simpson	NREL
STP-22	Process for the Regeneration of Sodium Borate to Sodium Borohydride	Ying Wu	Millenium Cell, Inc.
STP-23	Chemical Hydride Slurry for Hydrogen Production and Storage	Andrew McClaine	Safe Hydrogen, LLC
STP-24	Development of Regenerable High Capacity Boron Nitrogen Hydrides for Hydrogen Storage	Ashok Damle	Research Triangle Institute
STP-28	Safety Analysis and Applied Research on the Use of Borane-Amines for Hydrogen Storage	Clint Lane	Northern Arizona U.
STP-29	DOE Chemical Hydrogen Storage Center of Excellence	Bill Tumas	LANL
STP-30	A Synergistic Approach to the Development of New Classes of Hydrogen Materials	Jeffrey Long	UC Berkeley/LBNL
STP-31	Hydrogen Storage Materials with Binding Intermediate Between Chemisorption and Physisorption	Tony Cheetham	UC Santa Barbara
STP-32	Inorganic Clathrates for Hydrogen Storage	Viktor Struzhkin	Carnegie Institute of Washington
STP-32	A Radically New Method for Hydrogen Storage in Hollow Glass Microspheres	James Shelby	Alfred University
STP-33	Unexpected Gas Sorption Displayed by Organic Clathrates	Jerry Atwood	U of Missouri
STP-34	National Testing Laboratory for Solid-State Hydrogen Storage Technologies	Michael Miller	SwRI
STP-35	Low Cost, High Efficiency, High Pressure Hydrogen Storage	Jui Ko	Quantum Technologies, Inc.
STP-36	Advanced Concepts for Containment of Hydrogen and Hydrogen Storage Materials	Andrew Weisberg	LLNL
STP-37	Advanced Metal Hydrides	Jim Ritter	U of South Carolina
STP-38	Clean Energy Research: Project III: Hydrogen Storage Using Chemical Hydrides	Michael Matthews	U of South Carolina
STP-39	A Cassette Based System for Hydrogen Storage and Delivery	Wayne Britton	FST Energy
STP-40	Purdue Hydrogen Technology Program	Jay Gore	Purdue University
STP-41	Center for Hydrogen Storage Research at Delaware State University	Andrew Goudy	Delaware State University
STP-42	University of Arkansas at Little Rock Hydrogen Storage Project	Alexandru Biris	U of Arkansas
STP-44	First-Principles Computational Search for Reversible Room-Temperature Hydrides	Vidvuds Ozolins	UCLA
TVP-2	Business Opportunities Concept Project	Raymond Hobbs	Pinnacle

TVP-4	Hydrogen from Biomass for Urban Transportation	Kofi Bota	Clark Atlanta Univ.
TVP-7	Technology Validation: Fuel Cell Bus Evaluations	Leslie Eudy	NREL
TVP-12	R&D of a PEM Fuel Cell, Hydrogen Reformer, and Vehicle Refueling Facility (Las Vegas Energy Park)	Ed Kiczek	Air Products
TVP-13	To Evaluate Zero Emission Propulsion and Support Technology for Transit Buses	Arthur Douwes	Santa Clara Valley Trans Authority