Physics in the Office of Science, has developed a program in Accelerator Stewardship to serve as a catalyst in transitioning accelerator technologies to applications beyond High Energy Physics.

The Stewardship Program will apply the scientific and technical resources of the DOE accelerator R&D program to facilitate developing accelerator technology innovations into practice.

Accelerator technology includes the accelerator structures, high power radio frequency and microwave sources and systems, high efficiency high-voltage pulsed-power systems, particle beam transport using magnetic components, and high power targets for producing secondary beams. Sophisticated superconducting magnets and accelerators now routinely produce magnetic and electromagnetic fields of unsurpassed strength, power, and quality. Accelerator technology also includes computer control and automation systems, supporting laser systems, safety systems, and diagnostics.

Accelerators produce high power particle beams of electrons and protons that have been used to generate a wide array of intense secondary beams, principally neutrons and photons. Spectral control of both primary and secondary beams has become sophisticated, allowing beams to be specifically tailored to meet demanding application requirements.[6]

The Stewardship Program will pursue several technical ''thrust areas'', each of which will address an identified group of technically related challenges that, if solved, will result in high impact to society.

In the process, high technology will be transferred from the DOE accelerator R&D program into broader use, new public/private partnerships will be fostered, and high quality high technology jobs will be created.

Request for information: The objective of this request for information is to gather information about opportunities for research and development of accelerator technologies to address national challenges in energy and the environment.

The questions below are intended to assist in the formulation of comments, and should not be considered as a limitation on either the number or the issues that may be addressed in such comments. All comments will be made public.

[6] ''Accelerators and Beams: Tools of Discovery and Innovation'', APS–DPB brochure, *http://www.aps.org/units/dpb/upload/accel_beams_2013.pdf.*

The DOE Office of High Energy Physics is specifically interested in receiving input pertaining to any of the following questions:

Application Areas With High Impact

1. What are the most promising applications of accelerator technology to:

a. Produce safe and clean energy?

b. Lower the cost, increase the efficiency, or reduce the environmental impact of conventional energy production processes?

c. Monitor and treat pollutants and/or contaminants in industrial processes?

d. Monitor and treat pollutants produced in energy production?

e. Increase the efficiency of industrial processes with accelerator- or RF/microwave-based processes?

f. Treat contaminants in domestic water supplies and waste water streams?

g. Treat contaminants in the environment at large (cleanup activities)?

h. Produce alternative fuel sources?

i. Address critical environmental or energy related issues not already mentioned?

2. How should Federal, State, or Local regulators consider technologies in determining regulatory compliance?

3. What metrics could be used to estimate the long-term impact of investments in new accelerator technologies?

For Each Proposed Application of Accelerator Technology

Present State of the Technology

4. What are the current technologies deployed for this application?

5. Does accelerator technology have the potential to revolutionize the application or make possible something that was previously thought impossible?

6. Does the US lead or lag foreign competition in this application area?

7. What are the current obstacles (technical, regulatory, operational, and economic) that prevent the technology from being adopted?

8. How is accelerator technology used in the application?

9. Does the performance of the accelerator (either technical, operational, or cost) limit the application?

10. What efforts (both public and private, both domestic and off-shore) currently exist to develop this application?

11. What are the perceived and actual market barriers for the final product?

12. What aspects of the overall technology solution are proprietary or likely to be developed as proprietary, and what aspects are non-proprietary?

Defining the Stewardship Need

13. What is the present technology readiness level (TRL) of the accelerator technology for this application?

14. What resources (both skill and infrastructure) are needed to advance the technology to a prototype phase?

15. What mix of institutions (industrial, academic, lab) could best carry out the required R&D, and who should drive the R&D?

16. What collaboration models would be most effective for pursuing joint R&D?

17. Would partnering with a DOE National Laboratory be beneficial for the required R&D? Which laboratories could provide the greatest leverage?

18. Should cost sharing be considered for a grant or contract to pursue the R&D?

19. How should R&D efforts engage with other innovation and manufacturing initiatives, such as the NNMI?[7]

20. In what ways are the R&D needs not met by existing federal programs?

21. At what point in the manufacturing development cycle would external support no longer be needed?

22. What metrics should be used to assess the progress of a stewardship effort?

Other Factors

23. Are there other factors, not addressed by the questions above, that impact the successful adoption of accelerator technology for industrial purposes?

Depending on the response to this RFI, a subsequent workshop may be held to further explore and elaborate the opportunities.

Issued in Washington, DC, on April 8, 2014.

Michael Procario,

Acting Associate Director, Office of High Energy Physics.

[FR Doc. 2014–08846 Filed 4–17–14; 8:45 am]

BILLING CODE 6450–01–P

[7] See *http://manufacturing.gov/* for an NNMI program description.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: RP14–722–000.

Applicants: Cheyenne Plains Gas Pipeline Company, L.

Description: Non-Conforming Negotiated Rate Agreements Update (Foundation) to be effective 5/8/2014.

Filed Date: 4/7/14.

Accession Number: 20140407–5333.

Comments Due: 5 p.m. ET 4/21/14.

Docket Numbers: RP14–723–000.

Applicants: Enable Gas Transmission, LLC.

Description: Negotiated Rate Filing—April 2014—Tenaska 9840 Att A to be effective 4/7/2014.

Filed Date: 4/7/14.

Accession Number: 20140407–5346.

Comments Due: 5 p.m. ET 4/21/14.

Docket Numbers: RP14–724–000.

Applicants: Northern Border Pipeline Company.

Description: Northern Border Pipeline Company Operational Purchases and Sales of Gas Report.

Filed Date: 4/8/14.

Accession Number: 20140408–5079.

Comments Due: 5 p.m. ET 4/21/14.

Docket Numbers: RP14–725–000.

Applicants: Bison Pipeline LLC.

Description: Bison Pipeline LLC Operational Purchases and Sales of Gas Report.

Filed Date: 4/8/14.

Accession Number: 20140408–5080.

Comments Due: 5 p.m. ET 4/21/14.

Docket Numbers: RP14–726–000.

Applicants: El Paso Natural Gas Company, L.L.C.

Description: Request for Waiver and Extensions of El Paso Natural Gas Company, L.L.C.

Filed Date: 4/8/14.

Accession Number: 20140408–5145.

Comments Due: 5 p.m. ET 4/21/14.

Docket Numbers: RP14–727–000.

Applicants: Southwest Gas Storage Company.

Description: Remove Messenger Agreement to be effective 5/10/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5035.

Comments Due: 5 p.m. ET 4/21/14.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Dated: April 10, 2014.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2014–08868 Filed 4–17–14; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC14–41–000.

Applicants: NorthWestern Corporation, PPL Montana, LLC.

Description: Supplement to January 10, 2014 Joint Application for Order Authorizing Acquisition and Disposition of Jurisdictional Facilities of NorthWestern Corporation and PPL Montana, LLC.

Filed Date: 4/9/14.

Accession Number: 20140409–5249.

Comments Due: 5 p.m. ET 4/21/14.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER11–1858–003; ER11–1859–002.

Applicants: NorthWestern Corporation, Montana Generation, LLC.

Description: Supplement to January 10, 2014 Notice of Change in Status of NorthWestern Corporation and Montana Generation, LLC.

Filed Date: 4/9/14.

Accession Number: 20140409–5241.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1355–001.

Applicants: Lakeswind Power Partners, LLC.

Description: Amendment to Market-Based Rate Tariff to be effective 2/25/2014.

Filed Date: 4/10/14.

Accession Number: 20140410–5058.

Comments Due: 5 p.m. ET 5/1/14.

Docket Numbers: ER14–1425–001.

Applicants: Cheyenne Light, Fuel and Power Company.

Description: Supplement to Open Access Transmission Tariff Rate Change Filing to be effective 5/3/2014.

Filed Date: 4/10/14.

Accession Number: 20140410–5119.

Comments Due: 5 p.m. ET 4/17/14.

Docket Numbers: ER14–1665–000.

Applicants: Natural Gas Exchange Inc.

Description: Resubmission of document for April 7, 2014 Natural Gas Exchange Inc. tariff filing.

Filed Date: 4/9/14.

Accession Number: 20140409–5250.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1694–000.

Applicants: Appalachian Power Company.

Description: System Integration Agreement to be effective 6/1/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5203.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1695–000.

Applicants: Indiana Michigan Power Company.

Description: System Integration Agreement Concurrence to be effective 6/1/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5211.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1696–000.

Applicants: Kentucky Power Company.

Description: System Integration Agreement Concurrence to be effective 6/1/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5213.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1697–000.

Applicants: Public Service Company of Oklahoma.

Description: System Integration Agreement Concurrence to be effective 6/1/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5219.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1698–000.

Applicants: Southwestern Electric Power Company.

Description: System Integration Agreement Concurrence to be effective 6/1/2014.

Filed Date: 4/9/14.

Accession Number: 20140409–5220.

Comments Due: 5 p.m. ET 4/30/14.

Docket Numbers: ER14–1699–000.

Applicants: Milford Power, LLC.

Description: Supplement 2 to Notice of Succession and Non-Material Change in Status to be effective 1/28/2014.

Filed Date: 4/10/14.

Accession Number: 20140410–5063.

Comments Due: 5 p.m. ET 5/1/14.

Docket Numbers: ER14–1700–000.

Applicants: Southwest Power Pool, Inc.

Description: EIS Market Service Agreement Cancellations to be effective 3/1/2014.

Filed Date: 4/10/14.

Accession Number: 20140410–5065.