



10 CFR 50.75(f)(1)
10 CFR 50.82(a)(8)

March 29, 2018

LC-2018-0027

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

La Crosse Boiling Water Reactor
Facility Operating License No. DPR-45
NRC Docket Nos. 50-409 and 72-046

Subject: Report on Status of Decommissioning Funding for Shutdown Reactor

References:

- 1) Barbara Nick, Dairyland Power Cooperative, Letter to U.S. Nuclear Regulatory Commission, "Application for Order Approving License Transfer and Conforming Administrative License Amendments," dated October 8, 2015
- 2) Marlayna Vaaler, U.S. Nuclear Regulatory Commission, Letter to Barbara Nick, Dairyland Power Cooperative, "Order Approving Transfer of License for the La Crosse Boiling Water Reactor from the Dairyland Power Cooperative to LaCrosseSolutions, LLC and Conforming Administrative License Amendment" dated May 20, 2016
- 3) Gerard van Noordennen, LaCrosseSolutions, Letter to U.S. Nuclear Regulatory Commission, "Notification of Amended Decommissioning Plan and Post-Shutdown Decommissioning Activities Report for La Crosse Boiling Water Reactor," dated June 27, 2016

In accordance with 10 CFR 50.75, "Reporting and recordkeeping for decommissioning planning," paragraph (f)(1), and 10 CFR 50.82, "Termination of license," paragraph (a)(8), LaCrosseSolutions, LLC (LS) is submitting a report on the status of funding for decommissioning the La Crosse Boiling Water Reactor (LACBWR) facility, and managing the associated irradiated fuel. The annual radiological decommissioning and irradiated fuel management funding assurance report for LACBWR is provided in the Attachment to this letter for the period ending December 31, 2017.

The minimum required decommissioning funding assurance amount is based on a site-specific decommissioning cost estimate determined in accordance with 10 CFR 50.82(a). A change to the spent fuel management strategy was described in the application for license transfer (Reference 1), accepted by the NRC via Reference 2, and further described in the amended PSDAR (Reference 3).

S4601 State Highway 35, Genoa, WI 54632

NM5501
NM5526
NM55

Each of those references addressed the project's planning and scheduling basis, the associated estimated costs and the available funds for decommissioning, decontamination, dismantlement, and spent fuel management of the LACBWR facility. As described in those references, radiological decommissioning as represented by the LACBWR plan includes decontamination and dismantlement of the radiologically involved systems, structures, and components. The attached decommissioning cost estimate does not include the costs of dismantling non-radiological systems and structures and other non-radiological site restoration.

Under the terms of the license transfer, LS became the lead NRC licensee responsible for all activities under the LACBWR License. LS will complete all activities necessary to terminate the License and release the LACBWR Site for unrestricted use as an industrial site, except for a small area surrounding the Independent Spent Fuel Storage Installation (ISFSI) containing the spent nuclear fuel until its final disposition. Dairyland Power Cooperative (DPC) will remain the owner licensee and will retain title to the spent nuclear fuel. Upon issuance of a license amendment providing for termination of the License, except for the ISFSI site, and upon receipt of a future NRC license transfer approval, LS will transfer responsibility for the License back to DPC. Thereafter, DPC will maintain the ISFSI, and the ultimate disposition of the spent nuclear fuel will be provided for under the terms of DPC's Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Waste with the U.S. Department of Energy. These latter, ongoing costs are not included in the estimates herein.

NRC review of this decommissioning management strategy and the associated funding and cost estimate was accomplished as part of the NRC approval of the transfer of the LACBWR operating licenses to LS (Reference 2). Since the time of the last estimate provided in Reference 3, the cost and funding estimates have been adjusted for market value changes in the decommissioning trust fund (DTF), refinement of the cost and schedule estimate reflecting more mature knowledge gained from the new cost-significant contracts for various decommissioning activities, and more developed cost allocations among the activities for radiological and non-radiological work. While this report excludes costs and discussion of non-radiological site restoration, it is LS plan to additionally complete that work as part of the contract scope with DPC.

All spent nuclear fuel elements from LACBWR have been transferred to dry cask storage in the ISFSI. LS has entered into a "Company Services Agreement" with DPC, pursuant to which DPC will provide operations, maintenance, access control, and security services to and for the ISFSI site. DPC is responsible for the costs relating to the ISFSI.

The Attachment provides the aggregated, minimum estimated cost (funds needed) for radiological decommissioning. This estimate has been developed from the site aggregate decommissioning schedule and provides the cost and funding allocation necessary to optimally decommission the radiologically involved systems, structures and components consistent with the Commission accepted decommissioning strategy.

LaCrosseSolutions

LC-2018-0027

Page 3 of 3

There are no regulatory commitments contained within this letter.

If you have any questions about this letter, please contact me at (860) 462-9707.

Respectfully,

James Ashley
for Gerard van Noordennen
Vice President Regulatory Affairs

Attachment:

- 1) Annual Radiological Decommissioning and Irradiated Fuel Management Funding Assurance Report for La Crosse Boiling Water Reactor, Aggregate Costs

cc: Marlayna Vaaler, U.S. NRC Project Manager
Service List

**Annual Radiological Decommissioning and Irradiated Fuel Management Funding
Assurance Report for
La Crosse Boiling Water Reactor, Aggregate Costs**

December 31, 2017
(2017 dollars, millions)

<u>Trust Fund Amount at December 31, 2017 (A)</u>	<u>\$17.0¹</u>
<u>NRC Required Minimum Funding Assurance Amount at December 31, 2017 (B)</u>	<u>\$16.3</u>
<u>Difference in Trust Fund Amount versus Required Minimum Funding at December 31, 2017 – Surplus/(Shortfall) (C) = (A) - (B)</u>	<u>\$0.7</u>
<u>Projected End of Project Surplus at December 31, 2017 (D)</u>	<u>\$1.1²</u>
<u>Estimated Costs to Complete Decommissioning at December 31, 2017 (E)</u>	<u>\$16.0</u>
<u>Projected Costs to Manage Irradiated Fuel at December 31, 2017 (F)</u>	<u>\$0³</u>
<u>Amount Spent on Decommissioning⁴ (G):</u>	
<u>Cumulative (June 2016 – December 31, 2016)⁵</u>	<u>\$9.5</u>
<u>Calendar Year 2017</u>	<u>\$45.1</u>
<u>Cumulative (June 2016 – December 31, 2017)⁶</u>	<u>\$54.6</u>

¹ This NDT position, together with the \$17 million Surety Bond payable to the NDT, provides for sufficient funding and financial assurance for completion of radiological decommissioning of the LACBWR Project. Additionally, EnergySolutions resources and the \$15 million performance guarantee agreed to with DPC in the LACBWR Disposal Services Agreement, are available but are not relied upon here.

² The surplus is based on the trust fund amount as of December 31, 2017, less the estimate of costs to complete decommissioning, plus annual earnings and less taxes through the end of the project.

³ A separate account in the trust holds the funds necessary for the ultimate decommissioning of the ISFSI site and final license termination. DPC currently funds and will continue to fund the operation and maintenance of the ISFSI through its annual operating revenue.

⁴ The amounts spent on decommissioning represents withdrawals made from the trust fund reported for radiological decommissioning.

⁵ This time period reflects the transfer of license to LS in June 2016 as documented in Reference 2.

⁶ This time period reflects the transfer of license to LS in June 2016 as documented in Reference 2.

- a) The required minimum funding assurance amount is based on the decommissioning scenario from the site-specific decommissioning cost estimate provided in Reference 3. The cost estimate reflects actual experience to date, as well as forecast refinements made through the date of this filing.
- b) The trust fund amount is the actual trust fund balance less outstanding disbursements for decommissioning costs incurred through the same date.
- c) There are no additional funds to be collected.
- d) A 2% annual real rate of return is assumed in these calculations.
- e) There are no contracts relied upon pursuant to 10 CFR 50.75(e)(1)(v).
- f) Financial assurance for decommissioning is provided by the prepayment method, coupled with an external trust fund, in accordance with 10 CFR 50.75(e)(1)(i). There are no modifications to the current method of providing financial assurance since the last submitted report.
- g) There are no material changes to the trust fund agreements or financial assurance contracts as described at the time of transfer of the licenses.
- h) LS has entered into a "Company Services Agreement" with DPC, pursuant to which DPC will provide operations, maintenance, access control, and security services to and for the ISFSI site. DPC is responsible for the costs relating to the ISFSI and those costs are not included in this decommissioning estimate.
- i) DPC has funds sufficient to meet its obligations to manage spent fuel safely as requisite to the current cost estimates for the project and pursuant to 10 CFR 50.82(a)(8)(vii). A separate account in the trust holds the funds necessary for the ultimate decommissioning of the ISFSI site and final license termination. DPC's established spent fuel management funding plan is that it currently funds and will continue to fund the operation and maintenance of the ISFSI through its annual operating revenue.
- j) DPC has not projected the cost of managing irradiated until title to the fuel and possession of the fuel is transferred to the Secretary of Energy because this cost is indeterminate. ISFSI operating costs are estimated to be \$2.5 million per year and are funded from the operations and maintenance budget.
- k) Inquiries regarding the management of spent nuclear fuel beyond completion of the decommissioning project should be directed to DPC.

La Crosse Boiling Water Reactor Service List

cc:

Ken Robuck
Group President Disposal and
Decommissioning
EnergySolutions
299 South Main Street, Suite 1700
Salt Lake City, UT 84111

John Sauger
Executive VP and Chief Nuclear Officer
Reactor D&D
EnergySolutions
121 W. Trade Street, Suite 2700
Charlotte, NC 28202

Joseph Nowak
General Manager
LaCrosseSolutions
S4601 State Highway 35
Genoa, WI 54632-8846

Gerard van Noordennen
VP Regulatory Affairs
EnergySolutions
121 W. Trade Street, Suite 2700
Charlotte, NC 28202

Russ Workman
General Counsel
EnergySolutions
299 South Main Street, Suite 1700
Salt Lake City, UT 84111

Jerome Pedretti, Clerk
Town of Genoa
E860 Mundsack Road
Genoa, WI 54632

Jeffery Kitsembel
Division of Energy Regulation
Wisconsin Public Service Commission
P.O. Box 7854
Madison, WI 53707-7854

Regional Administrator
U.S. NRC, Region III
2443 Warrenville Road
Lisle, IL 60532-4352

Paul Schmidt, Manager
Radiation Protection Section
Bureau of Environmental and Occupational Health
Division of Public Health
Wisconsin Department of Health Services
P.O. Box 2659
Madison, WI 53701-2659

Barbara Nick
President and CEO
Dairyland Power Cooperative
3200 East Avenue South,
La Crosse, WI 54602-0817

Cheryl Olson, ISFSI Manager
La Crosse Boiling Water Reactor
Dairyland Power Cooperative
S4601 State Highway 35
P.O. Box 817
Genoa, WI 54632-8846

Lane Peters
La Crosse Boiling Water Reactor
Dairyland Power Cooperative
S4601 State Highway 35
Genoa, WI 54632-8846

Thomas Zaremba
Wheeler, Van Sickle and Anderson, S.C.
44 East Mifflin Street, Suite 1000
Madison, WI 53703

John E. Matthews
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004