MPSC

Issue Brief

Palisades Nuclear Plant

1. What is the Palisades Nuclear Plant?

The Palisades plant is an 800 MW nuclear power generating facility located in Covert Township in Van Buren County. The plant was built by Consumers Energy and came into service in 1973. Consumers Energy sold the plant to Entergy Corporation in 2007. At that time, Consumers Energy entered into a contract known as a power purchase agreement with Entergy to buy energy and capacity from the Palisades plant through 2022.

2. What did Entergy and Consumers Energy agree to related to the Palisades plant?

In December 2016, Entergy and Consumers Energy announced that they had agreed to a proposal in which **Consumers Energy would terminate the power purchase agreement with Entergy in 2018**, and compensate Entergy for the early termination of the contract. Upon termination of the contract, Entergy would shut Palisades down in October 2018. According to the companies, the remaining cost of the Palisades contract was higher than the projected costs of purchasing energy and capacity from the electricity market, and that even with a contract termination payment, Consumers Energy customers would realize savings overall.

3. What is the proposed buyout agreement between Entergy and Consumers Energy? How much is it?

Under the proposed agreement, **Consumers Energy would pay Entergy \$172 million to buy out the remainder of the contract term.** Entergy would continue to operate the plant until its next scheduled refueling outage in October 2018, and would permanently shut the plant down at that time. By comparing the remaining costs of the Palisades contract with projected market costs for energy and capacity, Consumers Energy and Entergy determined that there would be \$344 million in savings. According to the companies, by splitting this amount in half, Entergy would be compensated for giving up the remaining revenues associated with the Palisades contract, and Consumers Energy customers would see savings of \$172 million.

4. What is the nature of the proceeding before the Michigan Public Service Commission?

In February 2017, Consumers Energy filed an application with the MPSC to obtain approval to be able to recover costs associated with the proposed Palisades contract buyout. Consumers Energy proposes to use a special form of financing known as "securitization" to be able to recover the costs. This type of financing is intended to result in lower costs for Consumers Energy ratepayers relative to traditional cost recovery methods. The MPSC previously has authorized Consumers Energy to use securitization for project financing.

5. What is securitization?

Securitization is a process authorized under PA 142 of 2000 by which a utility, following the issuance of a financing order by the MPSC, replaces relatively high-cost debt and equity with lower-cost debt in the form of securitization bonds. Using the securitization process, rather than traditional cost recovery methods, is **intended to result in lower costs for ratepayers since higher-cost utility debt and equity is replaced by securitization bonds with low interest rates**. In order for securitization to be approved, the MPSC needs to find that there will be tangible and quantifiable benefits to ratepayers. If the net present value of costs associated with securitization is lower than the net present value of costs associated with traditional recovery methods, the MPSC can make this finding.

6. What did the MPSC decide?

The MPSC approved the ability of Consumers Energy to securitize costs related to buying out the Palisades contract, but only up to \$136.6 million, not the \$172 million that Consumers Energy proposed. In addition, the MPSC approved only \$5.5 million in associated transaction costs, less than the \$12.6 million originally requested by Consumers Energy. Thus, the total amount the MPSC allowed Consumers Energy to securitize is approximately \$142 million.

7. Why did the MPSC authorize Consumers Energy to recover \$142 million?

In its September 22, 2017 decision, the MPSC determined that authorizing Consumers Energy to buy out the remainder of the Palisades contract was in the best interest of its customers due to the expected long-term savings, and that securitization of the buyout costs will provide tangible and quantifiable benefits to customers. The MPSC found that the original amount of projected



savings negotiated between Consumers Energy and Entergy relied on a number of assumptions, the biggest of which dealt with congestion costs on the transmission network as a result of the shutdown of the Palisades plant, and the discount rate used to calculate the net present value of customer savings. Factoring Consumers Energy's projected congestion costs into the calculation, and applying a higher discount rate (7.65% instead of 4%), projected savings of \$273.3 million result. Other parties, including MPSC Staff, presented evidence of customer savings generally consistent with this amount based on different assumptions. Applying the 50/50 savings split used by the companies results in an amount of \$136.6 million that the MPSC authorizes Consumers Energy to recover. The MPSC also approved \$5.5 million associated with the costs of the securitization transaction, which brings the total amount to approximately \$142 million.

8. What is the impact of the MPSC's decision?

The MPSC's determination in this case allows Consumers Energy to securitize approximately \$142 million for the buyout of the remainder of the Palisades contract. If Consumers Energy moves forward with securitization, there will be surcharges on customer bills over a six-year period to repay the securitization bonds. However, the overall costs of the buyout would be lower than using traditional cost recovery mechanisms. And replacing the relatively high-cost Palisades contract with lower cost resources is expected to create savings for customers in the long term.

9. How did the MPSC solicit feedback for the decision making process?

The MPSC used its well-established, open, transparent process for making a decision on the Palisades securitization request. This proceeding was conducted as a contested case, which allows individuals with varying interests and positions to formally take part in the case. Parties to the case, including the MPSC Staff, Attorney General, representatives of large industrial customers, representatives of residential customers, Consumers Energy, and Entergy, submitted testimony and briefs for the purpose of providing the Commissioners with arguments and evidence to consider in their decision-making process. The MPSC also provided additional opportunities for individuals who were not formally part of the case but still wanted to share their opinions. The MPSC held two public hearing on May 8, 2017, in Van Buren County, and encouraged individuals to file written comments to the docket as well.

10. Does the MPSC have authority to decide whether Palisades closes or continues to operate? What is the MPSC's role?

The MPSC does not have the authority to decide whether Palisades continues to operate or shuts down. The MPSC's role in this case is limited to determining whether Consumers Energy is allowed to recover costs related to the proposed buyout of the Palisades contract by securitizing those costs.

11. Will Palisades stay open or shut down?

The decision whether to keep Palisades running is up to Entergy. The Palisades contract was originally scheduled to expire in 2022, and without another arrangement in place to sell energy and capacity, it is possible that Palisades would have shut down at that time. If Consumers Energy and Entergy agree to move forward with the contract termination, Entergy has indicated that it intends to shut the plant down in October 2018.

12. When will Entergy make a decision on the future of the Palisades plant?

Entergy and Consumers Energy will have to decide whether to move forward with the contract termination. Entergy indicated in filings before the MPSC that to prepare for a plant refueling (which is scheduled to take place in October 2018) takes approximately one year, meaning that **it would likely have to decide by October 2017** whether to move forward with the contract termination, or instead plan to refuel in October 2018 and continue to operate the plant.

13. What are the electric reliability impacts if Entergy decides to shut down the plant? Will Michigan have enough power? The Palisades plant is a large source of 24/7 power. Participants in the case before the MPSC, including the MPSC Staff, expressed concerns about the impact on reliability in the state if nearly 800 MW of electric generating capacity were to be taken offline at a time when there is uncertainty about the future reliability of the electric grid in both Michigan and the Midwest region. The MPSC recognized in recent orders that the Midwest region as a whole has adequate electricity supplies over the next five years based on available forecasts. And the MPSC has recently instituted new requirements pursuant to the 2016 energy law to ensure all electricity providers own or contract for their supplies four years into the future. At the same time, the MPSC strongly emphasized the importance for Consumers Energy to expeditiously move forward to secure replacement capacity arrangements.



14. Where will Consumers Energy's replacement power come from?

Consumers Energy proposed a replacement plan highlighting how it intends to replace the capacity from the Palisades contract with lower cost capacity. Consumers Energy's plan for replacement capacity includes increased energy waste reduction, increased commercial and industrial demand response, acceleration and increase in the size of its Cross Winds Energy Park currently under construction, amendment of an existing power purchase agreement, continued operation of the company's older generation plants used to supply power at times of peak demand, a short-term capacity purchase in 2018, and the purchase of an existing natural gas plant.

15. Will there be savings for customers if Consumers Energy moves forward with its plan to replace the power it is getting from the Palisades plant?

To the extent that lower-cost resources are used to replace a more expensive power purchase agreement, **the Palisades contract termination is expected to provide savings to customers over time** under stable capacity market and fuel price conditions.

16. Who regulates the Palisades nuclear plant?

The Nuclear Regulatory Commission, an independent federal agency, regulates nuclear generating facilities, including the decommissioning activities of all commercial nuclear power plants in the United States. Since Consumers Energy no longer owns the Palisades plant or any of the assets associated with the plant, any site remediation of the Palisades plant is the responsibility of Entergy.

17. What will happen to the nuclear waste if Palisades shuts down?

The Nuclear Regulatory Commission has sole authority over the long term disposition of spent nuclear fuel at the Palisades plant. There is no permanent repository for spent nuclear fuel. Consequently, nuclear power plants store spent fuel onsite. At Palisades, **spent fuel is stored in either a spent fuel pool in the plant or onsite in dry casks made of steel and concrete.** The concrete provides radiation shielding. The MPSC advocates that storage of spent nuclear fuel continues at the plant in a manner that protects public health and safety and the environment, but has no official role in overseeing this.

18. Is remediation of the Palisades plant for future use an option? If so, who pays for it?

In April 2007 Consumers Energy sold the Palisades plant to Entergy through an asset sale agreement. Through this agreement, Entergy assumed title to and responsibility for management, storage, removal, transportation, and disposition of all spent nuclear fuel associated with Palisades. In addition, the agreement transferred all of the decommissioning responsibilities for the plant to Entergy as well as a portion of the accumulated decommissioning funds. The disposition of the Palisades plant is entirely at the discretion of Entergy. Since Consumers Energy no longer owns the Palisades plant or any of the assets associated with the plant, any site remediation of the Palisades Plant is the responsibility of Entergy.

19. What are the next steps?

Consumers Energy and Entergy will have to decide whether to move forward with the contract termination. This will determine whether Consumers Energy issues securitization bonds, and whether Entergy decides to close the Palisades plant in October 2018, or to continue operating the plant past that date. Consumers Energy and Entergy have also previously indicated they are willing to provide \$10 million to local communities to help address the impacts of the plant closing.

20. Where can I find more information?

See all the filings in this docket on the MPSC's e-dockets webpage, under Case No. U-18250.

The **Michigan Agency for Energy** has been tasked with coordinating the State of Michigan's efforts relative to the Palisades plant. In addition to the cost recovery proceeding before the MPSC, other state agencies, including the Michigan Department of Treasury, Michigan Department of Education, Michigan Talent Investment Agency, and Michigan Economic Development Corporation, have been engaged on this issue as well.

For more information, please contact 517-284-8330 or visit www.michigan.gov/energy

