Exhibit A4A

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY CROCKER WIND FARM, LLC FOR A PERMIT FOR A WIND ENERGY FACILITY AND A 345 KV TRANSMISSION LINE IN CLARK COUNTY, SOUTH DAKOTA, FOR CROCKER WIND FARM

SD PUC DOCKET EL-17-___

PREFILED TESTIMONY OF ELIZABETH ENGELKING
ON BEHALF OF CROCKER WIND FARM, LLC

December 15, 2017

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Elizabeth Engelking. I am Vice President for Strategy and Policy at Geronimo Energy, LLC ("Geronimo"), located at 7650 Edinborough Way, Suite 725, Edina, Minnesota.

Q. Please describe your background and your duties.

A. I received my MBA in finance and economics from the Carlson School of Management at the University of Minnesota in 1986. From 1988-98, I was employed as a rate analyst with the Minnesota Public Utilities Commission, where I oversaw the implementation of Integrated Resource Planning and advised on utility resource planning, ratemaking, and industry restructuring issues. In 1998, I joined Great River Energy, where I worked as a transmission analyst and later as Manager of Resource Planning, where I directed the development, filing, and acceptance of two Integrated Resource Plans in Minnesota. From 2004-11, I worked as Xcel Energy's Director of Resource Planning and Bidding, where I was responsible for developing Integrated Resource Plans and long-term generation planning and acquisition. In 2012, I joined Geronimo, and I currently serve as Vice President for Strategy and Policy. My responsibilities include oversight over Geronimo's regulatory and legislative matters, as well as evaluation of commercial markets for wind and solar energy. My resume is attached as Exhibit 1.

Q. What is the relationship between Crocker Wind Farm, LLC ("Crocker" or the "Applicant") and Geronimo?

A. The Applicant is a wholly-owned subsidiary of Geronimo. Geronimo is a leading full-service North American renewable energy company based in Edina, Minnesota, with satellite offices in southwest Minnesota, North Dakota, South Dakota, Illinois, Colorado, New York, and Michigan. Geronimo provides renewable energy development solutions for utilities and corporations looking to harness renewable energy for business growth. Geronimo has developed several operating wind farms

and solar projects throughout the United States. Over 1,600 megawatts ("MW") of wind projects and solar projects developed by Geronimo are either operational or currently under construction. Geronimo has a multi-gigawatt development pipeline of wind and solar projects in various stages of development throughout the United States.

II. OVERVIEW

Q. What is the purpose of your Direct Testimony?

A. The purpose of my testimony is to discuss the commercial demand for the Crocker Wind Farm ("Project"). I will also discuss the impacts permitting delays would have on the Project.

Q. Please identify the portions of the Energy Facility Permit Application ("Application") that you are sponsoring for the record.

A. I am sponsoring the following portions of the Application:

- Section 2.1: National and State Energy Demand
- Section 2.2: Renewable Power Demand by Utilities

III. RENEWABLE ENERGY STANDARDS

Q. Does South Dakota have renewable energy standards?

A. Yes. In 2008, South Dakota enacted legislation establishing an objective that 10 percent of all retail electric sales in the state be obtained from renewable and recycled energy by 2015, with reporting required through 2017. *See* SDLC § 49-34A-101. In 2009, the statute was amended to allow conserved energy as a component, and it was reported in 2016 that a majority of the electric providers in South Dakota met this goal. South Dakota has additional regulatory policies, financial incentives, and technical resources aimed at encouraging energy efficiency and the expanded use of renewable sources for electric generation, such as property tax incentives and alternative taxation calculation.

Q. Do other states in the region also have renewable energy standards?

A. Yes. For example, Illinois requires certain utilities to obtain 25 percent of eligible sales from renewables by 2025.[1] Similarly, North Dakota has adopted the national "25 by 25" initiative, which establishes a goal of having not less than 25 percent of total energy consumed within the United States come from renewable resources by January 1, 2025.[2] Likewise, Minnesota utilities are required to provide 25 percent of their total retail electric sales from eligible renewable resources by 2025.[3] Although 15,147 MW of wind power capacity have been installed throughout the Mid-continent Independent System Operator ("MISO") footprint,[4] the regional need for electricity, and the potential to produce renewable resources from wind, far exceeds this number.[5]

IV. PROJECT DEMAND AND OFFTAKE

Q. What information did you evaluate concerning the demand for renewable energy in the region?

A. As an independent power producer ("IPP"), Crocker is not limited to the needs of one region and is capable of selling to multiple wholesale consumers across the region. Therefore, I evaluated the demand for wind energy in South Dakota and surrounding states from both electric utilities and commercial, industrial, and institutional ("C&I") customers. For electric utilities, I reviewed the most recent integrated resource plans of a number of utilities, which confirm that utilities are seeking additional renewable generation resources in the next several years. For

[1] 20 Ill. Comp. Stat. sec. 3855/1-75(c)(1).

[2] *See* N.D. Cent. Code. § 17-01-01.

[3] Minn. Stat. § 216B.1691.

[4] *See* American Wind Energy Association, *Annual Report 2015*, at 98.

[5] *See id.* at 65 (describing wind capacity in the upper Midwest); MISO, MISO Transmission Expansion Plan 2015, at 102 (explaining that certain proposed transmission projects will facilitate the interconnection of "41 million MWh of wind energy to meet renewable energy mandates and goals"), https://www.misoenergy.org/Library/Repository/Study/MTEP/MTEP15/MTEP15%20Full%20Report.pdf.

both electric utilities and C&I customers, I considered active requests for proposals ("RFPs") for wind energy. Over the past year, Geronimo has received eight utility and eight C&I power supply proposal requests for which the Project would qualify, indicating a demand for the output that will be produced by the Project. Additionally, I have considered general market information on commercial demand for renewable energy.

Q. Why did you consider a broader region for evaluating demand for the Project?

A. As an IPP, Crocker is not confined to a single set of customers or a defined service territory. Further, the advent of Regional Transmission Operators ("RTOs") has increased the area over which energy can be economically traded. Crocker is uniquely situated in the vicinity of major transmission lines for both the MISO and the Southwest Power Pool ("SPP"), allowing us to market the Project across a broad region, stretching from South Dakota to Indiana and down to Texas. In addition, because many corporate contracts are settled financially instead of physically, corporate customers for the Project could be located anywhere in the United States. In a financial settlement, a customer does not take physical delivery of the electricity. Instead, the energy is sold into the regional market and the customer receives a financial settlement that reflect the difference between what they paid and what the power sold for in the market.

Q. Is there a demand for renewable energy, such as that which will be produced by the Project, in the region?

A. Yes. Utility long-range demand in the Midwest shows the intent to purchase approximately 1,000 MW of wind energy over the next five years. This increased demand is evident through the utilities' integrated resource plans, as described in Section 2.2 of the Application. In addition, as the cost of renewable energy has decreased, C&I demand for renewable energy has increased, creating a new market to obtain a power purchaser. For example, in 2016, approximately 1,600 MW of

wind energy was purchased by the C&I sector.[6] Further, in a recent survey of more than 150 commercial customers with annual revenues greater than $250 million, 84 percent of respondents indicated that they planned to actively pursue or consider directly buying renewable energy.[7] Thus, the Project will help meet the regional and/or C&I need for renewable energy produced in South Dakota.

Q. Does the Project currently have an offtake agreement?

A. Not at this time. Crocker is actively marketing the sale of electricity to third parties, both utilities and large power consumers/marketers. Crocker is currently in active discussions with three potential offtakers, but has not yet executed an offtake agreement. The Project may sell power in the form of a power purchase agreement, or the Project could be owned directly by a utility. Crocker expects to have contracts for project offtake in place by the end of the first quarter of 2018.

Q. Does the Applicant commit to providing the South Dakota Public Utilities Commission ("Commission") with updates concerning the Project's offtake agreements during this permitting process?

A. Yes. Crocker will update the Commission on the status of offtake be April 1, 2018.

Q. Where will the power produced by the Project be used?

A. Electricity generation by the Project will enter the transmission grid in South Dakota and will follow the path of least resistance in terms of where it is used. Even if the power is purchased by an out-of-state buyer, the actual electricity produced will remain near the Project and will meet general energy needs in South Dakota and the surrounding region.

[6] Renewable Choice Energy. "The Rise of the Corporate Energy Buyer." View August 29, 2017. https://www.renewablechoise.com/blog-corporate-energy-buyer/.

[7] APEX Clean Energy and Green Biz. "2017 State of Corporate Energy Renewable Procurement" September 2017

Q. Should the Commission be concerned about the economic impacts of this facility on South Dakota ratepayers?

A. No, not at this time. Crocker is an IPP that does not serve retail customers in South Dakota. As an IPP, Crocker is entirely at risk for the cost of the facility. To the extent Crocker contracts with a public utility that serves retail customers in South Dakota, the Commission has regulatory oversight over those contracts and would consider impacts to ratepayers at that time.

V. OTHER ISSUES

Q. Why does the Application present multiple turbine models?

A. Crocker has not yet contracted for turbines for this project. Turbine supply agreements reflect a large capital investment in the project, and are frequently entered into after most major permits are received. Specifying a single turbine option at this time would make it difficult for Crocker to negotiate the best price for wind turbines. Negotiating turbine supply agreements in a competitive process with a number of suppliers will reduce the overall cost of the Project and benefit the Project offtakers.

Q. Why is the Applicant pursuing a permit from the Commission by June 2018?

A. The Federal Production Tax Credits ("PTC") for wind energy are currently in a five-year phasedown starting at 100% of the credits if a project qualified by the end of 2016. Once qualified, a project must be constructed within four years to receive the tax credits without demonstrating continuous construction. The Project was qualified for the Federal PTC at the end of 2015, and thus needs to be operating by the end of 2019 to receive credits. Because long lead time items such as interconnection substation construction and equipment orders can take as many as 18 months, it is important for Crocker to receive the requested permits by June 1, 2018.

Q. Are there other consequences of Project delay?

A. Yes. If the Project is not constructed or is delayed, potential power purchasers' efforts to obtain renewable energy in a cost-effective and reliable manner would be in jeopardy Additionally, Project costs are subject to commodity flux and rise. Therefore, if the Project is delayed, the greater the probability of a commodity price increase.

VI. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes.

Dated this 15th day of December, 2017

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Elizabeth Engelking