

June 27, 2018

**VIA E-MAIL AND FEDERAL EXPRESS**

Mr. Darrell Nitschke  
Executive Secretary  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

**RE: Harmony Solar ND, LLC's Ten Year Plan for 2018-2028  
Case No. PU-18-\_\_\_\_\_**

Dear Mr. Nitschke:

Enclosed for filing are originals of the following documents:

1. Harmony Solar ND, LLC's Ten Year Plan: 2018-2028;
2. Notice of Filing Ten Year Plan: 2018-2028; and
3. Certificate of Service.

Electronic copies of the enclosed documents were filed with the Commission today via e-mail. If you have any questions, please let me know.

Sincerely,



MOLLIE M. SMITH

MMS/bd  
Enclosures

cc: Michael Montplaisir, Cass County Auditor (w/encls.)

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200 South Sixth Street, Suite 4000  
Minneapolis, Minnesota  
55402-1425

**TEN YEAR PLAN: 2018-2028**

**Harmony Solar ND, LLC**

**June 2018**

In accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, Harmony Solar ND, LLC (“Harmony Solar”), submits the following Ten Year Plan for years 2018 through 2028.

- (1) *A description of the general location, size, and type of all facilities to be owned or operated by the utility during the ensuing ten years, as well as those facilities to be removed from service during the ten-year period.*

Harmony Solar is proposing to develop and construct an up to 200 MW solar project known as the Harmony Solar Project. Harmony Solar will be located 15 miles west of Fargo in Cass County, ND. The project will consist of solar arrays, inverters, access roads, an electrical collection system, an O&M building and a project step-up substation. The project will be fully enclosed within a safety fence.

Harmony Solar does not currently have any facilities within North Dakota and, therefore, has no plans to decommission any facilities. The Harmony Solar Project will have an estimated life of greater than 10 years. As such, Harmony does not have any plans to decommission any proposed facilities within the timeframe of this plan.

- (2) *An identification of the location of the tentative preferred site for all electric energy conversion facilities and the tentative location of all electric transmission facilities on which construction is intended to be commenced within the ensuing five years and such other information as may be required by the commission. The site and corridor identification shall be made in compliance with the criteria published by the commission pursuant to section 49-22-05.1.*

The Harmony Solar Project will be located west of Fargo, North Dakota approximately 4 miles northeast of Casselton in eastern Cass County. A map of the proposed site for Harmony Solar is provided in Exhibit A, attached hereto. The project will be designed so as to comply with the exclusion and avoidance areas referenced in Section 49-22-05.1 of the North Dakota Century Code and identified in Sections 69-06-08-01 of the North Dakota Administrative Code.

- (3) *A description of the efforts by the utility to coordinate the plan with other utilities so as to provide a coordinated regional plan for meeting the utility needs of the region.*

Throughout the development of the project, Harmony Solar has and will continue to engage and coordinate with the Midcontinent Independent Transmission

System Operator (“MISO”), the local transmission owner, Xcel Energy, and the local electrical cooperatives regarding the Harmony Solar Project.

In June of 2017, Harmony Solar moved its request to MISO for interconnection of 200 MW of solar generation at Xcel Energy’s Bison Substation into the Definitive Planning Phase. Harmony Solar’s Interconnection Application was filed per the MISO Business Practice Manual 015 for Generator Interconnection. Harmony Solar’s Interconnection and MISO’s administration of the application are consistent with MISO’s Open Access Transmission, Energy and Operating Reserves Market Tariff, and per the operating policies of the Midwest Reliability Organization designed to facilitate the administration of efficient energy markets.

- (4) *A description of the efforts to involve environmental protection and land-use planning agencies in the planning process, as well as other efforts to identify and minimize environmental problems at the earliest possible stage in the planning process.*

Harmony Solar has utilized internal environmental personnel, as well as external environmental consultants, to conduct studies and analyses of the Harmony Solar Project to ensure the project will comply with the siting criteria set forth in Chapter 49-22 of the North Dakota Century Code, as well as Section 69-06-08-01 of the North Dakota Administrative Code. Additionally, Harmony Solar has consulted and will continue to consult with applicable state and federal agencies to avoid, minimize, and/or mitigate any impacts to the environment from the construction and operation of the project. Harmony Solar has been and will continue to work with Cass County and Harmony Township to ensure conformance with local land use regulations.

- (5) *A statement of the projected demand for the service rendered by the utility for the ensuing ten years and the underlying assumptions for the projection, with that information being as geographically specific as possible, and a description of the manner and extent to which the utility will meet the projected demands.*

Harmony Solar is proposing to construct this facility to sell energy, capacity and renewable energy credits (“RECs”), either bundled or unbundled, to one or more electric utilities and/or commercial customers. Harmony is actively marketing the project to a number of potential off-takers and may sell the power in the form of a power purchase agreement (“PPA”), or the Project could be owned directly by a utility.

As an independent power producer, Harmony Solar is not limited to the needs of one region and is able to bid into multiple wholesale markets across the region. For example, over the past year Harmony Solar was eligible to bid into 8 utility and 14 corporate/industrial power supply proposal requests in the region. Utilities and other customers seeking to diversify and build their energy generation

portfolios are attracted to solar energy projects because of long-term, fixed, competitive pricing, high capacity value, environmental benefits and existing and potential renewable energy policies.

#### *Renewable Energy Policies*

In March 2007, North Dakota enacted legislation (H.B. 1506) establishing an *objective* that 10% of all retail electricity sold in the state be obtained from renewable energy and recycled energy by 2015. The objective must be measured by qualifying megawatt-hours (“MWh”) delivered at retail, or by credits purchased and retired to offset non-qualifying retail sales. This objective is voluntary; there is no penalty or sanction for a retail provider of electricity that fails to meet the objective. Municipal utilities and electric cooperatives that receive wholesale electricity through a municipal power agency or generation and transmission cooperative may aggregate their renewable and recycled energy objective resources to meet the objective.

As of reports filed with the Commission in 2017, all filing utilities indicated that they presently meet their 10% objective for renewables. However, North Dakota is proximate to other jurisdictions that also have renewable policies. Minnesota, in particular, has a standard that requires Xcel Energy to obtain 30% of its energy from renewables by 2020, and all other utilities to obtain 25% of their energy from renewables by 2025. In addition, Minnesota investor-owned utilities are required to obtain 1.5% of their energy from solar by 2020. North Dakota’s available land and good insolation, along with newly constructed transmission lines, create an ideal environment for solar energy projects to meet Minnesota’s renewable and solar standard.

#### *Economic Energy and Capacity*

With improving technology and falling costs, utilities are beginning to include solar projects in their resource plans as long-term economic energy and capacity resources. In North Dakota, peak solar generation has a high correlation with the MISO’s coincident peak, which determines the reserve margins MISO utilities must maintain for reliability and reserve sharing purposes. Recent solar pricing has shown that the costs of energy and capacity of utility scale solar are on par with building a simple cycle CT to provide peaking power. (Lazard’s Levelized Cost of Energy Analysis 10.0, 2016).


For example, in its 2015 Resource Plan filing, the Commission approved Xcel Energy’s proposed purchase of up to 1000 MW of solar by 2021, even though it has already exceeded Minnesota’s solar energy standard.

### *Commercial and Industrial Demand*

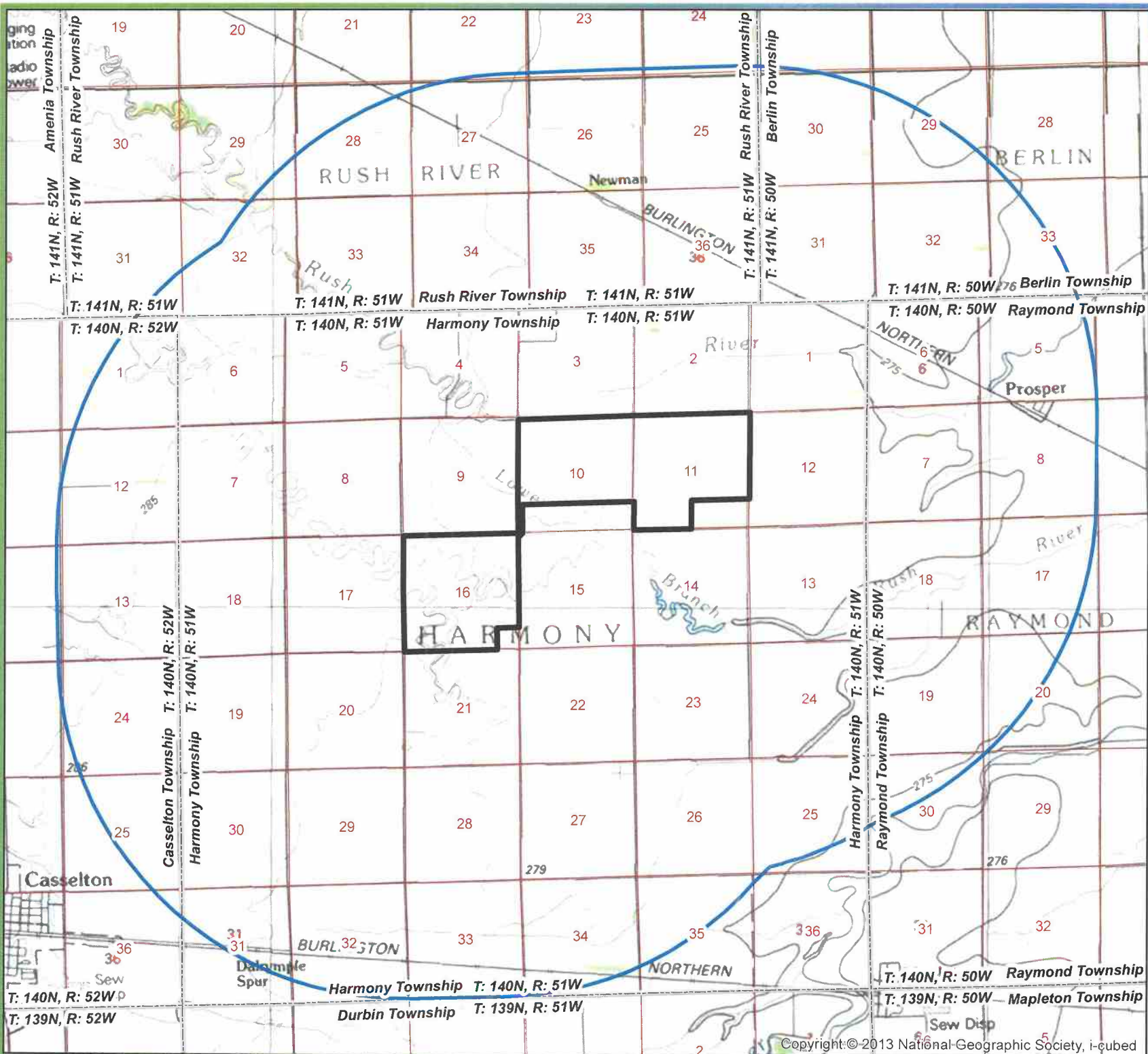
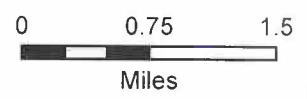
In addition to traditional utility demand for solar energy, a growing number of corporations are turning to renewable energy to save money on energy and meet sustainability goals. Corporate customers either purchase renewable energy directly or obtain renewable benefits and cost savings through financially settled contracts, sometimes called virtual PPAs. In addition, many utilities are creating “green tariffs,” which allow customers to purchase up to 100% renewable energy from the utility. Corporations such as Apple, Google and Facebook, along with many others, have recently set goals to obtain 100% of their energy from renewables. In 2016, approximately 1600 MW of renewable energy was purchased by commercial and industrial customers, and the number of requests for proposals doubled in 2017 (Renewable Choice Energy, 2017). In a recent survey, 84% of corporations stated that they planned to purchase renewable energy in the next 2 years.

# EXHIBIT A

## Harmony Solar Cass County, SD Project & Study Area

-  Harmony Solar Study Area (3mi)
-  Harmony Solar Project Area
-  Township/Range
-  Sections

1.5



STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION

Case No. PU-18-\_\_\_

IN THE MATTER OF THE FILING OF A TEN  
YEAR PLAN BY HARMONY SOLAR ND, LLC

CERTIFICATE OF SERVICE

Mollie M. Smith, being first duly sworn, does depose and state that on June 27, 2018, she served the following document:

**Ten Year Plan: 2018-2028**

by placing a true and correct copy of said document in an envelope addressed as follows:

Michael Montplaisir  
Cass County Auditor  
P.O. Box 2806  
Fargo, ND 58108-2806

and depositing the same, with postage prepaid, in the United States mail at Minneapolis, Minnesota.

  
Mollie M. Smith

STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION

Case No. PU-18-\_\_\_\_\_

IN THE MATTER OF THE FILING OF A TEN  
YEAR PLAN BY HARMONY SOLAR ND, LLC

**NOTICE OF FILING TEN YEAR PLAN  
2018-2028**

**PLEASE TAKE NOTICE** that Harmony Solar ND, LLC, in accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, filed a Ten Year Plan for the years 2018 through 2028 with the North Dakota Public Service Commission on June 27, 2018, and the Cass County Auditor on June 27, 2018.

Dated this 27th day of June, 2018.

FREDRIKSON & BYRON, P.A.

By



MOLLIE M. SMITH, ND Bar #06714  
*Attorney for Harmony Solar ND, LLC*  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402-1425  
(612) 492-7270

**CERTIFICATE OF SERVICE**

I, the undersigned, hereby certify that a true and correct copy of the following document:

**NOTICE OF FILING TEN-YEAR PLAN: 2018-2028**

was served on the 27th day of June, 2018 by placing the same in the United States mail, postage prepaid, properly addressed to the following:

North Dakota Aeronautics Commission  
P.O. Box 5020  
Bismarck, ND 58502-5020

North Dakota Office of Attorney General  
600 E. Boulevard Ave.  
Dept. 125  
Bismarck, ND 58505

North Dakota Department of Agriculture  
600 E. Boulevard Ave.  
Dept. 602  
Bismarck, ND 58505-0020

North Dakota Department of Health  
600 E. Boulevard Ave.  
Bismarck, ND 58505-0200

North Dakota Department of Human Services  
600 E. Boulevard Ave.  
Dept. 325  
Bismarck, ND 58505-0250

North Dakota Department of Labor and Human Rights  
600 E. Boulevard Ave.  
Dept. 406  
Bismarck, ND 58505-0340

North Dakota Department of Career and Technical Education  
State Capitol, 15th Floor  
600 E. Boulevard Ave., Dept. 270  
Bismarck, ND 58505-0610

North Dakota Department of Commerce  
1600 E. Century Ave., Suite 2  
P.O. Box 2057  
Bismarck, ND 58503

Energy Infrastructure and Impact Office  
North Dakota Department of Trust Lands  
1707 North 9th Street  
P.O. Box 5523  
Bismarck, ND 58506-5523

North Dakota Game and Fish Department  
100 N. Bismarck Expressway  
Bismarck, ND 58501-5095

North Dakota Industrial Commission  
State Capitol, 14th Floor  
600 East Boulevard Ave., Dept. 405  
Bismarck, ND 58505-0840

Office of Governor Doug Burgum  
State of North Dakota  
600 E. Boulevard Ave.  
Bismarck, ND 58505-0001

North Dakota Department of Transportation  
608 E. Boulevard Ave.  
Bismarck, ND 58505-0700

State Historical Society of North Dakota  
612 E. Boulevard Ave.  
Bismarck, ND 58505-0830

North Dakota Indian Affairs Commission  
State Capitol Building  
600 E. Boulevard Ave.  
1st Floor - Judicial Wing, Rm. #117  
Bismarck, ND 58505-0300

Job Service North Dakota  
P.O. Box 5507  
Bismarck, ND 58506-5507

North Dakota Department of Trust Lands  
1707 North 9th Street  
P.O. Box 5523  
Bismarck, ND 58506-5523

North Dakota Parks and Recreation Department  
Century Center  
1600 E. Century Ave., Suite 3  
PO Box 5594  
Bismarck, ND 58506-5594

North Dakota State Soil Conservation Committee  
c/o NDSU Extension Service  
2718 Gateway Ave., Suite 304  
Bismarck, ND 58503

North Dakota State Water Commission  
900 E. Boulevard Ave., Dept. 770  
Bismarck, ND 58505-0850

United States Department of Defense  
1400 Defense Pentagon  
Washington, DC 20301-1400

United States Fish and Wildlife Service  
North Dakota Field Office  
3425 Miriam Avenue  
Bismarck, ND 58501-7926

United States Army Corps of Engineers  
North Dakota Regulatory Office  
1513 South 12th Street  
Bismarck, ND 58504

Federal Aviation Administration  
United States Department of Transportation  
800 Independence Ave. SW  
Washington, DC 20591

North Dakota Transmission Authority  
c/o North Dakota Industrial Commission  
State Capitol 14th Floor  
600 E. Boulevard Ave. Dept. 405  
Bismarck, ND 58505-0840

North Dakota Pipeline Authority  
c/o North Dakota Industrial Commission  
State Capitol 14th Floor  
600 E. Boulevard Ave. Dept. 405  
Bismarck, ND 58505-0840

Cass County Commission  
PO Box 2806  
Fargo, ND 58108-2806

  
MOLLIE M. SMITH

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