STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co. Advance Determination of Prudence – Heskett 4 Application	)))	Case No. PU-19-306
Montana-Dakota Utilities Co. Certificate of Public Convenience and Necessity- Heskett 4 Application	)))	Case No. PU-19-307
Montana-Dakota Utilities Co. Deferred Accounting - Lewis & Clark 1, Heskett 1 and Heskett 2 Application	)))	Case No. PU-19-317

AFFIDAVIT OF MAILING

STATE OF NORTH DAKOTA)
) ss.
COUNTY OF BURLEIGH)

The undersigned, being duly sworn, deposes and says that: I am a United States citizen, over 18 years of age, and on May 11, 2020, I served a copy of the attached:

Exhibit MDU-7

by placing a true copy in a postage paid envelope or envelopes addressed to each person named below, at the address stated below, which is the last known address of the addressee, and by depositing said envelope in the United States mail at Bismarck, North Dakota.

Executive Secretary
Public Service Commission
600 East Boulevard Avenue, Dept. 480
Bismarck, ND 58505-0480

ALJ Timothy J. Dawson
Administrative Law Judge
2911 North 14th Street, Suite 303
Bismarck, ND 58503

Mitchell D. Armstrong
Special Assistant Attorneys General for PSC
Advocacy Staff
P.O. Box 460
Bismarck, ND 58502-0460

Brenda Vitek

Subscribed and sworn to before me, today, May 11, 2020.

Notary Public

DEBORAH ROFFLER
Notary Public
State of North Dakota
My Commission Expires May 20, 2023

Exhibit
MDU-7
PU-19-306; PU-19-307; PU-19-317

Montana-Dakota Utilities Co.
Plant In Service
Late Filed Exhibit - Case Nos. PU-19-306, PU-19-307 and PU-19-317

Lewis & Clark Station - Unit 1

Plant In Service - January 1, 2015		**$41,228,437**
2015 Additions:		
Add Pollution Control Equipment (MATS)	$16,572,078	
Install Settling Tank - Ash	5,317,147	
Refurbish both Circulating Water Pumps	318,671	
Purchase Water Truck	302,169	
Replace Control Valve & Turbine Stop Valve	245,659	
Particulate Matter Probe	110,908	
Construct Scrubber Pond Dike	107,736	
Update CEMS (MATS)	107,192	
Projects under $100,000	369,397	23,450,957
2016 Additions:		
Install Fly Ash System	$8,707,010	
Replace Air Preheater Hot/Cold Baskets	171,125	
Replace Intermediate Pressure Drip Pumps	157,992	
Rebuild Coal Mill - Unit #1	109,833	
Projects under $100,000	277,623	9,423,583
2017 Additions:		
Install Potable Water Line	$195,480	
Projects under $100,000	580,445	775,925
2018 Additions:		
Scrubber Pond Project	$5,474,011	
Replace Exciter System	518,999	
Replace Turbine Parts	402,927	
Replace Air Heater Drive	295,617	
Rebuild Circulating Water Pump - Spare	125,088	
Projects under $100,000	628,644	7,445,285
2019 Additions:		
Trade CAT Wheel Loader	$405,574	
Trade CAT Backhoe	103,320	
Projects under $100,000	191,166	700,060
Total Additions to Plant In Service		$41,795,810
Retirements and Adjustments		(4,969,570)
Plant In Service - August 31, 2019		**$78,054,677**
Change in Plant In Service		**$36,826,240**

Montana-Dakota Utilities Co.
Plant In Service
Late Filed Exhibit - Case Nos. PU-19-306, PU-19-307 and PU-19-317

Heskett Station - Units 1 & 2

Plant In Service - January 1, 2015		**$109,277,321**
2015 Additions:		
Material Handling Upgrade	$1,017,612	
Purchase Wheel Loader	358,607	
Replace Exciter Board - Unit 1	127,883	
Replace Damaged Building	126,085	
Projects under $100,000	1,037,437	2,667,624
2016 Additions:		
Bed Ash/Limestone Equipment - Emissions	$9,200,043	
Replace Unit 2 Induced Fan Rotor	430,167	
Replace Precipitator Optimization System & Micro-Voltage Controls - Unit #2	148,884	
Update Control Room	106,659	
Replace Railroad Ties and Rail Turnout	101,367	
Projects under $100,000	599,288	10,586,408
2017 Additions:		
Replace Turbine Major Parts - Unit 1	$840,491	
Trade CAT 950 Wheel Loader	260,705	
Replace Sand Processor Control - Unit 2	109,623	
Replace Boiler Casing/Ductwork - Unit 1	108,646	
Replace Rail & Rail Ties	106,476	
Projects under $100,000	381,884	1,807,825
2018 Additions:		
Trade CAT Articulated Dump Truck	$586,263	
Replace Air Compressor	206,734	
Replace Plant UPS	180,125	
Install Lime System Platforms	122,166	
Projects under $100,000	625,580	1,720,868
2019 Additions:		
Replace Boiler Buckstays - Unit 2	$279,633	
Replace Vibration Monitor System	218,884	
Projects under $100,000	92,904	591,421
Total Additions to Plant In Service		$17,374,146
Retirements and Adjustments		(3,400,119)
Plant In Service - August 31, 2019		**$123,251,348**
Change in Plant In Service		**$13,974,027**

Lewis & Clark – Unit 1

MATS Project – The Lewis & Clark Unit 1 was required to install additional particulate matter pollution controls for compliance with the Mercury and Air Toxics Standard (MATS) non-mercury metals emission standard. Montana-Dakota installed the following additional equipment and scrubber modifications to comply with this rule:

- Turning vanes to improve the distribution of the flue gas within the stack;
- A sieve tray and mist eliminator system to increase the efficiency of removing filterable particulate matter (FPM) which is the surrogate for the non-mercury metals;
- Replacement of scrubber slurry recycle pumps;
- A forced oxidation system to control the chemical reactions within the system and to prevent deposits from forming on the scrubber surfaces; and
- A weather enclosure was added to the stack to allow for required year-round emissions testing.

To comply with the MATS Rule, the Lewis &Clark Unit 1would have had to cease combusting coal and convert to natural gas or shut down by April 2015 or install the MATS upgrade by April 2016 pursuant to the compliance extension granted by the Montana Department of Environmental Quality. The Company installed the MATS project option, which was supported by the 2013 IRP. An Advance Determination of Prudence (ADP) was granted by the North Dakota Public Service Commission in October 2013 for the MATS rule project costs with a cost of $27.7 million. Using the 2013 IRP EGEAS model, Montana-Dakota demonstrated that L&C, with the MATS Project, would be a least-cost resource even if a future requirement would force the unit to shut down in five years (2020).

Settling Ash Tank and **Fly Ash System** – In 2015, an ash system project was implemented at Lewis & Clark Unit 1 as a result of the Coal Combustion Residual rule (CCR). The project consisted of three main parts: (1) retirement of the large ash pond; (2) construction of a new concrete bottom ash settling tank; and (3) modifications necessary to handle fly ash entirely as a dry material. The pond was retired in 2015, with final capping and shaping in 2018, and replaced with a new concrete bottom ash settling tank which was completed during the outage associated with the MATS project. Lewis & Clark Unit 1 was converted to dry fly ash management to minimize the size and cost of the new concrete bottom ash settling tank. Converting to dry fly ash management involved adding equipment and making modifications to handle fly ash entirely as a dry material from the collection hopper through transportation in trucks to the ash disposal site. This portion of the project

was installed in phases, with the dry fly ash management system operational on April 14, 2016.

Scrubber Pond Modifications – This project was executed to comply with the U.S. Environmental Protection Agency's Coal Combustion Residuals (CCR) Rule requirements. Surface impoundments that did not retrofit or otherwise meet all applicable regulatory requirements by October 17, 2018 were subject to closure. Under the CCR Rule as originally enacted, the scrubber ponds would have had to close no later than April 17, 2019 without completion of the retrofit project. The Scrubber Pond Project involved retrofitting the scrubber ponds, consisting of the following actions: removal of CCR materials, deconstruction of berms, re-establishment of base and berms, construction of a new composite liner system composed of geosynthetic clay liner and geomembrane, application of liner cover materials, modification of the existing pump house, and construction of a haul road and access ramps. In addition, a related temporary storage pad for dewatering flue gas desulfurization solids prior to transport and disposal needed to be closed and reconstructed due to the scrubber pond retrofit.

Heskett Units 1 & 2

Bed Ash/Limestone Equipment – This project was required at Heskett Unit 2 to comply with the North Dakota Department of Health Regional Haze State Implementation Plan in order to meet visibility improvement under round one of Regional Haze rule requirements under the Clean Air Act. Without this project, Heskett Unit 2 would have had to discontinue operations on May 7, 2017.

Material Handling – This was Phase 3 of a 3 phased project to upgrade the material handling equipment. This was required to effectively manage the unloading of coal, limestone and other bulk material while minimizing rail congestion, dusting, noise and plant labor resources.