

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION
STATE OF MINNESOTA

In the Matter of the Request by Minnesota Power
For a Certificate of Need for the
Great Northern Transmission Line

OAH Docket No. 65-2500-31196
MPUC Docket No. E-015/CN-12-1163

Exhibit _____

**OVERVIEW OF CERTIFICATE OF NEED FILING
AND PROJECT OVERVIEW**

Direct Testimony and Exhibits of

DAVID J. MCMILLAN

August 8, 2014

MR. DAVID J. MCMILLAN

OAH Docket No. 65-2500-31196

MPUC Docket No. E-015/CN-12-1163

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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is David J. McMillan and my business address at Minnesota Power is
4 30 West Superior Street, Duluth, Minnesota 55802.

5 **Q. What are your current positions with Minnesota Power and ALLETE?**

6 A. I am the Executive Vice President – Minnesota Power and Senior Vice President –
7 External Affairs – ALLETE.

8 **Q. What are your current duties with Minnesota Power and ALLETE?**

9 A. I am responsible for overseeing the rates, marketing, regional development,
10 legislative, regulatory and public affairs functions. I also provide leadership on
11 key policy issues and strategic direction for Minnesota Power and ALLETE.

12 **Q. How long have you been employed by Minnesota Power?**

13 A. I joined Minnesota Power in 1989. I became an officer of Minnesota Power in
14 1997 and became an officer of ALLETE in 2003. I assumed my present position
15 with Minnesota Power in 2006.

16 **Q. For whom are you testifying in this proceeding?**

17 A. I am testifying on behalf of Minnesota Power, an operating division of ALLETE.

18 **Q. What is the purpose of your testimony?**

19 A. My testimony provides an overview of Minnesota Power's Certificate of Need
20 Application for the Great Northern Transmission Line (also "Project") and the

1 Company's overall approach to this Project, a discussion of the Project ownership
2 and Project participants, a discussion of the potential retail rate impacts of the
3 Project on Minnesota Power's customers, and a summary of the key factors
4 supporting the issuance of a Certificate of Need for this Project. I also introduce
5 the other witnesses providing testimony on behalf of Minnesota Power who
6 provide the detailed support of our Certificate of Need application.

7 **Q. Do you also sponsor certain Sections or Appendices of Minnesota Power's**
8 **Certificate of Need Application?**

9 A. Yes, I sponsor:

- 10 • Section 1 (Executive Summary);
- 11 • Sections 3.1 and 3.2 (Project Ownership and Project Participants);
- 12 • Section 4.3.5.1 (Retail Rate Impact);
- 13 • Section 7.1 (Alternatives Analyzed and Overall Approach);
- 14 • Section 8 (Summary);
- 15 • Appendix D (Minnesota Power – Manitoba Hydro Term Sheet, September
16 27, 2013); and
- 17 • Appendix E (Manitoba Hydro Needs For and Alternatives To (“NFAT”)
18 Filing – Executive Summary, August 16, 2013).

19 **Q. Are you sponsoring any exhibits in this proceeding?**

20 A. Yes. I sponsor the following exhibits:

- 1 • Exhibit ____ (DJM), Schedule 1 – Keeyask license, issued by the
2 government of Manitoba on July 2, 2014; and
- 3 • Exhibit ____ (DJM), Schedule 2 – White House Fact Sheet, Building a 21st
4 Century Infrastructure: Modernizing Infrastructure Permitting, May 14,
5 2014.

6 **Q. What other witnesses will provide testimony on behalf of Minnesota Power?**

7 A. The following Minnesota Power witnesses will provide more detailed discussion
8 on the topics listed:

- 9 • Allan S. Rudeck, Jr., Vice President of Strategy and Planning, will discuss
10 the overall need for the Project, certain aspects of the Company’s
11 construction plans and our cost control efforts, and the generation and “no-
12 build” alternatives Minnesota Power considered;
- 13 • Jim Atkinson, Supervisor, Environmental Siting and Permitting, provides
14 testimony on the extensive public participation and stakeholder
15 involvement in this Project, on Minnesota Power’s engagement with
16 federal, State and local officials, on the other regulatory approvals
17 necessary for the Project and on environmental issues;
- 18 • Christian Winter, Transmission System Planning Engineer, provides the
19 detailed technical information on the Project and associated facilities and
20 on the transmission alternatives Minnesota Power considered;

- 1 • Mike H. Donahue, Project Manager for the Great Northern Transmission
2 Line, testifies on the cost and service characteristics of the Project, the
3 Facilities Construction Agreement between Minnesota Power and Manitoba
4 Hydro, the impact of the Project on wholesale rates and the study on overall
5 economic impacts of the Project conducted by the University of Minnesota
6 Duluth Labovitz School of Business and Economics; and
- 7 • Scott Hoberg, Supervising Engineer, sponsors several of the MISO studies
8 considered as part of Minnesota Power’s overall analysis of the Project and
9 Project alternatives.

10 **II. OVERVIEW OF THE PROJECT**

11 **Q. Can you provide an overview of the Great Northern Transmission Line**
12 **Project?**

13 A. The Great Northern Transmission Line is an approximately 220 mile 500 kV
14 transmission line from the International border that will terminate at the Minnesota
15 Power Blackberry 230/115 kV Substation (“Blackberry Substation”) in Itasca
16 County. The routing for the Project is being considered in a separate docket,
17 MPUC Docket No. E-015/TL-14-21. In addition to the transmission line itself, the
18 Project includes expansion of the Blackberry Substation to accommodate the 500
19 kV line, 500/230 kV transformation, and all associated 500 kV and 230 kV
20 equipment. Pending receipt of all necessary regulatory approvals, construction of

1 the line is anticipated to begin in June, 2016 and take approximately 48 months to
2 complete, with a projected in-service date of June 1, 2020. Mr. Winter and Mr.
3 Donahue provide further detail on the Project components and costs.

4 **Q. Why has Minnesota Power brought forward the Great Northern**
5 **Transmission Line Project at this time?**

6 A. The Company has brought forward this Project for many reasons, as discussed in
7 my and our other witnesses' testimony. Fundamentally, however, we have
8 brought this Project forward because Minnesota Power and our customers need the
9 Great Northern Transmission Line to supply the energy and capacity necessary to
10 meet our long-term resource needs and to fill those needs the Company desires to
11 use hydroelectric power because it provides all of the following attributes:
12 optionality, energy storage potential, reliability, stable price and zero carbon
13 emissions.

14 **Q. And how does the Project fit within the Company's overall resource strategy?**

15 A. As Mr. Rudeck discusses in more detail, the Great Northern Transmission Line
16 Project is a central element of Minnesota Power's long-term **EnergyForward**
17 resource strategy. **EnergyForward** is designed to deliver an affordable, reliable,
18 environmentally sustainable and diverse mix of energy resources for our
19 customers.

1 Through **EnergyForward**, Minnesota Power is working to meet the energy needs
2 of our customers with a balanced energy mix that preserves reliability, protects
3 affordability and further improves environmental performance. **EnergyForward**
4 builds on and compliments the substantial zero carbon emitting energy
5 investments the Company has already completed and will further diversify our
6 generation mix, growing zero carbon emitting and natural gas market resources
7 while continuing to utilize baseload energy from existing low emission coal power
8 plants. The key components of the **EnergyForward** strategy are Minnesota
9 Power's zero carbon emitting energy investments, including 600 megawatts of
10 clean, renewable wind energy; in-State hydroelectric and biomass; and
11 construction of the Great Northern Transmission Line to facilitate delivery of
12 hydropower from Canada.

13 **Q. Can you further describe the hydropower deliveries that the Project**
14 **supports?**

15 A. The Great Northern Transmission Line supports two sets of agreements between
16 Minnesota Power and Manitoba Hydro. First, the Project supports the 2011 250
17 MW Power Purchase Agreement and Energy Exchange Agreement between
18 Minnesota Power and Manitoba Hydro (collectively the "250 MW Agreements"),
19 approved by the Minnesota Public Utilities Commission ("Commission") in 2012
20 in MPUC Docket No. E-015/M-11-938 ("938 Docket"). In addition to providing

1 needed capacity and energy to Minnesota Power, the 250 MW Agreements contain
2 innovative wind storage provisions that leverage the flexible and responsive nature
3 of hydropower to enhance the value of Minnesota Power’s significant wind energy
4 investments.

5 The Project also supports the recently executed 2014 133 MW Energy Sale
6 Agreement and Energy Exchange Agreement (collectively, the “133 MW
7 Renewable Optimization Agreements,” included as a Schedule to Mr. Rudeck’s
8 testimony) between Minnesota Power and Manitoba Hydro. The 133 MW
9 Renewable Optimization Agreements provide additional needed energy as well as
10 enabling further wind storage.

11 These agreements with Manitoba Hydro not only provide critical capacity and
12 energy resources for Minnesota Power and its customers, but do so while
13 optimizing the value of our wind energy investments, diversifying our energy
14 portfolio and lessening our reliance on coal-fired electricity – a major goal of our
15 **EnergyForward** strategy. In fact, combining the 250 MW Agreements and the
16 133 MW Renewable Optimization Agreements (collectively, the “Manitoba Hydro
17 Agreements”), Minnesota Power has procured a total of over 1.5 million megawatt
18 hours (“MWh”) of hydropower annually, and the ability annually to store 1
19 million MWh of wind power in Manitoba Hydro’s system. Mr. Rudeck provides
20 further discussion of the 133 MW Renewable Optimization Agreements and the

1 overall need for this Project and how it supports the Company's **EnergyForward**
2 resource strategy.

3 **Q. Why are the energy storage provisions of the Manitoba Hydro Agreements**
4 **important and how does the Project facilitate that energy storage?**

5 A. Manitoba Hydro's system has the unique capability of storing energy throughout
6 its 5,700 MW system in a way that no other regional asset or system can. When
7 the Project is completed, the Company will be able to determine when Manitoba
8 Hydro energy can be best utilized to complement our world-class, but still
9 intermittent, Bison wind resources. We expect the 1 million MWhs of storage to
10 roughly equate to the off-peak production capabilities of the Bison assets --
11 producing tremendous resource utilization advantages for our customers.

12 **Q. Does the Project's ability to deliver additional hydropower to Minnesota**
13 **Power and other regional utilities provide benefits in addition to this "energy**
14 **storage" component?**

15 A. Absolutely. Manitoba Hydro and United States utilities such as Minnesota Power
16 have operated with high voltage transmission interconnections in place for
17 decades, utilizing these assets as well as other regional transmission infrastructure
18 to transact a varied and dynamic range of energy supply, diversity exchange,
19 excess energy, capacity and other arrangements. Both Manitoba Hydro and its
20 United States utility partners have benefitted from this trading relationship in

1 multiple ways, most importantly by supporting regional reliability and by bringing
2 large amounts of energy into the region, thereby helping to keep regional
3 electricity prices competitive. For example, as a winter peaking utility, Manitoba
4 Hydro and summer peaking United States utilities have been able to engage in
5 seasonal diversity exchanges, with Manitoba Hydro supplying surplus power from
6 its system in the summer and United States utilities supplying surplus power in the
7 winter, lessening the need for utilities on either side of the border to build
8 additional peaking resources. By facilitating more such transactions, the Project
9 cannot only bring more such load balancing benefits, it also reduces the need to
10 depend on price volatile and carbon-emitting natural gas resources. For Minnesota
11 Power specifically, Manitoba Hydro has provided a cost-effective resource option
12 (as evidenced by Commission approval of our power purchase agreements) that
13 significantly diversifies our supply portfolio.

14 **Q. Are the Project and the associated Manitoba Hydro Agreements also**
15 **consistent with State policy objectives?**

16 A. Yes. Moving away from heavy dependence on carbon intensive resources is
17 squarely aligned with Minnesota's energy direction as evidenced by the Minnesota
18 Legislature's enactment of Minnesota Statutes Chapter 216H (the State's
19 "Greenhouse Gas Emissions" statute), by Commission resource planning orders,
20 and other actions. Moreover, by adding another high voltage, large capacity

1 interconnection with Manitoba Hydro, the Project will advance the State's
2 interests in adding more intermittent zero carbon emitting generation resources.

3 **Q. Can current transmission facilities support the new agreements between**
4 **Minnesota Power and Manitoba Hydro?**

5 A. No. Other Minnesota Power witnesses provide detailed discussion of the regional
6 transmission system, its constraints and the various transmission alternatives
7 Minnesota Power considered. However, the bottom line is that current
8 transmission resources cannot facilitate such significant new energy exchanges
9 between Manitoba and the United States, as the Commission recognized when it
10 approved the 250 MW Agreements with Manitoba Hydro. In the 938 Docket, the
11 Commission acknowledged that both Minnesota Power and Manitoba Hydro must
12 construct their own new transmission facilities to allow the energy sales to occur.
13 For Minnesota Power's customers, the Project represents the Minnesota portion of
14 the new transmission facilities necessary to deliver the power called for under the
15 250 MW Agreements and the 133 MW Renewable Optimization Agreements.

16 **Q. Is Manitoba Hydro also pursuing new transmission and related facilities in**
17 **Canada?**

18 A. Yes. Manitoba Hydro is simultaneously developing the Canadian portion of these
19 major new transmission facilities. In our October 2013 Certificate of Need
20 Application, Minnesota Power explained that Manitoba Hydro had recently

1 submitted its Needs For and Alternatives To (“NFAT”) filing with the Manitoba
2 Public Utilities Board (“PUB”). In its NFAT submission, Manitoba Hydro set out
3 its Preferred Development Plan, including commencing construction of the 695
4 MW Keeyask Generating Station in June 2014 for a 2019 in-service date along
5 with the construction of the Canadian transmission component that will meet the
6 Project at the United States – Canada border. Since the filing of our Application,
7 the government of Manitoba has not only affirmed the need for Keeyask and the
8 new transmission line, it has also issued the license for Manitoba Hydro to begin
9 construction. On July 16, 2014 Manitoba Hydro and its Cree Nation partners
10 (Tataskweyak, War Lake, York Factory and Fox Lake First Nations) began
11 construction at Keeyask – a critical resource addition to support the 250 MW
12 Agreements and the 133 MW Renewable Optimization Agreement, as well as a
13 resource capable of supporting other sales of hydropower to United States
14 utilities.¹ Manitoba Hydro is also pursuing National Energy Board (“NEB”) approval of the Canadian portion of this new transmission project, given that the
15 line will cross the Canadian-United States border and is pursuing approval of the
16 routing of the Canadian portion of this new transmission interconnection known in
17 Canada as the Manitoba-Minnesota Transmission Line.
18

¹ For reference, the Provincial license for Keeyask is attached as Ex. ____ (DJM), Schedule 1 and the PUB’s full NFAT Report can be viewed at www.pub.gov.mb.ca/nfat/pdf/finalreport_pdp.pdf.

1 As Minnesota Power discussed in our Application, the NFAT also discussed the
2 potential development of the 1,485 MW Conawapa generating station. Manitoba
3 has not determined to move forward with Conawapa at this time. However,
4 Conawapa was not anticipated to be able to be in service until 2026 at the earliest,
5 or six years after the scheduled in-service date for the Great Northern
6 Transmission Line. The current lack of certainty regarding the timing of this
7 additional resource option does not lessen the need for the Project nor does it alter
8 Minnesota Power's requirements in the 250 MW Agreements to have a new
9 international transmission line in-service by June 1, 2020. Moreover, the unique
10 structure of the Manitoba Hydro Agreements means that the Project can meet
11 Minnesota Power's needs, while protecting our ratepayers and also improving
12 overall transmission system reliability and facilitating additional energy sales
13 between Manitoba Hydro and other regional utilities – providing State and
14 regional benefits.

15 **Q. What do you see as the key benefits of this Project for Minnesota Power and**
16 **its customers?**

17 A. The Project is a once-in-a-generation opportunity for Minnesota Power and its
18 customers to connect to the most advantageous and complementary carbon free
19 resource available in the Upper Midwest. Minnesota Power's **EnergyForward**
20 strategy envisions at least one-third of the Company's portfolio being carbon-free

1 renewable energy. Our North Dakota wind resources generate at capacity factors
2 ranging from 40 to 45 percent. While those capacity factors are almost
3 unparalleled for on-shore wind resources, these wind resources remain
4 intermittent. The Manitoba Hydro Agreements will complement our North
5 Dakota wind energy by “firming up” those resources and doing so with a zero
6 carbon emitting resource. As I discuss below, Manitoba Hydro, with the approval
7 of its PUB, is shouldering the bulk of the construction costs and a majority of the
8 long-term operations expenses and risk associated with building and owning a 500
9 kV asset. Manitoba Hydro is also enabling Minnesota Power to utilize the
10 Manitoba Hydro system for energy storage as well as allowing Minnesota Power
11 to keep the value of environmental attributes associated with energy purchases.
12 Minnesota Power’s customers stand to benefit over the next four decades from this
13 opportunity.

14 **III. PROJECT OWNERSHIP.**

15 **Q. Please discuss the Project participants and Project ownership.**

16 A. Minnesota Power is constructing the Great Northern Transmission Line as part of
17 a joint effort with Manitoba Hydro, which is constructing and will have sole
18 ownership of the Canadian portion of this new interconnection.

19 On the United States side, Minnesota Power will have majority ownership (51
20 percent) of the Project. The balance of the Project (49 percent) will be owned by a

1 subsidiary of Manitoba Hydro,² although the subsidiary may sell all or a portion of
2 its share to one or more United States utilities before, during or after construction.
3 Importantly, while Minnesota Power will own 51 percent of the Project, under the
4 terms of the Manitoba Hydro Agreements, Minnesota Power's customers will be
5 financially responsible for only 28.3 percent of the Project's capital revenue
6 requirements – the equivalent of the revenue requirements associated with 250
7 MW of the Project's total estimated transfer capability. Conversely, while
8 Manitoba Hydro will own a minority interest in the Project, it will be financially
9 responsible for the majority of the Project costs. This distinction between
10 "ownership" and "financial responsibility" is critical to understanding the full
11 benefits of the Project to Minnesota Power and our ratepayers.

12 **Q. The Application stated that Minnesota Power and its customers would have**
13 **financial responsibility for one-third of the Project costs. Can you explain**
14 **why you now state that the Company's customers will be responsible for a**
15 **smaller share?**

16 A. In the Application at page 16, Minnesota Power indicated that it would be
17 responsible for 33.3 percent of the Project's revenue requirements, with the 17.7
18 percent differential between this responsibility share and the Company's
19 ownership share covered by Manitoba Hydro under a "Monthly Must Take Fee" to

² For ease of review, references to Manitoba Hydro in this testimony also encompass its subsidiary, 6690271 Manitoba Ltd.

1 be included in the 133 MW Renewable Optimization Agreements, meaning that
2 the Company and its ratepayers would be responsible only for the revenue
3 requirements associated with 250 MW of the Project's total transfer capability.
4 Since the Application was filed, the Company has continued to ensure that its
5 customers would only bear the revenue requirements responsibility associated
6 with 250 MW of transfer capability.

7 However, three subsequent events have changed the Company's and our
8 customers' percentage share of the overall revenue responsibility. First, as
9 discussed by Mr. Winter, the total transfer capacity of the line has been estimated
10 to be 883 MW, not 750 MW as assumed at the time of the Application. Second,
11 Minnesota Power and Manitoba Hydro have finalized the 133 MW Renewable
12 Optimization Agreements. Third, the Company and Minnesota Power have
13 executed a Facilities Construction Agreement ("FCA"), as discussed by Mr.
14 Donahue.

15 In order for Minnesota Power to retain a 51 percent ownership in the line, while
16 not bearing more revenue responsibility than that associated with 250 MW of
17 transfer capability, the final agreements between the Company and Manitoba
18 Hydro call for: (1) Minnesota Power to ultimately bear 28.3 percent responsibility,
19 (2) the "Monthly Must Take Fee" included in the 133 MW Renewable
20 Optimization Agreements to continue covering 17.7 percent of the responsibility,

1 and (3) Manitoba Hydro to provide a 5 percent Contribution In Aid of
2 Construction (“CIAC”) payment to the Company – collectively totaling the 51
3 percent ownership held by Minnesota Power. Mr. Rudeck and Mr. Donahue
4 provide further discussion on these matters, but the benefits to Minnesota Power
5 and our customers of this unique business arrangement should be clear –
6 Minnesota Power and its customers gain the benefits of the economies of scale,
7 optionality and energy storage that are only available with a 500 kV line and the
8 benefits of the Manitoba Hydro Agreements, while bearing the revenue
9 responsibility associated with 250 MW of transfer capability.

10 **Q. Can you also discuss project construction and operations and maintenance?**

11 A. Yes. Mr. Donahue discusses this further, but Minnesota Power will serve as the
12 construction manager for all assets within the United States and will also operate
13 and maintain all Project assets located within the United States. Minnesota Power,
14 through an Operation and Maintenance agreement will invoice the Manitoba
15 Hydro subsidiary monthly for its 49 percent pro rata share of Operation and
16 Maintenance expenses associated with the Project. Once in-service, functional
17 control of the entire Project will be turned over to MISO.

1 **IV. RETAIL RATE IMPACT**

2 **Q. Can you estimate the Project's impact on the Company's retail customers?**

3 A. Yes. Table 4.3.5.1 in our Application summarized the estimated Minnesota
4 jurisdictional revenue requirements and rate impacts by customer class for the
5 expected in-service year beginning June 1, 2020 based on the information
6 available at that time. The Minnesota jurisdictional and class requirements were
7 derived by multiplying the total Minnesota Power customer revenue requirements
8 by Minnesota Power's current D-02 Transmission Demand jurisdictional and class
9 allocators. For the average residential customer, the rate impact in 2020 would be
10 approximately \$2.51 per month. If compared to the estimated average current
11 residential rate in 2014 (based on Final General Rates from our 2009 rate case,
12 adjusted to include current rider rates), this would represent an increase of
13 approximately 3.3 percent. By 2020, however, the percent increase is expected to
14 be lower because base rates will likely increase as other system costs change and
15 are incorporated into base rates through future rate cases and other mechanisms.
16 For our Large Power customers, the estimated rate impact for the year 2020 would
17 be approximately 0.261¢ per kWh of energy. If compared to the estimated
18 average current Large Power rate for 2014, this would represent an increase of
19 approximately 4.9 percent. As with residential rates, the percent increase is
20 expected to be lower by 2020 because base rates will likely increase due to

1 changes in other system costs that will be incorporated into base rates through
2 future rate cases and other mechanisms. These estimates would also be impacted
3 by future changes in Minnesota Power's D-02 Transmission Demand
4 jurisdictional and class allocators.

5 **Q. Has the Company reviewed these previous estimates in light of updated**
6 **Project cost information?**

7 A. Yes. Given the current estimates of overall Project cost, the total Minnesota
8 Power customer revenue requirements have increased by about \$5.4 million in
9 2020. However, this is offset by a revenue credit of about \$4.5 million in the first
10 year for a portion of the operation and maintenance, property tax, and
11 administrative and general expenses that will be covered by Manitoba Hydro.
12 After apportioning these totals to the retail jurisdiction, the Minnesota Power retail
13 revenue requirements for the first year would be about \$0.7 million higher than
14 stated in the Application, meaning rate impacts less than one-tenth of one percent
15 higher for residential customers and about 0.15 percent higher for Large Power
16 customers, when compared to the numbers presented in the Application. Thus, I
17 believe the Application continues to present a reasonable estimate of the ultimate
18 retail rate impacts of the Project.

1 **Q. And how would these retail rate impacts compare to the impact on customers**
2 **if Minnesota Power pursued a smaller 230 kV line instead of the Project?**

3 A. As discussed in the Application, our retail customers would actually pay more for
4 a smaller line than for the Project. In fact, using the current cost estimates and
5 revenue requirements responsibilities, the additional costs that would be imposed
6 on Minnesota Power customers from a smaller line have grown. As discussed
7 above and in the testimony of Mr. Donahue, Minnesota Power ratepayers will be
8 responsible for only 28.3 percent of the Project cost, currently estimated to equate
9 to \$158 million to \$201 million, with a midpoint of \$179.5 million. In contrast,
10 Mr. Donahue explains that the 230 kV alternative is now estimated to cost
11 between \$277 million and \$355 million, with a midpoint of \$316 million.
12 Moreover, Minnesota Power and our customers would bear 100 percent
13 responsibility for those costs, meaning the 230 kV alternative would be
14 substantially more expensive for our customers than the Project.

15 **V. ALTERNATIVES CONSIDERED**

16 **Q. Can you provide an overview of Minnesota Power's consideration of potential**
17 **alternatives to the Great Northern Transmission Line?**

18 A. Yes. Minnesota Power examined a number of alternatives, discussed in further
19 detail by Mr. Rudeck and Mr. Winter, including: generation alternatives; various
20 transmission solutions, including upgrading existing facilities, and using different

1 voltage levels and different endpoints; and a “no-build alternative.” Our
2 alternatives analysis was informed by a number of studies, including several
3 MISO studies sponsored by Mr. Hoberg. As demonstrated in our Application and
4 supported by these witnesses, none of the alternatives considered provides a more
5 reasonable and prudent option for Minnesota Power and its customers than the
6 Project.

7 When compared to generation alternatives such as fossil fuel powered resources,
8 the Project and the associated hydropower it makes available will produce
9 significantly fewer greenhouse gas emissions. Of course, the goal of lowering
10 greenhouse gas emissions is becoming increasingly important as the State and
11 federal governments continue to push utilities to reduce such emissions through
12 efforts such as the Environmental Protection Agency’s recently published
13 proposed Clean Power Rule (Clean Air Act § 111(d)). The Project enables
14 Minnesota Power to continue reshaping its energy supply portfolio from a
15 predominantly coal-based supply to a balanced mix of one-third renewable energy,
16 one-third market and/or natural gas energy and one-third coal-based energy. As
17 such, the Project will allow the Company to better manage risk associated with
18 any additional federal or State regulations and policies that restrict carbon
19 emissions or penalize generators of those emissions, benefitting both the
20 environment and our ratepayers.

1 Compared to the other transmission alternatives, a 500 kV transmission line with
2 the cost allocation described above is the most prudent project for Minnesota
3 Power's ratepayers. Not only will the Project meet Minnesota Power's needs by
4 supporting the Manitoba Hydro Agreements, it will also benefit the State and
5 region through increased reliability and capacity to import hydropower from
6 Manitoba. Given Manitoba Hydro's current and pending agreements with other
7 Minnesota and regional utilities,³ Manitoba Hydro requires the transmission
8 capacity available with a 500 kV line. A smaller line would not only fail to
9 facilitate these additional sales, forfeiting the State and regional benefits of
10 additional hydropower, it would actually impose greater costs on Minnesota
11 Power's customers.

12 Finally, the "no build" alternative cannot enable Minnesota Power to meet the
13 needs of its customers. Northeastern Minnesota is poised for economic
14 development with new mining operations and expansions of existing operations.
15 The Project, and the associated hydropower from Manitoba Hydro, enables
16 Minnesota Power to meet a growing need for capacity and energy at a reasonable
17 cost and in an environmentally responsible manner.

³ As discussed in the PUB's NFAT Report, Manitoba Hydro has current and future contracts totaling several hundred MW with Xcel Energy, Great River Energy and Wisconsin Public Service, in addition to its contracts with Minnesota Power.

1 **VI. SUMMARY OF NEED**

2 **Q. What criteria does the Commission consider in determining whether to issue**
3 **a Certificate of Need for a large energy facility such as the Great Northern**
4 **Transmission Line?**

5 A. Under the Commission's Certificate of Need Rules, the Commission considers the
6 following criteria:

7 1. Whether the probable direct or indirect result of denial would be an adverse
8 effect upon the future adequacy, reliability, safety, or efficiency of energy supply
9 to the Company, our customers, or to the people of Minnesota and neighboring
10 states;

11 2. Whether a more reasonable and prudent alternative to the proposed facility
12 has been demonstrated by a preponderance of the evidence on the record by
13 parties or persons other than the Company;

14 3. Whether a preponderance of the evidence on the record demonstrates that
15 the consequences of granting the Certificate of Need for the Project are more
16 favorable to society than the consequences of denying the certificate; and

17 4. That it has not been demonstrated on the record that the design,
18 construction, operation, or retirement of the proposed facility will fail to comply
19 with relevant policies, rules, and regulations of other State and federal agencies
20 and local governments.

1 **Q. What would be the impact on Minnesota Power, its customers, the State and**
2 **the region if the Certificate of need is denied?**

3 A. Denial of the Certificate of Need would adversely impact each of these interests.
4 As shown in Appendix C to our Application, in the 938 Docket (and associated
5 dockets), the Department and Commission analyzed the Company's capacity
6 energy supply needs and determined that the Company has the need for increased
7 capacity and energy and that the hydropower made available to Minnesota Power
8 by the 250 MW Agreements represents the most appropriate resources to meet
9 those needs. Those needs continue to exist and without the Project, they cannot
10 and will not be met by increased reliable, affordable and sustainable hydropower.
11 In the absence of the Project, Minnesota Power would need to meet its customers'
12 needs through other, more expensive options including, almost certainly, increased
13 reliance on fossil fuels, especially natural gas as the Company would need to add a
14 resource with the ability to compliment wind resources. Moreover, the State and
15 region benefit from the Project by the increased ability for Minnesota and regional
16 utilities to access this hydropower. As Mr. Winter discusses, the existing
17 interconnection between Manitoba and Minnesota cannot support such increased
18 access. Further, the Project addresses a major contingency in the regional
19 transmission grid by providing a second major interconnection, again providing

1 both State and regional benefits. Denial of the Certificate of Need forfeits all of
2 these benefits.

3 **Q. Is Minnesota Power aware of a more feasible and prudent alternative to the**
4 **Project?**

5 A. No. As I discuss above, and as Mr. Rudeck and Mr. Winter discuss in further
6 detail, none of the alternatives Minnesota Power has analyzed provide the benefits
7 to the Company, its customers and the State and region that the Great Northern
8 Transmission Line provides.

9 **Q. Will the Project protect the environment and provide benefits to Minnesota**
10 **Power's customers, the State and the region?**

11 A. Absolutely. Minnesota Power is committed to being a good steward of the
12 environment and we have consistently demonstrated that commitment. For
13 example, through our **EnergyForward** strategy, of which this Project is a key
14 component, we are diversifying our energy mix by increasing our use of
15 renewable energy sources and reducing our reliance on fossil fuel fired generation
16 generally and by significantly reducing our reliance on coal fired generation in
17 particular. In addition, our work on the Project has involved an unprecedented
18 level of commitment and coordination with key stakeholders, including the public
19 and governmental entities, all aimed at understanding and addressing potential
20 environmental concerns associated with a transmission line project of this scope.

1 The environmental impact of Project is being jointly reviewed by the State of
2 Minnesota and the United States Department of Energy, with the full cooperation
3 of the Company. In fact, the Project was recognized by the White House in a May
4 2014 Fact Sheet titled “Building a 21st Century Infrastructure: Modernizing
5 Infrastructure Permitting”, Ex. ____ (DJM), Schedule 2, for its efforts in early
6 coordination with federal, State and local entities. Mr. Atkinson discusses this
7 further in his testimony.

8 Additionally, the Project provides significant economic benefits to Minnesota
9 Power’s service territory, including construction jobs, tax revenues and other
10 benefits. To assess the overall economic impact of the Project, Minnesota Power
11 contracted with the Labovitz School of Business and Economics (Bureau of
12 Business and Economic Research) at the University of Minnesota Duluth to
13 conduct an economic impact study on the Project (the “Labovitz Study”), attached
14 as Appendix L to the Certificate of Need Application. The Labovitz Study shows
15 that construction of the Project will generate over \$850 million in economic
16 impact in northern Minnesota for the design and construction period of 2016
17 through 2020.

1 **Q. Will the Project comply with all applicable federal, State and local permitting**
2 **requirements?**

3 A. Yes. Minnesota Power will continue to work with all federal, State and local
4 governmental authorities to obtain all necessary permits and is fully committed to
5 compliance with those permits.

6 **Q. Does this complete your testimony?**

7 A. Yes.

8 9377248v1



MINISTER OF
CONSERVATION AND WATER STEWARDSHIP

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

Client File 5550.00

July 2, 2014

Bruce Barrett, President
Keeyask Hydropower Limited Partnership
360 Portage Ave.
P.O. Box 815, Stn Main
Winnipeg MB R3C 2P4

Dear Mr. Barrett:

Enclosed is Environment Act licence No. 3107 dated July 2, 2014 issued to Keeyask Hydropower Limited Partnership for the construction, operation, maintenance and decommissioning of the Keeyask Generation Station and related dams, dikes, channels, control structures and infrastructure.

In addition to the Licence requirements, it is my intention to ensure that all of the non-licensing recommendations in the Clean Environment Commission report be implemented. In addition to the Clean Environment Commission report, I reviewed and considered the Crown-Aboriginal consultation report before making a licensing decision. Technical staff in my department will contact you in the near future to discuss implementation of the recommendation to investigate and incorporate Aboriginal traditional knowledge and local knowledge of historical "summer resident caribou" to inform the current status and management of this population.

I address the following requirements specifically to Manitoba Hydro:

- As outlined in the Environmental Impact Statement, and exceeding the recommendations in the related Keeyask Clean Environment Commission report, licence conditions have been imposed to ensure that Manitoba Hydro implements a world class, leading edge program to protect the Lake Sturgeon population that may be affected by the construction and operation of this project. We expect that Manitoba Hydro establish and maintain a robust and self-sustaining Lake Sturgeon population in affected areas of the Nelson and Burntwood River systems throughout the life of the project. An expert committee will be formed consisting of Manitoba Hydro, on behalf of the Keeyask Hydropower Limited Partnership, the federal Department of Fisheries and Oceans, and Conservation and Water

Stewardship, and Fisheries Branch whose purpose is to independently review the results of the annual conservation and stocking Lake Sturgeon monitoring program and to recommend adaptive management strategies.

- Manitoba Hydro has stated that once the Keeyask Generating Station is operational, the need for coal-fired emergency generation will be eliminated. This is consistent with government's commitment to clean energy. As such, pursuant to Environment Act licence No. 1703R, Manitoba Hydro must cease coal-fired operations of the Brandon Generating Station Unit 5, as of December 31, 2019. It is expected that there will be no layoffs as a result of this closure and Manitoba Hydro will manage accordingly.
- Manitoba Hydro will be required to invest in educational and/or knowledge transfer programs that promote trapping as well as plant harvesting to affected communities.
- Manitoba Hydro will be required to continue to fund efforts to prevent and manage infestation of zebra mussels and other invasive species which may negatively affect Hydro development.
- By June 2015, Manitoba Hydro is required to undertake a comprehensive review of pesticide use for new development and existing operations with the objective of eliminating or reducing pesticide use and moving to lower risk pesticides.
- Manitoba Hydro is required to seek to rehabilitate the landscape, where possible, including the Sundance town site, unused borrow pits, storage yards, dumps, and other such disturbances.
- The final results of the Regional Cumulative Effects Assessment are due no later than October 31, 2015. Included in the attached licence is a clause that refers to this Assessment and provides the Director authority to require Manitoba Hydro to conduct additional monitoring or corrective action should the results of the Assessment indicate such work would be environmentally beneficial in the project area.
- I understand that Manitoba Hydro has no future development plans for the Seal River. Over the next three years, Manitoba intends to consult on options to protect the Seal River ecosystem as a critical habitat for the beluga whale.

The Keeyask Hydropower Limited Partnership represents a very significant and positive joint venture between Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation, Fox Lake Cree Nation and Manitoba Hydro, and one which we believe speaks to an ongoing process of partnership and reconciliation.

We are pleased with the work of the Partnership in effectively incorporating both traditional and western scientific knowledge into the Keeyask project Environmental Impact Statement and related filings – this joint approach has produced a deeper and more robust assessment of impacts and mitigation and avoidance strategies. We encourage the Partnership to continue to work toward expanding opportunities for Aboriginal skills training and employment in connection to the Keeyask project.

The Manitoba Government also encourages Manitoba Hydro to continue along this path of reconciliation with all of Manitoba's Aboriginal and northern communities, to recognize the significant effects of earlier hydro development on local communities and the wider environment, and to apply lessons learned from the past to build more positive relationships and partnerships

going forward. Among other initiatives, we encourage Manitoba Hydro to explore with Aboriginal communities the renaming of past development projects to better reflect traditional values, and to continue to increasingly engage aboriginal and local labour in development projects and ongoing operations.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with. A Notice of Alteration must be filed with the Minister for approval prior to any alteration to the Development as licensed.

Pursuant to Section 27 of *The Environment Act*, this licensing decision may be appealed by any person who is affected by the issuance of this Licence within 30 days of the date of the Licence.

Yours truly,

Original Signed By _____

Gord MackIntosh

The Environment Act

Enc.

c: Don Labossiere, Director, Environmental Compliance and Enforcement
Pierce Roberts, Director, Regional Services
Public Registries, Public Distribution List

NOTE: Confirmation of Receipt of this Licence No. 3107 (by the Licensee only) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by July 18, 2014.

On behalf of the Keeyask Hydropower Limited Partnership

Date

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

Keeyask Generation Project – Public Distribution List

| |
|-------------------------------|
| Public Interest Law Centre |
| Ian RJ Brown |
| Manitoba Wildlands |
| The Manitoba Métis Federation |
| Nisichawayasihk Cree Nation |
| Pimicikamak Okimawin |
| Peguis First Nation |
| Clean Environment Commission |

The Environment Act
Loi sur l'environnement

THE ENVIRONMENT ACT
LOI SUR L'ENVIRONNEMENT

Manitoba 

LICENCE

Licence No. / Licence n° 3107
Issue Date / Date de délivrance July 2, 2014

In accordance with *The Environment Act* (C.C.S.M. c. E125) /
Conformément à la *Loi sur l'environnement* (C.P.L.M. c. E125)

Pursuant to Section 12(1) / Conformément au Paragraphe 12(1)

THIS LICENCE IS ISSUED TO : / CETTE LICENCE EST DONNÉE À :

KEYYASK HYDROPOWER LIMITED PARTNERSHIP;
"the Licencee"

for the Development being the Keeyask Generation Project, a 695-megawatt hydroelectric generating station, located on the lower Nelson River, approximately 180 km northeast of Thompson. The Development involves the construction, operation, maintenance and decommissioning of the Keeyask Generating Station, and related dams, dikes, channels, control structures and infrastructure, including roads, in accordance with the Proposal filed under *The Environment Act*, dated December 9, 2011, and the Environmental Impact Statement (EIS), dated July 6, 2012, and additional information dated November 19, 2012, April 24, 2013, April 26, 2013, July 12, 2013, July 22, 2013 and August 23, 2013, and in consideration of the April 2014 Clean Environment Commission Report on Public Hearings, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence:

"affected area" means a geographical area, excluding the property of the Development;

"aggregate" means any crushed stone or slag, crushed or uncrushed gravel, sand or mineral filler;

"approved" means approved by the Director or Environment Officer in writing;

"Director" means an employee so designated pursuant to *The Environment Act*;

****A COPY OF THIS LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

"Environment Officer" means an employee so designated pursuant to *The Environment Act*;

"Offsetting Programs" means programs that are intended to provide appropriate replacements, substitutions and opportunities to compensate for unavoidable effects associated with the Development on practices, customs and traditions integral to the distinctive cultural identity of each of the Keeyask Cree Nations;

"opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;

"PIT tags" means Passive Integrated Transponder tags, consisting of an integrated circuit chip, capacitor, and an encased antenna coil used for tracking individual organisms;

"particulate matter" means any finely divided liquid or solid matter other than water droplets;

"particulate residue" means that part or portion of an atmospheric emission which is deposited onto a surface;

"point source" means any point of emission from the Development where pollutants are ducted into the atmosphere;

"riparian area" means an area of land on the banks or in the vicinity of a waterbody, which due to the presence of water supports, or in the absence of human intervention would naturally support, an ecosystem that is distinctly different from that of adjacent upland areas (*The Water Protection Act 2005*);

"study area" means the geographical limits within which effects on an element of the environment or key topic is assessed in the Environmental Impact Statement for the Development;

"summer resident caribou" as identified in the Environmental Impact Statement, means a population of caribou that uses a smaller range than migratory caribou, and is more likely to use calving and rearing habitat that occurs within the Keeyask region;

"waterbody" means any body of flowing or standing water, whether naturally or artificially created, and whether the flow or presence of water is continuous, intermittent or occurs only during a flood, including but not limited to a lake, river, creek, stream, and wetland (slough, marsh, swamp, etc.), including ice on any of them (*The Water Protection Act 2005*); and

"wetland" means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and

various kinds of biological activity which are adapted to a wet environment. They are generally less than approximately 2 metres in depth (National Wetland Working Group 1997).

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

Compliance

1. The Licencee shall adhere to the commitments made in the Proposal, supporting information filed in association with the Proposal, and plans submitted and approved pursuant to this Licence during construction, maintenance, operation and decommissioning of the Development.

Additional Permits

2. The Licencee shall, prior to commencing construction of the Development, apply for and obtain all land tenure allocations and Work Permits as required from the appropriate Conservation and Water Stewardship district office and shall comply with the conditions of all permits.
3. The Licencee shall, prior to commencing construction of the Development, obtain all permits and agreements as required by Manitoba Infrastructure and Transportation.

Environmental Inspection

4. The Licencee shall, during construction of the Development, employ qualified environmental inspectors to monitor the work on a daily basis to ensure that all the environmental practices outlined in the Proposal, supporting information, and the plans submitted pursuant to this Licence are carried out.

Additional Reporting

5. The Licencee shall, in addition to any of the specifications, limits, terms and conditions specified in this Licence, upon the request of the Director:
 - a) sample, monitor, analyse or investigate specific areas of concern regarding any segment, component or aspect of the Development for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated from the Development;

- c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
- d) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and other information as may from time to time be requested.

Reporting Format

- 6. The Licencee shall submit all information required to be provided to the Director or Environment Officer under this Licence, in writing, in such form (including number of copies) and of such content as may be required by the Director or Environment Officer, and each submission shall be clearly labelled with the Licence Number and Client File Number associated with this Licence.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Notification

- 7. The Licencee shall, prior to beginning construction of the Development, provide notification to the Environment Officer responsible for the administration of this Licence of the intended start date of construction and the name of the contractor(s) responsible for the construction.
- 8. The Licencee shall, prior to construction, provide a copy of this Licence to the contractor(s) and subcontractor(s) involved in the Development.

Access Routes

- 9. The Licencee shall not create or improve roads or short access routes for construction and/or maintenance of the Development without written approval from the Northeast Region Integrated Resource Management Team (IRMT) of Conservation and Water Stewardship.
- 10. The Licencee shall submit an access route inventory and decommissioning and rehabilitation plan for all access routes created or improved in association with the Development, upon completion of construction of the Development, as required by the Northeast Region IRMT.

Local Aboriginal Language

- 11. The Licencee shall submit a plan for approval of the Director, prior to November 30, 2014, describing how locations and road signs will include local language and nomenclature.

Air Quality

12. The Licencee shall minimize the burning of slash generated during clearing of the Development where smoke may affect residences. In such cases, the Licencee shall dispose of slash using environmentally suitable methods such as chipping and mulching, where feasible.
13. The Licencee shall undertake dust control measures during construction. Water required for dust control during construction shall be obtained from a source other than waste water treatment facilities.

Blasting

14. The Licencee shall, during construction of the Development, undertake blasting associated with construction, demolition and aggregate preparation activities in accordance with guidelines prepared by the federal Department of Fisheries and Oceans.

Borrow Pits

15. The Licencee shall construct borrow pits in connection with the Development to minimize environmental and aesthetic impacts. Borrow pit designs shall be approved in writing by the IRMT prior to construction, and subject to the requirements of a Quarry Permit. Reclamation of individual borrow pits shall occur as they are no longer in use for the Development, unless otherwise approved by the Director.

Environmental Protection Plans

16. The Licencee shall submit Environmental Protection Plans for the approval of the Director prior to commencing construction of the Development. These plans shall describe the approach to be used by the Licencee to ensure that mitigative measures are applied systematically, and in a manner consistent with the commitments made in the EIS. Separate plans may be submitted for different components of the Development. Specifically, the plans shall:
 - a) incorporate both western science and Aboriginal Traditional Knowledge;
 - b) describe the environmental management system;
 - c) provide field construction personnel with clear instructions on the mitigation measures to be implemented and on the appropriate lines of communication and means of reporting to be followed throughout the life cycle of the project;
 - d) summarize environmental sensitivities and mitigation actions and emergency response plans and reporting protocols;
 - e) describe the protocol for reporting on compliance monitoring; and
 - f) include, as a minimum, the following components:
 - i) Generating Station Environmental Protection Plan;
 - ii) South Access Road Environmental Protection Plan.

Environmental Management Plans

17. The Licencee shall submit Environmental Management Plans for the approval of the Director prior to commencing construction of the Development. These plans shall describe the mitigative measures that will be employed during construction and operation to reduce the environmental impact of the Development. They shall describe the approaches to be taken by the Licencee and shall be consistent with the commitments made in the EIS. Specifically, the plans shall:
- a) incorporate both western science and Aboriginal Traditional Knowledge;
 - b) describe the specific measures to be installed/undertaken;
 - c) outline the communication and reporting protocol on implementation progress;
 - d) describe contingency measures, if mitigation is not working as anticipated;
 - e) include a plan to establish a self-sustaining lake sturgeon population and include, as a minimum the following:
 - i) a conservation stocking plan for lake sturgeon for 50 years or until a self-sustaining lake sturgeon population is proven to be re-established in the following areas:
 - a. in the Nelson River from Kelsey Generation Station to Kettle Generation Station; and,
 - b. in the Burntwood River below First Rapids.
 - ii) a plan to resume the conservation stocking plan at any time if the lake sturgeon population declines as a result of the Development until the Development is decommissioned, or as otherwise approved by the Director;
 - iii) a plan to incorporate, at a minimum, the following in the adaptive management of lake sturgeon:
 - a. the results of lake sturgeon monitoring developed pursuant to Clause 18; and
 - b. committee recommendations developed pursuant to Clause 21.
 - iv) a description of how other facilities and other jurisdictions were consulted with in order to collect and evaluate the most successful techniques in fish culture for rearing and releasing lake sturgeon and how these techniques will be implemented;
 - f) include, as a minimum, the following components:
 - i) In-Stream Construction Sediment Management Plan;
 - ii) Fish Habitat Compensation Plan;
 - iii) Access Management Plan;
 - iv) Heritage Resources Protection Plan;
 - v) Vegetation Rehabilitation Plan;
 - vi) Terrestrial Mitigation Implementation Plan;
 - vii) Waterways Management Plan; and
 - viii) Reservoir Clearing Plan.

Environmental Monitoring Plans

18. The Licencee shall submit, for the approval of the Director, a report on monitoring programs to be undertaken in connection with the plans approved pursuant to Clauses 16 and 17. The report shall be submitted no later than June 30, 2015. Specifically, the report shall:
- a) incorporate both western science and Aboriginal Traditional Knowledge;
 - b) compare and describe the pre-development baseline conditions to projected or predicted conditions and the actual conditions during the different phases of the Development;
 - c) define the parameters to be measured and the methods to be used to evaluate the environment effects of the Development;
 - d) describe how the performance and effectiveness of the recommended mitigation measures will be evaluated during implementation;
 - e) include a plan for ensuring monitoring and follow-up are implemented correctly;
 - f) provide a plan to describe how adverse effects will be adaptively managed;
 - g) assess effects of the Development on the local and regional bald eagle population and include, as a minimum, the following component:
 - i) a comprehensive bald eagle nest monitoring program to assess the location, number and reproductive success of bald eagle nests within the study area prior to construction and annually for a minimum of five years after operation begins;
 - h) include a plan to assess effects of the Development on the local and regional gull and tern populations and include, as a minimum, the following components:
 - i) a baseline survey to determine the current number and location of gull and tern colonies and their nesting success in the affected area;
 - ii) a monitoring program to assess the establishment of new colonies or the expansion of existing colonies within the affected area; and
 - iii) an evaluation of the feasibility of creating replacement gull and tern nesting habitat, by modifying existing islands or creating new islands, as soon as possible after construction begins;
 - i) include a plan to monitor the lake sturgeon population and the associated conservation stocking program, developed pursuant to Clause 17, until the project is decommissioned, or as otherwise approved by the Director and include, as a minimum:
 - i) a plan to uniquely identify and track, using PIT tags or other best technology, individual lake sturgeon and to distinguish natural from stocked individuals to help evaluate the success of the lake sturgeon stocking program, approved pursuant to Clause 17;
 - j) include a plan to assess construction effects of the Development on the habitat and relative abundance and distribution of the olive-sided flycatcher and rusty

- blackbird populations;
- k) include a plan for a three year aerial reconnaissance survey to identify and delineate the current range of summer resident caribou in consultation with Conservation and Water Stewardship, Wildlife Branch;
 - l) include a public information program to encourage residents to report the sightings of caribou and moose, including caribou road kills along project access roads and PR 280 during construction of the Development within the study area;
 - m) include a plan for mercury monitoring in fish within the Keeyask reservoir, Stephens Lake, and Long Spruce and Limestone forebays, and other waterbodies as may be required, until mercury concentrations return to background or until it can be determined that there is no further effect from the Development, unless otherwise approved by the Director and in consultation with Conservation and Water Stewardship, Fisheries Branch. This may or may not also include sediment and water quality monitoring;
 - n) include a mercury and human health risk management plan to identify, assess, respond to, communicate and monitor risks to human health from increased methylmercury in the environment as a result of the Development;
 - o) include a plan to conduct baseline mercury concentration monitoring in fish in Gull Lake and Stephens Lake for a minimum of two years, prior to reservoir impoundment;
 - p) include a plan to monitor road-based traffic incidents associated with the increase in traffic to and from the Development during construction, considering, at a minimum, the following:
 - i) traffic data collected by Manitoba Infrastructure and Transportation on traffic-related incidents on PR 280;
 - ii) use of personal vehicles to commute to and from the Development; and
 - iii) actual traffic volumes with predicted traffic volumes;
 - q) include timely provision of monitoring information to the Split Lake, Fox Lake and York Factory Resource Management Boards and to Conservation and Water Stewardship, as requested, with respect to the management and administration of offsetting programs that involve resource management, resource harvesting and resource use activities within the respective resource management areas and submit an annual report to the respective resource management board and include, at a minimum, the annual outcomes of project monitoring for offsetting programs, including effects on resource use;
 - r) include a plan to monitor, identify and adaptively manage fish passage requirements during operation of the Development in consultation with Conservation and Water Stewardship, Fisheries Branch and the federal Department of Fisheries and Oceans;
 - s) include a plan to monitor and adaptively manage impacts to the Development associated with zebra mussels and participate with the Government of Manitoba on treatment programs within the Keeyask reservoir; and
 - t) include, as a minimum, the following components:

- i) Physical Environment Monitoring Plan;
- ii) Aquatic Effects Monitoring Plan;
- iii) Terrestrial Effects Monitoring Plan;
- iv) Socio-Economic Monitoring Plan;
- v) Resource Use Monitoring Plan; and
- vi) Zebra Mussel Monitoring Plan.

19. The Licencee shall implement the plans approved pursuant to Clauses 16, 17 and 18 of this Licence.

Annual Reporting

20. The Licencee shall report annually, before June 15th of each calendar year, to the Director on the results of monitoring plans, as approved pursuant to Clause 18 of this Licence and shall include sufficient detail that assessments can be made as to the accuracy of predictions, success of mitigation actions and commitment to future actions. These reports will provide assessments of any trends detected over the entire reporting period.

Lake Sturgeon Advisory Committee

21. The Licencee shall establish a committee consisting of Manitoba Hydro (on behalf of the Keeyask Hydropower Limited Partnership), the federal Department of Fisheries and Oceans, and Conservation and Water Stewardship, Fisheries Branch to review the results of the annual conservation lake sturgeon stocking monitoring program submitted pursuant to Clause 20. The committee, at a minimum, shall:
- a) meet once annually before April 30th of each calendar year, until the project is decommissioned, or as otherwise approved by the Director;
 - b) provide copies of meeting minutes and recommendations on adaptive management of lake sturgeon stocking to the Director.

Dangerous Goods Storage and Handling

22. The Licencee shall comply with all the applicable requirements of:
- a) *Manitoba Regulation 188/2001*, or any future amendment thereof, respecting *Storage and Handling of Petroleum Products and Allied Products*.
 - b) *The Dangerous Goods Handling and Transportation Act*, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development; and
 - c) the Office of the Fire Commissioner – Province of Manitoba.
23. The Licencee shall establish any fuel storage areas required for the construction and operation of the Development a minimum distance of 100 metres from any waterbody.

24. The Licencee shall, during construction and maintenance of the Development, operate, maintain, and store all materials and equipment in a manner that prevents any deleterious substances including fuel, oil, grease, hydraulic fluid, coolant, and other similar substances from entering any waterbody. An emergency spill kit for in-water use shall be readily available on site during construction.

Spill Response

25. The Licencee shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
26. The Licencee shall, following the reporting of an event pursuant to Clause 25,
- a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the Director; and
 - d) submit a report to the Director about the causes of breakdown and measures taken, within one week of the repairs being done.
27. The Licencee shall, in a manner approved by the Environment Officer, remove and dispose of all spilled dangerous goods.
28. The Licencee shall, following construction of the Development, verify that terrestrial contamination of the environment has not occurred in work areas of the Development. Any areas of contamination shall be remediated to the satisfaction of the Environment Officer.

Heritage Resources

29. The Licencee shall, during construction and operation of the Development, apply measures to protect heritage resources, as directed by the Historic Resources Branch of Manitoba Tourism, Culture, Heritage, Sport, and Consumer Protection.

Onsite Wastewater Disposal

30. The Licencee shall, during construction of the Development, dispose of all wastewater from on-site sanitary facilities in accordance with *Manitoba Regulation 83/2001*, or any future amendment thereof, respecting *Onsite Wastewater Management Systems*.

Pesticide Application

31. The Licencee shall not use herbicides in association with the construction of transmission components of the Development and shall eliminate the use of herbicides during operation of the Development unless there are no other feasible means available. If herbicides are used, the Licencee shall adhere to the *Manitoba Regulation 47/2004*, or any future amendment thereof, respecting *Pesticides*.

Signage

32. The Licencee shall, during construction of the Development, post appropriate warning signage to advise traffic of construction activity, the presence of structures, water conditions and potential for collision with caribou and moose on access roads. Signs shall be in English and the local Aboriginal language in accordance with the plan submitted pursuant to Clause 11 of this Licence.

Waste Disposal

33. The Licencee shall dispose of non-reusable construction debris and solid waste from the construction and maintenance of the Development at a waste disposal ground operating under the authority of a permit issued under *Manitoba Regulation 150/91*, or any future amendment thereof, respecting *Waste Disposal Grounds*, or a licence issued pursuant to *The Environment Act*.

Water Crossings

34. The Licencee shall, during construction and maintenance of the Development, adhere to the general recommendations on design, construction, and maintenance of stream crossings as specified in the Manitoba Department of Natural Resources guidelines titled *Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat, May 1996*, and the current versions of applicable federal Department of Fisheries and Oceans Operational Statements.

Riparian Areas

35. The Licencee shall, during construction and maintenance of the Development within riparian areas associated with fish-bearing and potentially fish-bearing waterbody crossings:
- a) clear trees that must be removed using only low impact methods including, where possible, hand clearing;
 - b) prohibit the application of herbicides during construction clearing;
 - c) stabilize and re-vegetate disturbed soils with biodegradable erosion control materials and, where possible, a seed mix native to the area;

- d) where possible, maintain 30 metres from the high water mark of creeks, streams and rivers;
- e) minimize in-stream construction time to reduce sedimentation;
- f) avoid use of organic soil, silt, or clay in temporary winter stream crossings; and
- g) remove all materials used in the construction of ice bridges from the watercourse or water body prior to spring thaw.

Sedimentation and Erosion

36. The Licencee shall, during construction and maintenance of the Development, take all appropriate measures to prevent erosion and the deposition of sediment into any waterbodies except within the impoundment area. Construction adjacent to waterbodies, except within the impoundment area, shall not occur during high rainfall events if construction activities will result in increased erosion and sediment disposition in the adjacent waterbody.

Instream Works

37. The Licencee shall only conduct construction activities in connection with the Development in fish bearing waters or potentially fish bearing waters in accordance with Environmental Management Plans, pursuant to Clause 17 of this Licence and in accordance with applicable federal *Fisheries Act* Authorizations. The Licencee shall notify Conservation and Water Stewardship, Fisheries Branch, if an application is made to the federal Department of Fisheries and Oceans to work outside the prescribed in-stream work timing windows.

Water Intakes

38. The Licencee shall, during construction of the Development, maintain water intakes for construction water supplies in compliance with the "Freshwater Intake End-of-Pipe Fish Screen Guideline" published by the federal Department of Fisheries and Oceans.

Wetlands

39. The Licencee shall not, during construction, clear, compact, grade or fill any wetlands or native upland habitat, which are not required for the Development.
40. The licencee shall, prior to March 31, 2015, provide a plan, for approval by the Director, to demonstrate how the licencee will manage to offset drained wetlands in accordance with requirements set out in the forthcoming no net loss of wetland benefits provisions of the drainage regulation that is being reviewed as stated in the Towards Sustainable Drainage consultation document. If drainage of the wetland cannot be avoided, the plan shall provide quantification of the area of the drained wetland to be lost due to the construction and operation of the development, and a plan as to how that loss will be

offset by at least a three to one ratio of area of restored wetlands to the area of those lost through drainage.

Live Salvage Fish

41. The Licencee shall salvage live fish in dewatered areas. A Live Handling Permit is required from Conservation and Water Stewardship for fish salvage operations.

Habitat Fragmentation

42. The Licencee shall limit fragmentation of habitat and disturbance of summer resident caribou, where possible, by decommissioning roads and trails required for construction.
43. The Licencee shall only conduct clearing associated with the Development in accordance with the Environmental Protection Plans, pursuant to Clause 16 of this Licence.

Migratory Birds

44. The Licencee shall not, unless otherwise approved by Environment Canada under the federal *Migratory Birds Convention Act*, disturb migratory bird nests during construction and maintenance of the Development.

Endangered or Threatened Species

45. The Licencee shall not remove, destroy or disturb species pursuant to *Manitoba Regulation 25/98*, or any future amendment thereof, respecting *Threatened, Endangered and Extirpated Species*, and species listed as endangered or threatened in the federal *Species at Risk Act*.

Foreign Species

46. The Licencee shall, during construction and maintenance of the Development, take measures to prevent the introduction and spread of foreign aquatic and terrestrial biota.

Revegetation

47. The Licencee shall revegetate soil in areas of the Development exposed by construction with a mixture of native or introduced grasses or legumes. Native species shall be used to revegetate areas where native species existed prior to construction. Exposed areas shall be revegetated as quickly as possible following construction to prevent soil erosion and the establishment of noxious weeds.

Respecting Operation of the Generation Station

48. The Licence shall, during normal operation of the Development, regulate Keeyask Generating Station to maintain a maximum reservoir level in the immediate forebay of 159 m above sea level and a minimum operating level of 158 m above sea level.
49. The Licence shall, during operation of the Development, operate the Keeyask Generation Station in accordance with the Water Power Licence issued pursuant to the *The Water Power Act*.

Education and Training Opportunities

50. The Licencee shall seek to provide continued education and training opportunities for northern residents employed at the Development, which may include workers trained through the Hydro Northern Training and Employment Initiative.

Respecting Concrete Batch Plant Operation During Construction

51. The Licencee shall comply with the "Manitoba Heavy Construction Association Best Environmental and Safety Management Practice Redi-Mix Concrete Facilities" manual, © 2000, or future versions thereof.
52. The Licencee shall operate the concrete batch plant only at a location approved by the Director.
53. The Licencee shall not emit particulate matter from the concrete batch plant of the Development such that:
 - a) particulate matter:
 - i) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide for processes involving combustion, from any point source of the concrete batch plant of the Development;
 - ii) exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
 - iii) results in the deposition of visible particulate residue at any time beyond the property line of the Development; or
 - b) opacity of any point source of the concrete batch plant of the Development equals or exceeds:
 - i) 20 percent as an average of any 24 consecutive opacity observations taken within 15 second intervals;
 - ii) 20 percent for more than 16 individual opacity observations within any one hour period; or
 - iii) 40 percent for any individual opacity observation.
54. The Licencee shall direct all air streams from the concrete batch plant, which contain a pollutant(s) of concern to the Director, to a pollution control device which has been

- designed for and demonstrated to be capable of reducing, altering, eliminating or otherwise treating the pollutant(s).
55. The Licencee shall submit for the Director's approval, within 90 days of the issuance of this Licence, a standard operating procedural manual and a maintenance schedule for each air emission pollution control device based on the manufacturer's specifications and recommendations.
56. The Licencee, upon receiving the Director's approval as required in Clause 55 of this Licence, shall not operate any process directing an emission to an air pollution control device for the concrete batch plant of the Development unless:
- a) the operating and maintenance measures and status of the device are in full compliance with the approved procedures and timetables;
 - b) all emissions from the process are directed to the fully operational air pollution control device;
 - c) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and
 - d) the emissions do not contain concentrations of pollutants which:
 - i) are in violation of any other applicable legal instrument including an Act, Regulation or by-law; or
 - ii) otherwise create a significant negative environmental or health impact in the affected area.
57. The Licencee shall maintain a log book of the most recent 24 month period to record any downtime of an air pollution control device due to either the breakdown or maintenance of that air pollution control device. The log book shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log book shall record, at minimum, the following information:
- a) identification of the air pollution control device and the process(es) it serves;
 - b) time/date of log entry;
 - c) nature of event;
 - d) duration of event; and
 - e) the accumulated downtime of this air pollution control device for the events for each calendar year.
58. The Licencee shall handle, store and dispose of all pollutants collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.
59. The Licencee, upon written request from the Director, shall provide a stack or stacks including all necessary sampling facilities for the sampling of air emissions at the concrete batch plant of the Development. The stack or stacks shall be provided:
- a) at a location(s) and within a time frame satisfactory to the Director; and

- b) to the specifications and in accordance with the most recent version of Conservation and Water Stewardship Guideline, *Guideline for Stack Sampling Facilities*, unless otherwise approved by the Director.
60. The Licencee, upon a written request from the Director, shall submit a detailed plan which is acceptable to and approved by the Director, for the sampling and analysis of potential air pollutants from the concrete batch plant of the Development, released as stationary point and fugitive emissions, including any compounds determined by the Director. The plan shall identify the rationale for the sampling, the ways and means by which the sampling program will be implemented including any special measures or methods which would be necessitated by influencing factors such as unfavourable weather conditions, the need for large or additional sample volumes, the need for multiple sampling runs, the methods used for the sampling and the analysis for each compound, the detection level to be attained, a comprehensive QA/QC program, and other items as may be identified by the Director.
61. The Licencee shall perform all stack sampling in accordance with the most recent version of Conservation and Water Stewardship Report No. 96-07, *Interim Stack Sampling Performance Protocol*, unless otherwise approved by the Director.
62. The Licencee shall arrange the scheduling of the sampling program submitted pursuant to Clause 60 of this Licence such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.
63. The Licencee shall complete the sampling of emissions according to the approved plan submitted pursuant to Clause 60 of this Licence, within a timeframe to be determined by the Director.
64. The Licencee shall submit a report, for the approval of the Director, of the completed sampling and analysis plan approved pursuant to Clause 60 of this Licence, within 60 days of the receipt of the analytical results of that sampling plan. The report shall contain at minimum:
- a) the raw data collected;
 - b) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
 - c) a discussion of the significance of the data gathered with specific attention to:
 - i) the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
 - ii) the need for risk assessment of the impact of emissions;
 - iii) the need for the establishment of ambient air monitoring stations;
 - iv) the need for dispersion modeling of emissions;
 - v) results and conclusions of the QA/QC program; and
 - vi) other issues as may be determined by the Director.

65. The Licencee, upon the written request of and in a timeframe stipulated by the Director, shall comply with any air emission or ambient air quality criteria specified by the Director for any pollutant of concern.
66. The Licencee shall not release wash water from settling ponds associated with the concrete batch plant of the Development that does not comply with Manitoba *Water Quality Standards, Objectives, and Guidelines* (dated November 28, 2011 or future versions thereof.)

Environmental Audit

67. The Licencee shall, upon completion of construction of the Development, undertake a third-party environmental audit to assess whether commitments made in the EIS and supporting information were met and to assess the accuracy of the assumptions and predictions in these documents. The audit shall be repeated after ten years. Reports on the audits shall be submitted to the Director.

Website

68. The Licencee shall, for the life of the Development, develop and maintain an easily accessible and frequently updated website to contain all relevant and appropriate information related to monitoring and assessing environmental impacts, mitigation and management of the Development. The website shall also include the annual reports on the results of monitoring plans, pursuant to Clause 20 and the reports on third-party environmental audits conducted pursuant to Clause 67 of this Licence.

Regional Cumulative Effects Assessment

69. The Director, in addition to any of the specifications, limits, terms and conditions specified in this Licence, may require additional mitigation, monitoring or corrective action pending the results of the Regional Cumulative Effects Assessment if those results are relevant to the Development.

Watershed Protection

70. Manitoba Hydro shall participate in potential future watershed studies as may be determined by the Director, in cooperation with the Manitoba Government.

Offsetting Programs

71. The Licencee shall submit for the approval of the Director a compensation plan for outfitters impacted by offsetting programs. The compensation plan shall, at a minimum, include:
 - a) a plan to minimize or avoid impacts of the offsetting programs on outfitters, where feasible; and

- b) a plan to provide compensation to outfitters for losses attributable to the offsetting programs and provide an option for disposition of payments.
72. The Licencee shall implement the compensation plan as approved by the Director, pursuant to Clause 71.

Decommissioning or Alteration

73. The Licencee shall rehabilitate decommissioned stream crossings to pre-existing conditions.
74. The Licencee shall, prior to decommissioning of the Development, submit for approval of the Director, a decommissioning plan for the Development.
75. The Licencee shall implement the decommissioning plan as approved pursuant to Clause 74 of this Licence.
76. The Licencee shall obtain approval from the Director for any proposed alteration to the Development before proceeding with the alteration.

REVIEW AND REVOCATION

77. If, in the opinion of the Minister, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Minister may, temporarily or permanently, revoke this Licence.
78. If the Licencee has not commenced construction of the Development within five years of the date of this Licence, this Licence is revoked.
79. If, in the opinion of the Minister, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Minister may require the filing of a new proposal pursuant to Section 12 of *The Environment Act*.

File: 5550.00

Original Signed By

Minister

The White House
Office of the Press Secretary

For Immediate Release

May 14, 2014

FACT SHEET – Building a 21st Century Infrastructure: Modernizing Infrastructure Permitting

Building a 21st century infrastructure is a critical component of President Obama's effort to accelerate economic growth, expand opportunity, and improve the competitiveness of the American economy.

With the Highway Trust Fund projected to run out of money before this fall, President Obama has laid out his vision for a long-term infrastructure bill that would provide certainty for our state and local partners, support millions of jobs, and position our economy for lasting growth. The President is calling on Congress to pass a robust multi-year transportation bill before funding runs out and puts hundreds of thousands of jobs at risk.

The President has also been clear that he is committed to making 2014 a year of action and that while he wants to work with Congress wherever they are willing, he will not hesitate to use his power as President to act on his own to promote American economic growth and opportunity.

That is why, as part of its commitment to ensuring America has a first-class transportation infrastructure, the Administration is taking action to modernize the federal infrastructure permitting process, cutting through red tape and getting more timely decisions, while protecting our communities and the environment. For projects that are approved, this means states, local and tribal governments, and private developers will be able to start construction sooner, create jobs earlier, and fix our nation's infrastructure faster.

Over the past 3 years, federal agencies have worked to expedite the review and permitting of over 50 major infrastructure projects, including bridges, transit, railways, waterways, roads, and renewable energy projects, and over 30 of those projects have completed the permitting process. For example, federal agencies completed the permitting and review for the Tappan Zee Bridge in 1.5 years for a process that normally takes 3-5 years.

Today, the Administration is releasing a comprehensive plan to accelerate and expand permitting reform government-wide. The Administration's plan adopts the best practices learned from the initial focus projects and calls on federal agencies to apply those practices going forward. By turning best practice into common practice, we can improve the efficiency and effectiveness of the federal permitting and review of all major infrastructure projects. These reforms include:

- *Improving Interagency Coordination to Increase Decision Making Speed.* Major infrastructure projects often require multiple permits and reviews from federal agencies and bureaus responsible for ensuring projects are built safely. To improve interagency coordination, the Administration will institutionalize best practices, including:
 - Requiring early coordination with the identification of a lead agency for each project.
 - Requiring a single coordinated project plan across all federal agencies.
 - Strengthening dispute resolution mechanisms to quickly resolve conflicts and make sure that interagency disputes do not hold back valid projects or quick decision making.
- *Synchronizing Reviews* Federal agencies will also be moving from separate, consecutive reviews to synchronized, simultaneous reviews. For example, the U.S. Coast Guard, the Army Corps of Engineers, and the Department of Transportation have launched a new partnership to synchronize their reviews for transportation projects. By developing one environmental analysis that satisfies all three agencies, project timelines can be significantly reduced.
- *Driving Accountability and Transparency through the Online Permitting Dashboard.* The Administration's Federal Infrastructure Projects Permitting Dashboard supports coordination and synchronization of projects among federal agencies, and can also help create a more predictable process for project applicants. The Administration is expanding the Dashboard to include additional projects, as well as new capabilities to track project schedules and metrics, increasing overall accountability and transparency. As a first step, today we are adding 11 more Dashboard projects. Each project will have a lead agency, a coordinated project plan across all federal agencies, and public tracking of progress to ensure milestones are met. The Administration's goal is for all major infrastructure projects to be included on the Dashboard to institutionalize and broaden the reach of this tool.
- *Launching an Interagency Permitting Center to Institutionalize Reform.* The Administration is standing up an interagency infrastructure permitting improvement center dedicated to implementing these reforms across agencies, as well as looking for new ways to modernize infrastructure permitting and reviews. The President's 2015 Budget includes funding for the center and the expansion of the Permitting Dashboard.

This effort to modernize infrastructure permitting is part of the Administration's broader commitment to increase investment in U.S. infrastructure, as well as the President's Management Agenda, which is dedicated to driving

efficiency within government, spurring economic growth, and unlocking the full potential of the federal workforce. The Administration has also recently released the GROW AMERICA Act, a four-year, \$302 billion transportation plan to modernize our nation's roads, bridges, and public transportation, spur economic growth, and allow states and localities to make sound multi-year investments. The GROW AMERICA Act includes reforms to further accelerate the approval and delivery of projects. Together these efforts will help create the transportation infrastructure we need for the 21st century.

Background:

Modernizing Infrastructure Permitting

As major infrastructure projects are proposed, federal, state, local, and tribal entities work to consider and minimize potential impacts on safety and security, and environmental and community resources such as air, water, land, and historical and cultural resources. For the majority of projects, these environmental review and permitting requirements are accomplished effectively and efficiently. However, for particularly large and complex infrastructure projects, multiple permits and approvals can lead to inefficiencies and delay.

To begin addressing this challenge, the President issued a Presidential Memorandum on August 31, 2011 and an Executive Order on March 22, 2012 to add more transparency, accountability, and certainty into the permitting and review processes for major infrastructure projects. Since then, federal agencies have worked to expedite the review and permitting of over 50 major projects, including bridges, transit, railways, waterways, roads, and renewable energy projects; over 30 of those projects have now completed the permitting process. Progress on these projects is tracked publicly through the Administration's online Federal Infrastructure Projects Permitting Dashboard.

Building off this work on specific projects, agencies have identified a set of best practices for efficient review and permitting, ranging from expanding information technology (IT) tools to synchronizing reviews for improving collaboration. On May 17, 2013, the President issued a Presidential Memorandum charging an interagency Steering Committee with developing a plan to put these best practices to work in a systematic and permanent way across the government. The Steering Committee is comprised of 12 agencies including the Advisory Council on Historic Preservation (ACHP), Department of Agriculture (USDA), Department of the Army (USACE), Department of Commerce represented by National Oceanic and Atmospheric Administration (NOAA), Department of Defense (DOD), Department of Energy (DOE), Department of Homeland Security represented by the U.S. Coast Guard (Coast Guard), Department of Housing and Urban Development (HUD), Department of the Interior (DOI), Department of Transportation (DOT), Environmental Protection Agency (EPA), the Morris K. Udall and Stewart L. Udall Foundation (Udall) as well as the Office of Management and Budget (OMB) and Council on Environmental Quality (CEQ).

An Implementation Plan to Guide Further Reforms

Today, the Administration's Steering Committee on permitting issued an Implementation Plan, which identifies four over-arching strategies, 15 specific reforms, and nearly 100 near-term and long-term milestones to institutionalize and drive these reforms across Federal agencies. The full plan will be available [HERE](#) following the President's remarks.

The strategies are:

- **Strategy 1: Institutionalize Interagency Coordination and Transparency** by formalizing interagency coordination, including: early identification of a lead agency; synchronizing separate federal review and permitting processes and decisions; standardizing the use of the Permitting Dashboard; and identifying best practices for early engagement with state, local, and tribal governments.

Implementation of key reforms is underway. For example, for the proposed Great Northern Transmission Line (GNTL), the Department of Energy initiated monthly meetings with other Federal agencies, Minnesota Power, and non-federal agencies to ensure early coordination, and Minnesota Power has held several public meetings. Through these early coordination meetings, the company was able to narrow down potential corridors to two routes in their application which address agency concerns and will facilitate a more efficient review process. Similarly, the Lynwood Link Extension project north of Seattle, WA and Federal Way Extension Light Rail Transit in South King County, WA have been working closely with state, local, and tribal governments and all involved federal agencies on the projects' permitting and reviews to identify issues early in the process and avoid unnecessary delay. These three projects, as well as eight others, were added to the Permitting Dashboard today.

- **Strategy 2: Improve Project Planning, Siting, and Application Quality** by developing tools to assist project applicants in planning for a major infrastructure project and support effective and timely decision-making by agency staff once the federal process begins. For example, agencies are expanding access to data and map-based IT tools so that applicants have information about potential sensitive areas, such as the location of an endangered species- in advance of selecting a site.
- **Strategy 3: Improve Permitting Reviews and Mitigation** by supporting agency staff in effectively implementing existing regulations, policies, and guidance, as well as identifying barriers. This strategy also includes policies to facilitate advance planning for the mitigation of project impacts and landscape- or watershed-level approaches to mitigation, where appropriate, as well as changes to cost-recovery authority for specific agencies as proposed in the President's FY 2015 Budget.

For example, a number of agencies have recently expanded their use of programmatic environmental analyses, improving efficiency by leveraging a single analysis for multiple projects, and improving environmental outcomes by making it possible to plan for nearby projects with a better understanding of how they fit within a single landscape. For example, in 2012, the Department of the Interior released a Programmatic Environmental Impact Statement to provide a single blueprint for utility-scale solar energy permitting in six states. Additionally, on April 10, 2014, the Secretary of the Interior issued a Department-wide landscape-scale mitigation strategy to encourage infrastructure development while protecting natural and cultural resources. As part of the strategy, Interior will work closely with states, tribes, other federal agencies, and other stakeholders to identify regional conservation priorities that can benefit from coordinated landscape-scale mitigation.

- **Strategy 4: Drive Continued Improvement** by establishing a team dedicated to implementation of the reforms across agencies, further analyzing agency processes, identifying additional reforms, and developing reliable metrics to track timeframes and outcomes for communities and the environment.

To support these efforts, the President's FY 2015 Budget includes funding to establish an Interagency Infrastructure Permitting Improvement Center (IIPIC) to be housed at the Department of Transportation. The IIPIC will report to the interagency Steering Committee chaired by OMB in coordination with CEQ to ensure a government-wide perspective. The Budget also includes funds to expand the Permitting Dashboard to track schedules for more major infrastructure projects, improving transparency and accountability.

Additionally, the Administration established a Cross-Agency Priority (CAP) Goal on infrastructure permitting to drive progress, ensure transparency, and promote interagency coordination. As a CAP Goal, this effort will receive regular, senior-level reviews, and progress will be tracked publicly on Performance.gov.

Building on Past Success: Examples of Expedited Projects

The Implementation Plan builds on lessons learned from projects that the Administration has successfully expedited in recent years, at the President's direction. Some examples include:

Replacement of the Tappan Zee Bridge will improve mobility, reduce congestion, and make travel safer on one of the east coast's busiest routes. This critical Hudson River crossing north of New York City carries approximately 138,000 vehicles per day between Westchester and Rockland counties, approximately 20 miles north of New York City. The current bridge is nearly 60 years old and traffic volumes on the bridge have increased by about 30 percent since 1990. Using the process established under the Presidential Memorandum in 2011, federal agencies completed the permitting and review in 1.5 years for a process that might otherwise take 3-5 years. A number of key strategies contributed to agencies successfully working together to cut up to three years off the project. These strategies included: development of a coordinated timeline; use of concurrent, rather than sequential review – with a particular focus on increased coordination between the U.S. Department of Transportation (USDOT), the U.S. Coast Guard (USCG), and the U.S. Army Corps of Engineers (USACE); identification of aggressive targets; and increased transparency and accountability.

Other examples of infrastructure project permitting reviews that have been accelerated under this initiative include:

The Greater Cleveland Regional Transit Authority's Little Italy – University Circle Rapid Station project involves the relocation of an existing station at E 120th Street and construction of a new rail transit station along with the rehabilitation of two transit track bridges at Mayfield Road. The project will integrate the station with the dense, high employment areas of Little Italy neighborhood and University Hospitals. The project replaces an obsolete station with a new, energy efficient building, while focusing on reusing existing community resources. The Department of Transportation worked closely with the Greater Cleveland Transit Authority to develop a streamlined and focused environmental assessment in line with the Council on Environmental Quality's guidance.

The Kennebec Bridge Replacement project replaces an 80 year-old moveable bridge at the end of its service life connecting Richmond and Dresden in Maine. The new bridge will eliminate the need for a movable span, and will provide reliable access and regional mobility for both highway and marine traffic. Through early and frequent collaboration, open dialogue to quickly resolve disputes, and negotiating and maintaining a project schedule across all Federal agencies involved, the agencies cut up to a year off the anticipated timeline for the permitting and review of the bridge.

Additional examples of projects can be found on the Administration's Permitting Dashboard.

Investing in a 21st Century Transportation Infrastructure

Transportation is a critical engine of the nation's economy. Investments in the national transportation network over the country's history, and especially the last half-century, have been instrumental in developing the world's largest economy and most mobile society. The President proposes increasing infrastructure investment in order to create jobs, grow our economy, attract private investment, facilitate American exports, reduce commute times and increase access to jobs, make our roads and bridges safer, cut red tape, and increase the return on investment of transportation infrastructure for American taxpayers. Just weeks ago, the Administration submitted to Congress the GROW AMERICA Act, a four-year proposal designed to achieve those objectives.

GROW AMERICA ACT – Before this fall, the Highway Trust Fund – which funds a significant portion of the construction and repair of our surface transportation system – will be insolvent and just a few weeks later the authorities that establish our surface transportation programs will expire. Without action, many states and communities may be forced to slow or stop work on critical transportation projects that our nation depends upon to move people, energy, and freight every day, putting jobs at risk and slowing investment in our future. The Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act, or GROW AMERICA Act, is a \$302 billion, four year transportation reauthorization proposal that provides increased and stable funding for our nation's highways, bridges, transit, and rail systems. The Administration's proposal is funded by supplementing current revenues with \$150 billion in one-time transition revenue from pro-growth business tax reform. This will prevent Trust Fund insolvency for four years and increase investments to meet the transportation priorities and economic needs of communities across the country. The proposal also includes a series of legislative proposals to improve project delivery and the federal permitting and regulatory review process

Building on Past Accomplishments – The President's proposal builds on a series of major accomplishments in infrastructure over the past five years. Since the President took office, American workers have improved over 350,000 miles of U.S. roads and repaired or replaced over 20,000 bridges. The American Recovery and Reinvestment Act was the most significant transportation public works program since the New Deal, providing \$48 billion to more than 15,000 projects across the country. Earlier this year, the President announced \$600 million in competitive TIGER grants to fund innovative transportation projects around the country. Notably, the President's FY 2015 Budget proposes a new America Fast Forward (AFF) bonds program that would build upon and expand a successful program created in the Recovery Act to attract private capital for infrastructure investments.

Leveraging Private Sector Investment – In addition to the need for smart public investment in our shared transportation system, the Administration is committed to leveraging private sector investment to further expand infrastructure investment. The GROW AMERICA Act proposes a range of measures to attract more investment in infrastructure, including expanding financing options under the TIFIA Program, which leverages federal dollars by facilitating private participation in transportation projects and encouraging innovative mechanisms that help advance projects more quickly. As part of the FY 2015 Budget, the Administration has also proposed a National Infrastructure Bank, as well as changes to tax rules to encourage greater private investment.