

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Hess Corporation
14" Crude Oil Pipeline – Williams County
Siting Application

Case No. PU-12-683

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

November 13, 2013

Appearances

Commissioners: Brian P. Kalk, Randy Christmann and Julie Fedorchak.

Brian R. Bjella, Attorney at Law, Crowley Fleck PLLP, 400 East Broadway, Suite 600, Bismarck, North Dakota 58501 on behalf of the Applicant, Hess Corporation.

Mitchell D. Armstrong, Special Assistant Attorney General, P. O. Box 460, Bismarck, North Dakota 58502-0460, Legal Counsel for the Public Service Commission.

Patrick Fahn, Director-Compliance and Competitive Markets Division, North Dakota Public Service Commission, 600 East Boulevard, Bismarck, North Dakota 58505.

Patrick J. Ward, Administrative Law Judge, Office of Administrative Hearings, 316 North 5th Street, Bismarck, ND 58502-1695, as Procedural Hearing Officer.

Preliminary Statement

Under North Dakota Century Code (NDCC) §49-22-07, a utility may not begin construction of a transmission facility in the state without first having obtained a route permit. The facility must be constructed, operated, and maintained in conformity with the permit and any terms, conditions, or modifications of the permit.

On November 26, 2012, Hess Corporation (Hess) filed applications with the North Dakota Public Service Commission for a certificate of corridor compatibility and a route permit to authorize construction for a 10.2-mile 14-inch diameter crude oil pipeline in Williams County, North Dakota. Hess proposes to convert three existing crude oil gathering pipeline segments into a single transmission pipeline that will transport crude oil from the Ramburg Truck Facility (RTF) to the Tioga Rail Terminal (TRT). The transmission line will total 10.2 miles in length, and would consist of 14-inch nominal diameter steel pipe. The pipeline will provide transport service for 54,000 barrels of crude oil to be further shipped via rail throughout the United States and Canada.

On April 24, 2013, Hess filed an application requesting that the Commission waive procedures and time schedules established under NDCC Chapter 49-22 and North Dakota Administrative Code Chapter 69-06-06. In its application for waivers of procedures and time schedules, Hess requests that the Commission waive the following:

- Procedures that require separate filings of applications for a certificate of corridor compatibility and a route permit, and procedures that require separate notices of such applications,
- Procedures that may require separate public hearings on a waiver request, a certificate of corridor compatibility application, and a route permit application.

On May 8, 2013, the Commission deemed the Applications complete and issued a Notice of Filings and Notice of Hearing (Notice) scheduling a public hearing on July 31, 2013 at 10:00 a.m. CDT at the Tioga City Hall, 12 1st Street NE, Tioga, North Dakota, 58852.

The Notice identified the following issues to be considered with respect to the application for waiver of procedures and time schedules:

1. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The Notice identified the following issues to be considered with respect to the applications for a certificate of corridor compatibility and route permit:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On July 31, 2013, the public hearing was held as scheduled.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following:

Findings of Fact

1. Hess is a Delaware corporation authorized to transact business in the State of North Dakota.
2. Hess is the operator of both the RTF and the TRT.

Size and Type of Facility

3. At the RTF, crude oil is delivered by truck and then transferred to existing pipelines operated by third parties, including Enbridge and Tesoro.
4. In 2011, Hess constructed a pipeline to transport crude oil from Hess' Red Sky gathering system to the TRT, from which the crude oil is transported by rail. The pipeline system was constructed by utilizing an existing 6.1 mile, 14-inch natural gas pipeline and adding two new segments of 14-inch pipeline, one 1.9 miles in length and one 2.2 miles in length. Hess states this line is currently a gathering line because no pressure is currently added at a pipeline storage site for further transport of the crude oil.
5. Hess now proposes to add pumps at the RTF and utilize the pipeline system as a transmission pipeline. Also, main line valves will be added at both ends of the pipeline. The main line valves will be located entirely on property owned by Hess and used in connection with the RTF and the TRT.
6. With the addition of the pumps, the transmission pipeline will be capable of carrying up to 120,000 barrels of oil per day, but Hess anticipates a normal throughput of approximately 54,000 barrels of oil per day.
7. The design, construction, and operation of the crude oil pipeline must be in accordance with the United States Department of Transportation regulations.

Study of Preferred Location(s)

8. Hess evaluated a one-mile wide area centered on the existing pipeline alignment for the exclusion, avoidance, selection and policy criteria of the Commission (study area). Field surveys were conducted based upon a 200-foot wide area centered on the existing pipeline alignment and extended up to 350 feet in areas (survey area). The survey area is depicted on the maps in Late Filed Exhibit 3 in this proceeding. The purpose of the field survey was to inventory any potential resource issues such as wetlands, water bodies, protected species, critical habitats, or cultural resources. Hess conducted a Class I literature search in the study area, and a Class III cultural resources inventory was conducted in the survey area.

9. A solicitation was sent to and responses were received from the following agencies: State Historical Society of North Dakota, State Historic Preservation Office (SHPO), North Dakota Game and Fish Department, North Dakota Parks and Recreation Department, North Dakota Department of Trust Lands, USDA Farm Service Agency, and U.S. Fish and Wildlife Service North Dakota Field Office.

10. One alternative to the transmission pipeline consists of trucking the crude from the RTF to the TRT. At maximum transport capacity of 120,000 barrels of oil per day, the transmission pipeline would displace approximately 667 trucks per day, trucks that would be loaded at the RTF, driven to the TRT and unloaded at the TRT. Truck transportation could also be subject to disruptions. Another alternative consists of a new pipeline, which would require easements from landowners and new environmental impacts associated with construction activities.

Siting Criteria

11. North Dakota Administrative Code §69-06-08-02 sets forth criteria to guide and govern the suitability evaluation of a transmission facility corridor and route. The criteria are classified as exclusion areas, avoidance areas, selection criteria, and policy criteria.

12. An exclusion area is a geographic area that must be excluded in the consideration of a route for a transmission facility. Exclusion areas may be located within a corridor, but at no point shall such an area encompass more than fifty percent of the corridor width unless there is no reasonable alternative. A buffer zone of a reasonable width to protect the integrity of an exclusion area must be included in the siting of the transmission facility.

13. The exclusion areas within the survey area are several previously recorded and newly recorded cultural resources. Hess' consultants recommended a determination of "No Historic Properties Affected" and "No Significant Sites Affected" and the SHPO concurred with this recommendation.

14. An avoidance area is a geographic area that may not be considered in the routing of a transmission facility unless the applicant shows that, under the circumstances, there is no reasonable alternative. In determining whether an avoidance area should be designated for a transmission facility, the Commission may consider, among other things: the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes.

15. The only avoidance areas within the study area are several wildlife areas.

16. Hess' natural resources survey recorded six palustrine emergent wetlands within the survey area.

17. Hess' natural resources survey recorded eleven naturally occurring woody vegetation assemblages and three planted assemblages in the survey area.

18. In accordance with the Commission's Selection Criteria, a transmission facility route shall be approved if it is demonstrated that no significant adverse impacts will result from the location, construction, and maintenance of the transmission facility. Because the pipeline has already been constructed, the Selection Criteria do not apply to the transmission pipeline.

19. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility. Because the pipeline has already been constructed, the Policy Criteria do not apply to the transmission pipeline.

Mitigation to Minimize Impact

20. There will be no ground-disturbing activities outside of the confines of the RTF and TRT.

21. In 2011, the existing 6.1 mile, 14" pipeline was converted from a natural gas pipeline to a crude oil line. The remaining segments were newly constructed in 2011. All pipeline segments must meet the U.S. Department of Transportation regulations as set forth in 49 CFR Part 195.

22. At the hearing a resident of Tioga testified that water runoff into the pig launcher area, in the NE corner of Section 33, Township 157N, Range 95 W, had increased substantially since the construction of the Tioga Rail Terminal to the north across 67th Street. The pig launcher area shown in the application includes a mainline valve that may be utilized in the event of an incident on the pipeline. The resident was concerned that Hess may have trouble accessing the area to operate the valve in the event of a pipeline incident. Hess' application states that the mainline valve will be actuated, fail safe, automated, and controlled by both local actuation and by a 24-hour Hess Control Center located in the City of Tioga. Therefore, on-the-ground access to the valve should be unnecessary in the event of an incident on the pipeline.

23. Hess will have personnel available in Tioga to respond to any conditions 24 hours a day, seven days a week. The mainline valves will allow the pipeline to be quickly shut down in the event of any system failure. A SCADA system will report pipeline operations and facilitate early response to any breach or failure of the pipeline.

24. On July 22, 2013, Hess signed a Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications to address mitigation of impacts of construction in a designated corridor. Some of these provisions would not apply because the pipelines are already in service, however, all the provisions would apply to future construction in a designated corridor.

25. Hess will use environmental monitors and inspectors to comply with all applicable permits.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over the applicant, Hess Corporation, and over the subject matter of the Application under NDCC Chapter 49-22.
2. Hess is a utility as defined in NDCC §49-22-03(13).
3. The proposed pipeline is a transmission facility as defined by NDCC §49-22-03(12).
4. The location, construction, operation and maintenance of the pipeline produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The location, construction, operation and maintenance of the pipeline are compatible with environmental preservation and the efficient use of resources.
6. The pipeline corridor and route minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
7. The pipeline is of such design and location that it produces minimal adverse effects, as defined by NDCC §49-22-07.2.
8. It is appropriate for the Commission to waive the procedures and time schedules as requested in the Application and provided under NDCC §49-22-07.2.

From the foregoing Findings of Fact and Conclusions of Law, the Commission issues the following:

Order

The Commission orders:

1. The Hess Corporation's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility Number 148 is issued to Hess Corporation designating a corridor for the construction, operation, and maintenance of a 10.2 mile, 14-inch crude oil pipeline and associated facilities in Williams County, North Dakota. For purposes of the Certificate, the designated Corridor will be as depicted in Late Filed Exhibit 3.

3. Route Permit Number 159 is issued to Hess Corporation designating a route for the construction, operation, and maintenance of a operate a 10.2 mile, 14-inch crude oil pipeline and associated facilities in Williams County, North Dakota. For purposes of the Permit, the route is identified on Late Filed Exhibit 3.

4. The July 22, 2013 Certification Relating to Order Provisions – Transmission Facility Siting with the accompanying Tree and Shrub Mitigation Specifications is incorporated by reference and attached to this Order.

PUBLIC SERVICE COMMISSION



Randy Christmann
Commissioner



Brian P. Kalk
Chairman



Julie Fedorchak
Commissioner

PUBLIC SERVICE COMMISSION

STATE OF NORTH DAKOTA

Certificate of Corridor Compatibility Number 148

This is to certify that the Commission has designated a transmission facility corridor for Hess Corporation for approximately 10.2 miles of 14-inch pipeline in Williams County, North Dakota, between the Ramberg Truck Facility and the Tioga Rail Terminal, for the transmission of crude oil.

This Certificate is issued in accordance with the Order of this Commission dated November 13, 2013 in Case No. PU-12-683 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, November 13, 2013.

ATTEST:

PUBLIC SERVICE COMMISSION



Executive Secretary



Commissioner

STATE OF NORTH DAKOTA

Route Permit Number 159

This is to certify that the Commission has designated a transmission facility route for Hess Corporation for approximately 10.2 miles of 14-inch pipeline in Williams County, North Dakota, between the Ramberg Truck Facility and the Tioga Rail Terminal, for the transmission of crude oil.

This permit is issued in accordance with the Order of this Commission dated November 13, 2013 in Case No. PU-12-683 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, November 13, 2013.

ATTEST:

PUBLIC SERVICE COMMISSION


Executive Secretary


Commissioner

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Hess Corporation
14" Crude Oil Pipeline- Williams County
Siting Application

Case No. PU-12-683

CERTIFICATION RELATING TO ORDER PROVISIONS
TRANSMISSION FACILITY SITING

I am Warren W. Walker, a representative of Hess Corporation ("Company") with authority to bind Company to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
3. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
4. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
5. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a weekly basis.
6. Company understands and agrees that the pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48

inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.

7. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.
8. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
9. Company agrees to construct and operate the transmission facility in the manner described in Company's application, in any late filed exhibits, and supplemental materials (Application). To the extent there are any conflicts or inconsistencies between Company's Application and the provisions in this Certification Relating to Order Provisions, the Certification provisions control.
10. Company agrees to report promptly to the Commission the presence in the permit area of any critical habitat or threatened species, endangered species, bald eagles, or golden eagles of which Company becomes aware and which were not previously reported to the Commission.
11. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
12. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society and clearance to proceed is given by the Commission.
13. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission

facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.

15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures approved by the Commission are taken.
16. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be stripped and segregated from the subsoil. Except along segments of the line using the double ditching method, any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.
17. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.
18. Company understands and agrees that its obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the transmission facility.
19. Company understands and agrees that its obligation for reclamation and maintenance of the transmission facility, associated facilities, and roadways will continue throughout the life of the transmission facility.
20. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
21. Company understands and agrees that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
22. Company understands and agrees that it shall repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.

23. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
24. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
25. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.
27. Company understands and agrees that it shall advise the Commission of any extraordinary events which take place at the site of the transmission facility, including injuries to any person, or the death of any threatened or endangered species on the site within five business days of such event.
28. Company understands and agrees that it shall implement a procedure for how complaints concerning the transmission facility will be handled by Company
29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.
30. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility. Company understands and agrees to obtain written approval from the Commission prior to any modifications to the site plan or the transmission facility. Approval may be granted after notice and opportunity for hearing.
31. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North

and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.

32. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.
33. Company understands and agrees that in the event Company desires to construct, within any corridor granted by a Certificate of Corridor Compatibility in this proceeding, a transmission facility or energy conversion facility that was not included in Company's application in this proceeding, Company shall apply to the Commission for a Route Permit or Site Certificate for the facility.
34. Company shall notify the Commission, as soon as reasonably possible, if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined and clearance to proceed has been given by the Commission.
35. Company understands and agrees that the corridor certificate and route permit are subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate or permit or subsequent modification, or failure to comply with applicable statutes, or rules, regulations, standards, and permits of other state or federal agencies.
36. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of its pipeline, pursuant to House Bill No. 1147:
 - a. Company will specifically identify the subsection of House Bill No. 1147 under which it is requesting the adjustment.
 - b. Before conducting any construction activities for any adjustment to the designated route within the designated corridor, Company will file with the Commission maps meeting the requirement of N.D. Admin. Code § 69-06-04-01(n) and identifying:

1. the designated route and the route adjustment;
 2. the designated corridor;
 3. all exclusion and avoidance areas within the designated corridor;
 4. all landowners and their associated property within the designated corridor; and
 5. all government entities with an interest in the designated corridor.
- c. If Company is filing a route adjustment with construction activities outside the designated corridor, the maps will include the following additional information:
1. the length of the route outside the designated corridor;
 2. the corridor adjustment;
 3. the width of the revised corridor;
 4. identification of all exclusion and avoidance areas within the revised corridor;
 5. identification of all landowners and their associated property within the revised corridor; and
 6. identification of all government entities with an interest in the revised corridor.
- d. Company will provide the name and contact information for each landowner and for each governmental entity with an interest in the designated corridor and any revised corridor; and will provide a description of the nature of each entity's interest sufficient for the Commission and Commission staff to evaluate potential impacts.
- e. Company will provide sufficient supporting documentation indicating that no landowner or interested government entity opposes the adjustment. If a landowner or interested government entity is opposed to the route adjustment, Company will provide documentation from the landowner or government entity stating its objection. If no documentation exists, Company will provide a description of its understanding of the nature of any landowner or government entity objection.
- f. If the construction activity associated with the adjustment will not affect any known exclusion or avoidance area, Company will certify in its filing that construction activities will not affect any known exclusion or avoidance areas and will provide all field studies performed to conclude that exclusion or avoidance areas will not be impacted within the revised corridor.

- g. If the construction activity associated with the adjustment will impact an avoidance area, Company will provide, before any construction activities are undertaken:
1. Specific information describing avoidance areas expected to be impacted;
 2. All field studies performed to conclude that exclusion or avoidance areas will be impacted;
 3. Specific information describing why Company asserts there is no reasonable alternative to impacting the avoidance area;
 4. Specific information describing why Company asserts there is good cause to impact the avoidance area; and
 5. Specific information about any mitigation measures Company will take.
- h. If Company is seeking an adjustment under subsection (2) or (4) of House Bill No. 1147, the Company agrees the initiation of the 10 working days from receipt of Company's filing, certification and supporting documentation will not start until all of the information required by law and this Certification has been received by the Commission. Company further acknowledges that the Commission may delegate to staff the authority to determine if Company has established good cause to impact an avoidance area. However, if it is Commission staff's determination that full Commission involvement is necessary to evaluate whether authorization to impact the avoidance area should be authorized, staff's written notice to Company that the staff is bringing the question to the full Commission constitutes action by the Commission within 10 working days and authorization is not granted until the Commission acts.
- i. If a route adjustment is granted within the original designated corridor or in an adjusted corridor, Company agrees to incorporate and follow all provisions of the Commission's Order designating the original route and corridor unless Company specifically requests relief from a specific provision, and the requested relief is specifically granted.
- j. Company certifies that it will comply with the Commission's Order and all applicable laws, rules, and regulations designating the corridor and route with respect to any adjustment.

Dated this 22 day of July, 2013.

HESS CORPORATION

By W. W. Walhang

Its Director of Infrastructure -

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Hess Corporation
14" Crude Oil Pipeline – Williams County
Siting Application

Case No. PU-12-683

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.

6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

Invasive or noxious species must be replaced by similar non-invasive or non-noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).