MINNESOTA DEPARTMENT OF COMMERCE

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AN EQUAL OPPORTUNITY EMPLOYER

December 23, 2016

Hon. Eric L. Lipman
Administrative Law Judge
State of Minnesota
Office of Administrative Hearings
PO Box 64620
Saint Paul, MN 55164-0620

RE: In the Matter of the Application of Minnesota Energy Resources Corporation for a Route Permit for the Rochester Natural Gas Pipeline Project in Olmsted County
Docket No. G-011/GP-15-858; OAH Docket No. 8-2500-33180

Dear Judge Lipman:

Attached and hereby efiled in the above matter are the following:

- REVISED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS OF THE DEPARTMENT OF COMMERCE, ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS (DOC EERA)

- PERMIT PROPOSAL OF DOC EERA (WITH ATTACHED UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN), AND WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

EERA will forward to you by e-mail a Microsoft Word version of these documents.

EERA Staff believes that issuance of a pipeline route permit is reasonable.

Sincerely,

/s/Larry Hartman
Environmental Review Manager
Energy Environmental Review and Analysis

cc: service list

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

In the Matter of the Application of Minnesota Energy Resources Corporation for a Route Permit for the Rochester Natural Gas Pipeline Project in Olmsted County	PUC Docket No. G011/GP-15-858 OAH Docket No. 8-2500-33180

REVISED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS OF THE DEPARTMENT OF COMMERCE, ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS (DOC EERA)

December 23, 2016

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

In the Matter of the Application of Minnesota Energy Resources Corporation for a Route Permit for the Rochester Natural Gas Pipeline Project in Olmsted County	PUC Docket No. G011/GP-15-858 OAH Docket No. 8-2500-33180 Findings of Fact, Conclusions of Law, and Recommendations

Public hearings were held before the Honorable Eric L. Lipman, Administrative Law Judge, on November 9, 2016, at the Centerstone Plaza Hotel, 401 6th Street SW, Rochester, Minnesota 55905 at 1:00 p.m. and 6:00 p.m.

Kodi Jean Verhalen and Michael C. Krikava, Attorneys at Law, Briggs and Morgan, P.A., and Amber S. Lee, Regulatory and Legislative Affairs Manager, appeared on behalf of Minnesota Energy Resources Corporation ("Applicant" or the "Company").

Larry Hartman and Andrew Levi, Environmental Review Managers, and Linda S. Jensen, Assistant Attorney General, appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis ("EERA").

Michael Kaluzniak, Project Manager, and Kevin George, Public Adviser,[1] Minnesota Public Utilities Commission ("Commission") Staff, appeared on behalf of the Commission.[2]

STATEMENT OF ISSUES

1. Have the procedural requirements been met for issuance of a pipeline routing permit ("Route Permit") set forth in Minnesota Statutes 216G and Minnesota Rules 7852for the Rochester Natural Gas Pipeline Project ("proposed Project") located in Olmsted County, Minnesota?

2. What combination of route segment alternatives best meets the criteria identified in Minnesota Rules 7852.1900, Subpart 3, to minimize the human and environmental impacts associated with the proposed Project?

[1] Minnesota Rule 7852.1200 requires that a "public adviser" be available to any person to advise that person how to effectively participate in route selection procedures but may not give legal advice or advice that may affect the rights of the person being advised nor may the public adviser act as an advocate.

[2] Northern Natural Gas Company was granted status as a party to the proceeding via its February 16, 2016, Petition to Intervene (eDocket No. 20162-118340-01) and the Administrative Law Judge's Third Prehearing Order (eDocket No. 20164-119742-01) but did not appear at the public hearing.

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Based on information in the Route Permit Application for the Project ("Application") submitted to the Commission; the Comparative Environmental Analysis ("CEA"); and other evidence in the hearing record,[3] the Administrative Law Judge makes the following:

FINDINGS OF FACT

I. PARTIES AND PARTICIPANTS

1. Applicant is a natural gas distribution services utility providing natural gas service to 230,000 natural gas customers in 177 Minnesota communities.[4]

2. EERA was authorized by the Commission to prepare the CEA for the Project, to hold public information meetings, to collect and analyze all route alternative proposals, and to provide a summary, analysis, and recommendation for the Commission's review and determination of routes to be considered at the hearing. EERA was also authorized to administer the route development process and the development of the CEA. The Commission requested that EERA study issues and indicate, during the hearing process, its position on the reasonableness of granting a Route Permit and that EERA issue the CEA in draft form for public comment and reply to substantive comments in pre-filed testimony at least 14 days before the public hearing.[5]

3. Northern Natural Gas Company is an interstate natural gas transmission company operating more than 3,340 miles in the State of Minnesota. Northern Natural Gas Company delivers natural gas to Applicant at 176 Town Border Stations ("TBS") and 1,815 farm taps in the State of Minnesota. Northern Natural Gas Company would provide natural gas service to Applicant's TBS 1D if the Project is issued a Route Permit by the Commission.[6]

II. PROCEDURAL SUMMARY

4. The proposed Project is located along the west and south sides of the City of Rochester in Olmsted County, Minnesota. The Project includes the construction of two new TBSs and one District Regulator Station ("DRS") along with approximately 13 to 14 miles of natural gas distribution pipeline connecting these stations.[7]

5. On November 3, 2015, Applicant filed with the Commission an Application for a Pipeline Routing Permit for the Project. The Application was filed pursuant to Minnesota Statutes section 216G.02, subdivision 3 and Minnesota Rule chapter 7852.[8] On November 9,

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[3] Certain documents filed on eDockets were not assigned exhibit numbers at the public hearing. These documents are identified herein by the corresponding eDocket number.

[4] Ex. 58 at 18 (Public Information and Scoping Meeting Presentation).

[5] Ex. 56 at 9 (Order Finding Application Complete and Granting Variance, Notice of Hearing, and Certificate of Service ("Order on Completeness")).

[6] Northern Natural Gas Company's Petition to Intervene at 1-2 (eDocket No. 20162-118340-01); Ex. 108 at 4 (CEA).

[7] Ex. 108 at 4 (CEA).

[8] Ex. 1 (Application).

2015, Applicant filed with the Commission a supplement to its Application, providing tables regarding environmental conditions for the route alternatives discussed in the Application.[9]

6. On November 9, 2015, Applicant mailed copies of the Application and the supplemental tables to state agencies.[10]

7. On November 13, 2015, the Commission issued a Notice of Comment Period on Completeness of the Application.[11]

8. On November 30, 2015, EERA filed its comments and recommendations regarding the completeness of the Application and recommended the Application be found complete.[12]

9. On December 7, 2015, Applicant filed comments replying to EERA comments regarding typographical errors EERA identified in its November 30, 2015, comments.[13]

10. On December 1, 2015, Applicant mailed a copy of the Application to the Rochester Public Library.[14]

11. On December 31, 2015, the Commission issued its Notice of Meeting on Application Completeness for January 14, 2016.[15]

12. On January 7, 2016, Commission staff filed briefing papers recommending the Commission find the Application complete, order a CEA be completed for the Project, take no action on an advisory task force at that time, authorize EERA to undertake the CEA development process, vary Minnesota Rule 7852.1400 to provide sufficient time for EERA to fully consider public comments and route alternatives for inclusion in the CEA, delegate authority to the executive secretary under Minnesota Rule 7829.3100 to develop a procedural schedule for the Project, refer the docket to the Office of Administrative Hearings for a contested case proceeding, and approve EERA's proposed budget for CEA development of $100,000.[16]

13. On January 13, 2016, Commission staff filed revised decision options for the January 14, 2016, Commission meeting authorizing EERA to prepare a CEA; hold public information meetings; collect and analyze all route alternative proposals; provide a summary, analysis, and recommendation for the Commission's review and determination of which routes

[9] Ex. 2 (Application – Supplemental Tables).

[10] Ex. 6 (Affidavits of Mailing Route Permit Application).

[11] Ex. 51 (Notice of Comment Period on Completeness of Route Permit Application and Certificate of Service).

[12] Ex. 101 (Comments and Recommendations: Application Acceptance).

[13] Ex. 3 (Minnesota Energy Resources Corporation ("MERC") – Route Permit Completeness Reply Comments). The Commission also filed documentation that no public comments were received during the comment period. Ex. 52 (Public Comment).

[14] Ex. 6 (Affidavits of Mailing Route Permit Application).

[15] Ex. 53 (Notice of Commission Meeting and Certificate of Service).

[16] Ex. 54 at 9-11 (Staff Briefing Papers on Completeness).

will be considered at hearing; and requesting that EERA issue the CEA in draft form for public comment and reply to any substantive comments received as pre-filed testimony at least 14 days prior to the public hearing.[17]

14. On January 13, 2016, Applicant filed the corrected Application information identified in its December 7, 2015, Reply Comments in the format required by Minnesota Rule 7852.2000, Subpart 3.[18]

15. On January 14, 2016, the Commission met to consider whether the Application was complete.[19]

16. On January 19, 2016, Applicant provided state agencies with revised pages filed January 13, 3016.[20]

17. On January 20, 2016, Applicant mailed copies of the Application to local units of government. Copies of the Supplemental Tables and the Revised Pages were included.[21]

18. On January 28, 2016, Applicant mailed Supplemental Tables and Revised Pages to the Rochester Public Library.

19. On January 28, 2016, Applicant filed proof of mailing copies of the Application in compliance with Minnesota Rule 7852.2000, Subpart 6.[22]

20. On February 3, 2016, the Commission issued its Order on Completeness. The Commission found the Application, as amended, was complete, and authorized EERA to begin preparation of the CEA for the Project, to hold public information meetings, to collect and analyze all route alternative proposals, and to provide a summary, analysis, and recommendation for the Commission's review and determination of routes to be considered at hearing. The Commission referred the matter to the Office of Administrative Hearings for contested case proceedings, delegated administrative authority to the Executive Secretary, authorized EERA to administer the route development process and the development of the CEA, varied the time periods in Minnesota Rule 7852.1400, Subparts 3 and 4, and approved the EERA proposed Project review budget of $100,000. The Commission also requested EERA continue to study issues and indicate during the hearing its position on the reasonableness of granting a Route Permit, required Applicant to facilitate continued examination of these issues, required Applicant to place a copy of the Application for review in at least one government center or public library in each county where the route is proposed, directed Commission staff to work with the Administrative Law Judge and EERA on suitable locations for the public hearing, and directed Applicant to work with Commission staff to arrange for appropriate notice to be published in

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[17] Ex. 55 (Staff Briefing Papers – Revised Decision Option).

[18] Ex. 4 (Revisions to Route Permit Application).

[19] Ex. 56 (Order on Completeness).

[20] Ex. 6 (Affidavits of Mailing Route Permit Application).

[21] Ex. 6 (Affidavits of Mailing Route Permit Application).

[22] Ex. 6 (Affidavits of Mailing Route Permit Application).

newspapers in the Project area. Finally, the Commission required that EERA issue the CEA in draft form and respond to any substantive public comments on the draft CEA at least 14 days prior to the public hearing.[23]

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21. On February 4, 2016, the Commission issued its Notice of Application Acceptance and Public Information and CEA Scoping Meetings to the Project Service List, the agency technical representatives list, local units of government, and the landowner mailing list as required by Minnesota Statutes section 216G.02, subdivision 3(b)(3).[24]

22. On February 11, 2016, Notice of Application Acceptance, as required by Minnesota Rule 7852.0900, and Notice of Public Information Meeting, as required by Minnesota Rule 7852.1300, Subpart 2, including a map depicting the routes included in the Application, was published in the *Rochester Post-Bulletin*.[25]

23. Notice of Application Acceptance was published in the *Minnesota Environmental Quality Board Monitor* on February 15, 2016.[26]

24. On February 16, 2016, Commission staff filed the handouts provided at the February 29, 2016, public information meetings.[27] On May 3, 2016, EERA staff filed its Draft Scoping Document and Route Proposal Guidelines, which were also available at the public information meetings.[28]

25. On February 29, 2016, public information and CEA scoping meetings were held at 2:00 p.m. and 6:00 p.m. at the Kahler Apache Hotel at 1517 16th Street SW, Rochester, Minnesota 55902, as required by Minnesota Rule 7852.1300, Subpart 1(A).[29]

26. On April 5, 2016, EERA staff filed meeting notes from the public information meetings.[30]

27. On April 13, 2016, the scoping comment period ended.[31]

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[23] Ex. 56 at Order Points 1-10 (Order on Completeness).

[24] Ex. 57 (Notice of Application Acceptance – Public Information and CEA Scoping Meeting and Certificate of Service). In April, Applicant identified that several landowners were inadvertently omitted from this list and issued a notice of the routes Applicant proposed in the Application and an extended comment period to these landowners. Ex. 11 (Affidavit of Notice of Supplemental Comment Period).

[25] Ex. 9 (Affidavit of Publication of Notice of First Public Information Meeting).

[26] Ex. 102 (Notice of Permit Application Acceptance, MEQB Monitor).

[27] Ex. 27 (Public Information and Scoping Meeting Presentation).

[28] Ex. 104, 105 (How to Suggest an Alternative Pipeline Route) (Comparative Environmental Analysis: Draft Scoping Document for Rochester Natural Gas Pipeline Project).

[29] Ex. 58 (Public Information and Scoping Meeting Presentation).

[30] Ex. 103 (February 29, 2016, Public Information Meeting Minutes).

[31] Ex. 58 at 41 (Public Information and Scoping Meeting Presentation).

28. On May 10, 2016, Applicant issued a Notice of Supplemental Comment Period to landowners inadvertently omitted from the February 4, 2016, mailed notice, extending the comment period for proposing alternative routes to May 30, 2016.[33]

29. On May 30, 2016, the supplemental scoping comment period ended.[34]

30. On June 27, 2016, EERA filed its Comments and Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project (Comments and Recommendations: Scoping) with the Commission.[35]

31. On July 1, 2016, the Commission issued a Notice of Commission Meeting noting that it would consider what action it should take in regard to route alternatives to be evaluated in the CEA at its regular meeting on July 14, 2016.[36]

32. On July 6, 2016, Commission staff issued briefing papers on the CEA scoping process and alternative routes and recommended that the Commission approve EERA's recommendations regarding the routes to include in the CEA.[37]

33. On July 14, 2016, the Commission met to consider what route or route segment proposals it considered to be appropriate for further consideration.[38] The Commission directed EERA to include in the CEA the 29 route segments ("Route Segments") EERA recommended in its June 27, 2016, Comments and Recommendations: Scoping.[39]

34. On August 2, 2016, the Commission filed a Generic Route Permit Template.[40]

35. On September 9, 2016, EERA issued a letter to landowners, state agencies, and local units of government notifying them of the routes accepted for the CEA, consistent with Minnesota Rule 7852.1600, that the Second Public Information Meeting under Minnesota Rule 7852.1300, Subpart 1(B) would be held on September 28, 2016, and that the draft CEA would be available beginning on September 16, 2016.[41]

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[33] Ex. 11 (Affidavit of Notice of Supplemental Comment Period).

[34] Ex. 11 (Affidavit of Notice of Supplemental Comment Period).

[35] Ex. 106 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[36] Ex. 60 (Notice of Commission Meeting and Certificate of Service).

[37] Ex. 61 (Staff Briefing Papers (7/6/2016)).

[38] Minnesota Rule 7852.1400, Subpart 1.

[39] Ex. 62 (Order Accepting Comments and Recommendations of EERA Staff for Route Segments and Certificate of Service).

[40] Ex. 63 (Generic Route Permit Template and Certificate of Service).

[41] Ex. 107 (DOC EERA: Landowner Letter, September 9, 2016).

36. On September 16, 2016, EERA issued a Notice of Draft CEA Availability and Public Comment Meeting.[42]

37. On September 16, 2016, EERA issued the CEA for the Project in draft from, consistent with the requirements of the Commission's Order of February 3, 2016.[43]

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38. On September 17, 2016, the Notice of Draft CEA Availability and Second Public Information Meeting was published in the *Rochester Post-Bulletin*.[44]

39. On September 19, 2016, EERA published the Notice of Draft CEA Availability and Public Comment Meeting in the *Minnesota Environmental Quality Board Monitor*.[45]

40. On September 28, 2016, the Second Public Information Meeting required under Minnesota Rule 7852.1300, Subpart 1(B) was held at 2:00 p.m. and 6:00 p.m. at the Kahler Apache Hotel, 1517 16th Street SW, Rochester, Minnesota.[46]

41. On October 18, 2016, the Commission issued its Notice of Public and Evidentiary Hearings consistent with the requirements of Minnesota Rule 1405.0500 and mailed a copy to the Official Service List, the Project Contact List, landowners along all routes included in the CEA, state agencies, and local units of government.[47]

42. On October 19, 2016, the Commission issued a corrected Notice of Public and Evidentiary Hearings.[48]

43. On October 18, 2016, a Notice of Public and Evidentiary Hearings was published in the *Rochester Post-Bulletin*.[49]

44. On October 24, 2016, Applicant filed Direct Testimony of Amber S. Lee, Lindsay K. Lyle, and Rick J. Moser.[50] Applicant mailed copies of its pre-filed Direct Testimony to the Rochester Public Library.[51]

[42] Ex. 109 (Notice of Draft CEA and Public Comment Meeting).

[43] Ex. 108 (CEA).

[44] Ex. 15 (Affidavit of Notice of Publication of Second Public Information Meeting).

[45] Ex. 110 (Notice of Draft CEA Availability and Public Comment Meeting).

[46] Ex. 110 (Notice of Draft CEA Availability and Public Comment Meeting).

[47] Ex. 65 (Notice of Public and Evidentiary Hearings and Certificates of Service).

[48] Ex. 66 (Corrected Notice of Public and Evidentiary Hearings, Erratum, and Certificate of Service).

[49] Ex. 24 (Affidavit of Publication of Notice of Public Hearing).

[50] Ex. 18 (Direct Testimony of MERC Filing letter); Ex. 19 (Direct Testimony of Amber S. Lee); Ex. 20 (Direct Testimony of Lindsay K. Lyle); Ex. 21 (Direct Testimony of Rick J Moser).

[51] Ex. 22 (Affidavit of Mailing of MERC Direct Testimony to the Rochester Public Library).

45. On October 24, 2016, EERA filed its Reply to Substantive Comments on the draft CEA, consistent with the Commission's Order of February 3, 2016. EERA was not required to reissue the CEA.[52]

46. On November 9, 2016, Administrative Law Judge Lipman presided over a public hearing at 1:00 p.m. at the Centerstone Plaza Hotel located at 401 6th Street SW, Rochester, Minnesota 55905 and public and evidentiary hearings at 6:00 p.m. at the Centerstone Plaza Hotel. Applicant's witnesses, Amber S. Lee, Lindsay K. Lyle, and Rick J. Moser were present for the public and evidentiary hearings, as were EERA staff, Larry Hartman and Andrew Levi.[53]

47. The public and evidentiary hearings concluded on November 9, 2016.[54]

48. The public comment period concluded on November 21, 2016.[55]

49. On December 2, 2016, Applicant filed its post-hearing brief including its Proposed Findings.[56]

50. On December 23, 2016, EERA filed its Comments and Recommendations regarding the Applicant's Proposed Findings.

III. DESCRIPTION OF THE PROJECT

51. The proposed Project is located along the west and south sides of the City of Rochester in Olmsted County, Minnesota. The Project includes the construction of two new TBSs and one DRS along with approximately 13 to 14 miles of natural gas distribution pipeline connecting these stations.[57]

52. The proposed Project would install approximately five miles of 16-inch outside diameter steel pipeline and approximately eight miles of 12-inch outside diameter steel pipeline. The maximum allowable operating pressure will be 500 pounds per square inch gauge ("psig") for both pipelines. The 16-inch outside diameter pipeline is anticipated to be operated at 400 to 475 psig. The 12-inch outside diameter pipeline is anticipated to be operated at 250 to 275 psig.[58]

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[52] Ex. 113 (Reply to Substantive Comments).

[53] Ex. 24 (Affidavit of Publication of Notice of Public Hearing); *see* Public and Evidentiary Hearing Transcripts (Nov. 9, 2016).

[54] Public Hearing Transcript at 11:14-17.

[55] Ex. 24 (Affidavit of Publication of Notice of Public Hearing).

[56] Minnesota Energy Resources Corporation (Brief – Post-Hearing Brief) eDockets Nos. 201612-127021-01, 201612-127021-02.

[57] Ex. 108 at 4 (CEA).

[58] Ex. 108 at 4 (CEA).

53. The proposed Project would connect TBS 1D, to be constructed adjacent to the existing Northern Natural Gas Company TBS 1D northwest of Rochester in Cascade Township, to a new TBS ("Proposed TBS"), to be located west of Rochester in Salem Township. The proposed Project will then continue on to a new DRS ("Proposed DRS") located south of Rochester in Marion Township. Once the Project is completed, Applicant's existing TBS 1B, located in southeast Rochester, will be decommissioned.[59]

54. Applicant proposes to construct the Project in three phases. The first phase will include construction of TBS 1D and is anticipated to occur in 2017. The second phase will include construction of the Proposed TBS and installation of the 16-inch pipeline between TBS 1D and the Proposed TBS and is anticipated to be completed by 2019. The third, and final, phase will include construction of the Proposed DRS and the installation of the 12-inch pipeline between the Proposed TBS and the Proposed DRS and is anticipated to be completed by 2023.[60]

55. The total right-of-way for the distribution pipeline portion of the Project is proposed to be 100 feet wide. The 100-foot right-of-way will include a 50-foot permanent right-of-way and a 50-foot temporary right-of-way.[61]

56. The temporary right-of-way will be adjacent to the permanent right-of-way and may all be located to one side of the permanent right-of-way or split between the two sides, depending on construction needs.[62]

57. In addition to the pipeline permanent and temporary rights-of-way, Applicant will require the following:

- A permanent easement measuring 200 feet by 200 feet (0.92 acre) for TBS 1D;
- A permanent easement measuring 200 feet by 200 feet (0.92 acre) for the Proposed TBS;
- A permanent easement measuring 200 feet by 200 feet (0.92 acre) for the Proposed DRS;
- A temporary easement measuring 10.0 acres for storing equipment and materials and for construction staging;[63] and
- One workspace on either side of the crossing for each area where horizontal directional drilling ("HDD") or boring is to be used along the proposed Project. At each of these locations, approximately 225 feet will be excavated

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[59] Ex. 108 at 4 (CEA).

[60] Ex. 108 at 4-5 (CEA).

[61] Ex. 108 at 30 (CEA).

[62] Ex. 108 at 62 (CEA).

[63] Ex. 108 at 62 (CEA). Applicant intends to obtain easements for TBS 1D, Proposed TBS, and Proposed DRS. If, however, the landowner requests that Applicant obtain any of these areas of property in fee, Applicant will purchase the 0.92 acres from the landowner. Ex. 108 at 62 n.59 (CEA).

on either side of the crossing and a workspace of at least 20,000 square feet in total size will be needed.[64]

58. The Applicant stated that the purpose of the proposed Project is to expand the capacity of Applicant's natural gas system to meet the projected increase in demand from its existing Rochester area customers, as well as from new customers. The proposed Project will provide Applicant with the ability to shift the supply of natural gas to where it is needed on Applicant's natural gas distribution system within the Rochester service area.[65]

59. More specifically, the Applicant stated that the proposed Project is designed to alleviate a two-fold need by: (1) eliminating the operating pressure and piping configuration issues that prevent Applicant's existing distribution system in the Rochester area from efficiently and reliably distributing the gas available on the system across Rochester and surrounding communities; and (2) increasing the interstate natural gas pipeline capacity available to the Rochester area and surrounding communities so that it is adequate to meet existing customer demand and projected future demand.[66]

IV. ROUTE AND ROUTE SEGMENT ALTERNATIVES EVALUATED

60. In its Application, Applicant included a route identified as its preferred route for the proposed Project (the "Application Preferred Route"), as required by Minnesota Rule 7852.2600, Subpart 1.[67] In its Application, Applicant also identified three alternate segments (the "BP Pipeline Alternative Route Segment," the "50th St SW/48th St SW Alternative Route Segment," and the "60th Avenue SW Alternative Route Segment") Applicant considered for the proposed Project.[68] Those three alternatives were combined with portions of the Application Preferred Route to create an alternative route ("Application Alternate Route").[69]

61. In response to public comments received during the proceeding and Applicant's continued route evaluation, Applicant modified two segments of the Application Preferred Route and identified the Modified Preferred Route for the Project. The Modified Preferred Route followed 60th Avenue SW to 40th Street SW, to County Road 8 instead of following the BP Pipeline route followed by the Application Preferred Route. The Modified Preferred Route, after

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[64] Ex. 113 at 10 (Reply to Substantive Comments); Ex. 25 (Proposed Route Permit Maps). Some workspaces may need to be larger than 20,000 square feet depending on the length, depth, and angle of the HDD. Ex. 113 at 10 (Reply to Substantive Comments). Applicant intends to co-locate all temporary workspaces for HDD within the construction right-of-way (the combined permanent and temporary rights-of-way) but actual construction conditions may require the temporary workspace to be outside the construction right-of-way or even outside the 500-foot route width in rare circumstances. Ex. 20 at 6:8-14 (Direct Testimony of Lindsay K. Lyle); Ex. 25 (Proposed Route Permit Maps).

[65] Ex. 1 at 5 (Application); Ex. 106 at 2-3 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[66] Ex. 19 at 5:5-11 (Direct Testimony of Amber S. Lee).

[67] Ex. 1 at 19 and Figure 1 (Application); Ex. 108 at Figure 1A (CEA).

[68] Ex. 1 at 19-20 and Figure 6 (Application); Ex. 2 (Application – Supplemental Tables).

[69] Ex. 108 at Figure 1B (CEA).

reaching 11th Avenue SW, followed 11th Avenue SW to 40th Street SW instead of crossing from 11th Avenue SW to 40th Street SW cross country along the Application Preferred Route.[70]

62. The Commission accepted for consideration at the public hearing 29 Route Segments.[71] These 29 Route Segments were combined into 37[72] segment alternatives ("Segment Alternatives") for purposes of performing comparisons and evaluations in the CEA.[73] The composition of the 37 Segment Alternatives are summarized in Table 4-2 to Table 4-5 of the CEA.[74]

63. Ten of these Route Segments comprised the Application Preferred Route (1P, 2P, 3P, 12, 14, 16, 6P, 7P, 26, and 9P).[75] Twelve of these Route Segments comprised the Application Alternate Route (1P, 2P, 11, 4P, 14, 18, 20, 22, 24, 25, 26, and 9P).[76] Nine of these Route Segments comprised the Modified Preferred Route (1P, 2P, 3P, 4P, 5P, 6P, 7P, 8P, and 9P).[77] The Commission could ultimately select any grouping of route segments to arrive at a final pipeline route regardless of wether or not the combination of route segments is reflected as part of the 37 Segment Alternatives.[78]

V. PROJECT ROUTE WIDTHS

64. For the Project, Applicant has requested a route width of at least 500 feet.[79] The following Route Segments have route widths wider than 500 feet:

- 4P (700 feet)
- 12 (700 feet)
- 16 (700 feet)
- 18 and 20 (800 feet)
- 20 and 22 (800 feet)
- 27 (2,000 feet).[80]

[70] Ex. 108 at 54-55 and Figure 1C (CEA).

[71] Ex. 62 (Order Accepting Comments and Recommendations of EERA Staff for Route Segments and Certificate of Service).

[72] Ex. 108 at Tables 4-2 to 4-5 (CEA). The CEA states that 36 Segment Alternatives were developed. Ex. 108 at 49 (CEA). However, 37 Segment Alternatives were considered in the CEA. Ex. 108 at Tables 4-2 to 4-5 (CEA).

[73] Ex. 108 at 49 (CEA).

[74] Ex. 108 at Tables 4-2 to 4-5 (CEA).

[75] Ex. 108 at Table 4-1 (CEA).

[76] Ex. 108 at Table 4-1 (CEA).

[77] Ex. 108 at Table 4-6 (CEA). The Modified Preferred Route is approximately 13.9 miles in length. Ex. 108 at 54 (CEA).

[78] Ex. 108 at page 45 (CEA).

[79] Ex. 1 at 16 (Application); Ex. 25 (Proposed Route Permit Maps).

[80] Ex. 62 at 2 of Order (Order Accepting Comments and Recommendations of EERA Staff for Route Segments and Certificate of Service).

Deleted: The scoping process, undertaken during the spring of 2016, resulted in a total of

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Deleted: Ex. 108 at 49 and Tables 4-2 to 4-5 (CEA).

65. The Modified Preferred Route has a route width of 500 feet, except for a short portion of Route Segment 4P, which has a route width of 700 feet in Section 19 of Rochester Township and Section 24 of Salem Township.[81]

VI. PERMITTEE

66. The permittee for the Project is Minnesota Energy Resources Corporation.[82]

VII. CERTIFICATE OF NEED

67. A certificate of need is not required for the proposed project because the project is not classified as a large energy facility under Minnesota Statutes § 216B.2421, or under Minnesota Rules, Chapter 7851 (Certificate of Need; Gas Storage, Pipeline).[83]

VIII. PUBLIC AND LOCAL GOVERNMENT PARTICIPATION

A. Public Comments

1. Comments on CEA Scope

68. Minnesota Rule 7852.1300 requires that a public information meeting be held in each county crossed by an applicant's preferred pipeline route to explain the route designation process, to respond to questions raised by the public, and to solicit comments on route and route segment proposals and other issues that should be examined in greater detail in the CEA prepared for a project.[84]

69. On February 29, 2016, the Commission and EERA held two public information and scoping meetings in Olmsted County at 2:00 p.m. and 6:00 p.m. Both meetings started with an overview presentation provided by Commission staff, followed by a brief overview by the Company of the proposed project, and an overview provided by EERA of the Commission's route permitting process. These presentations were followed by questions and comments from the public and responses from Commission, Company, and EERA representatives as appropriate.[85]

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[81] Ex. 62 at 2 of Order (Order Accepting Comments and Recommendations of EERA Staff for Route Segments and Certificate of Service); Ex. 25 (Proposed Route Permit Maps). Pages 5 and 6 of Exhibit 25 illustrate the area of the Modified Preferred Route with a route width of 700 feet.

[82] Ex. 1 at 8 (Application); Ex. 108 at i (CEA).

[83] Ex. 106 at 8 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[84] Ex. 106 at 11 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[85] Ex. 106 at 11-12 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project); *see also* Ex. 103 (Feb. 29, 2016, Public Information Meeting Minutes).

70. In addition to the information and scoping meetings, the Rochester Township Board requested that Company representatives and EERA staff attend the monthly board meeting on May 12, 2016, to provide information on the proposed Project, an overview of the Commission's regulatory review process for pipelines, and to respond to questions from the board and the public. Representatives of the Company and EERA attended the meeting and responded to questions as appropriate. On June 3, 2016, EERA staff spoke with the chair of the Rochester Township Board, who indicated that while the board did not send any written comments, it nonetheless wanted to be kept informed of project-related activities.[86]

71. With respect to written comments, the initial comment period closed on April 13, 2016; however, some landowners were inadvertently omitted and did not receive the mailed notice of the comment period. Although mailed notice of the comment period is not required under Minnesota law, the Company mailed a notice of a supplemental comment period to these landowners with the opportunity to provide comments. The supplemental comment/scoping period closed May 30, 2016.[87]

72. Twenty-eight separate comments were provided by the close of the April 13, 2016, and May 30, 2016, comment periods through various methods, including oral comments provided at the public meetings and documents submitted to EERA staff by mail and email.[88]

a. Oral Comments

73. *Mr. Louis Siefert* inquired as to whether residents along the proposed pipeline could tap into the proposed pipeline for gas service to their homes or farms.[89]

74. *Mr. Daniel DeCook* inquired about the location of the Proposed TBS and depth of burial for the proposed pipeline.[90]

75. *Ms. Carol Overland*, a resident of Red Wing, Minnesota, inquired about whether "phased and connected actions" would be addressed in the environmental review, including the need for Northern Natural Gas Company to run a gas line into the area to provide the Company with natural gas for the proposed Project and suggested that Northern Natural Gas Company's project be included in the scope for environmental review. Ms. Overland also inquired about a natural gas plant proposed by Rochester Public Utilities and suggested that the environmental review document address that proposal. With respect to "socioeconomic impacts and safety impacts," Ms. Overland questioned how the Project "relates to the city and county comp plans

[86] Ex. 106 at 12 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[87] Ex. 106 at 12 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[88] Ex. 106 at 13 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Rochester Natural Gas Pipeline Project).

[89] Ex. 103 at 24-27 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[90] Ex. 103 at 27-32 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

and the zoning" and "safe separation distances from natural gas transmission pipelines."[91] Ms. Overland also submitted several documents to EERA staff at the public meeting.[92]

76. *Mr. Thomas Roetzler* inquired about how close buildings could be to pipelines, land use restrictions, and how compensation is handled under eminent domain proceedings.[93]

77. *Mr. John Donovan* inquired about pipeline safety, whether safety standards are set by the federal or state government, depth of burial, and whether the pipeline was going to be located on private land or in the public road right-of-way.[94]

78. *Mr. Mark Darnell*, a landowner with property along the Application Preferred Route and speaking on behalf of himself and his neighbor, *Mr. Stan Dee*, who was present at the meeting, expressed concern about the location of the Application Preferred Route on their property and indicated they would prefer the Application Alternate Route because said route would not bisect their properties. Mr. Darnell suggested that the Application Preferred Route be moved south approximately 300 yards in order to follow the natural property line and tree line, so as to not disrupt their farming operations or businesses.[95] Mr. Darnell and Mr. Dee also submitted written comments stating similar sentiments expressed in their oral comments.[96]

79. *Ms. Frances Passe*, a landowner with property along the Application Preferred Route, inquired about why the proposed pipeline changes size from "13 inches to 8 inches," how the pipeline would cross the Zumbro River, and on what side of 60th Avenue the pipeline would be located. Ms. Passe suggested that the Company take the Application Alternate Route so as to not intersect a portion of her property.[97]

80. *Mr. Dennis Dore* pointed out that a protected wetland is located in the vicinity of where the Application Preferred Route ends, as well as a transfer station, two hotels, and two new apartment buildings under construction. Mr. Dore indicated that the Application Alternate Route is on the south side of a new development. Given the restrictions mentioned by Mr. Dore, he stated that he would like to be apprised of updates.[98]

81. *Mr. Douglas Cranston* inquired about what happens in the event of a leak or rupture of the natural gas pipeline and the operating pressure of the pipelines proposed by the Company and Northern Natural Gas Company.[99]

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[91] The Project is a natural gas *distribution* line.

[92] Ex. 103 at 33-39 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting); *see also* Ex. 124A-124C, 125D-125F (documents submitted by Ms. Overland at the 2:00 p.m. public meeting).

[93] Ex. 103 at 39-42 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[94] Ex. 103 at 42-47 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[95] Ex. 103 at 47-52 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[96] Ex. 123 (Mark A. Darnell/Stanley Dee Written Comments).

[97] Ex. 103 at 53-60 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[98] Ex. 103 at 60-63 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

[99] Ex. 103 at 63-67 (Feb. 29, 2016, Public Information Meeting Minutes) (2:00 p.m. meeting).

82. *Mr. Bruce Ryan*, a landowner who owns property along the Application Preferred Route, raised concerns that the proposed route would impact the mature trees on his property and suggested that the pipeline be moved approximately 50 feet to the west to an open farm field.[100] Mr. Ryan also submitted, in written comments, an alternative route proposal.[101]

83. *Mr. Gary Vasdev*, a landowner who owns property along the Application Preferred Route, inquired about the bending of the pipe, whether bending affects the longevity of the pipe, and questioned why the pipeline could not follow the existing road right-of-way because easements are already in place. Mr. Vasdev also questioned whether any compensation is provided for developing over farm fields in the summertime.[102]

84. *Mr. Bud Hanson*, a landowner who owns property along the Application Preferred Route, inquired about where the pipeline would be in relation to buildings on his property and how close the pipeline can be constructed to his house.[103]

b. Written Comments

85. *Mr. Irrold Hanson*, a landowner with property along the Application Preferred Route, commented that the proposed pipeline should be located in road right-of-ways.[104]

86. *Mr. Harry Meyer*, president of Meyer Farms, Inc. and owner of land along the Application Preferred Route, expressed opposition to the Application Preferred Route due to possible interference with existing tile lines. Mr. Meyer expressed a preference for locating the proposed pipeline on the west side of the right-of-way.[105]

87. *Mr. Gene Peters*, an owner of Westridge Hills ("Westridge Hills") property, provided background on Westridge Hills' proposed development and expressed concerns that the Application Preferred Route would diminish the value of the property owned by Westridge Hills and would affect the placement of sewer, water, and stormwater pipes for the proposed development by Westridge Hills. Mr. Peters suggested that the pipeline be placed in the current road right-of-way.[106]

88. *Mr. Jeff Broberg*, Senior Environmental Manager of WSB & Associates, Inc., submitted written comments on behalf of *Mr. Franklin Kottschade*, a landowner along the Application Preferred Route. Mr. Broberg noted Mr. Kottschade's objection to the proposed pipeline, stating that the Application Preferred Route does not take into consideration the development plans or development history of the properties owned by Mr. Kottschade, nor does

[100] Ex. 103 at 89-91 (Feb. 29, 2016, Public Information Meeting Minutes) (6:00 p.m. meeting).

[101] Ex. 119 (Bruce Ryan Written Comments).

[102] Ex. 103 at 91-93, 97-98 (Feb. 29, 2016, Public Information Meeting Minutes) (6:00 p.m. meeting).

[103] Ex. 103 at 93-96 (Feb. 29, 2016, Public Information Meeting Minutes) (6:00 p.m. meeting).

[104] Ex. 118 (Irrold M. Hanson Written Comment).

[105] Ex. 121 (Meyer Farms Inc./Harry Meyer Written Comment).

[106] Ex. 122 (Eugene Peters – Westridge Hills Corp. Comment).

it account for the impact that the pipeline may have on any plans for future development. Mr. Kottscade requested that the Commission reject the proposed route and require the Company to consider alternatives that do not have such a substantial impact on the growth of the southern corridor of the City of Rochester.[107]

89. *Ms. Donna Anderson* proposed a route segment that would run adjacent to an existing Northern Natural Gas Company right-of-way near the location of TBS 1D, suggesting the new route segment because it uses agricultural lands, avoids residential lawns, and would be further away from the Olmsted County landfill.[108]

90. *Mr. Ronald Jacobson* stated a preference for the pipeline to be extended to 55th Avenue, follow 55th Avenue north, and connect to the BP Pipeline right-of-way north of 40th Street. Mr. Jacobson provided two aerial photos depicting route proposals.[109]

91. *Mr. Jerry Dee*, a landowner with property along the Application Preferred Route, stated a preference that the pipeline route run on the Application Preferred Route along the north side of his farm.[110]

92. *Wayne and Earlen Laursen* submitted written comments stating that "[t]he preferred route is, by far, our choice."[111]

93. The Minnesota Department of Transportation ("MnDOT"), the Minnesota Department of Natural Resources ("MnDNR"), and the Rochester-Olmsted Planning Department ("ROPD") submitted written comments on the scope of the CEA. These comments are discussed in Sections VII.B.1, VII.B.2, and VII.B.3 below.

2. Comments on Draft CEA

94. Minnesota Rule 7852.1300, Subpart 1(B) requires that a second public information meeting be held before the public hearing in each county through which a route is proposed to explain the route designation process, present major issues, and respond to questions raised by the public.

95. Two public meetings were held on September 28, 2016, at the Kahler Apache Hotel in Rochester, Minnesota, at 2:00 p.m. and 6:00 p.m., to allow the public to comment on the draft CEA. The format for each meeting was the same, with the meetings starting with an overview presentation provided by EERA staff followed by public questions and comments and responses from EERA staff and representatives of the Company as appropriate.[112]

[107] Ex. 126, 126A-126G (Franklin Kottschade Written Comments and Supporting Documents).

[108] Ex. 120 (Donna Anderson Written Comments).

[109] Ronald Jacobson Public Comment (eDocket No. 20164-120688-01).

[110] Jerry Dee Public Comment (eDocket No. 20164-120687-01).

[111] Ex. 125 (Wayne and Earlen Laursen Written Comments).

[112] Ex. 113 at 2 (Reply to Substantive Comments).

96. The public comment period on the draft CEA closed on October 7, 2016. The public could submit comments in multiple ways. Oral comments were accepted at the public meetings. A pre-addressed comment form was provided at the public meetings. Interested persons could submit the form at the public meeting, mail the form after affixing appropriate postage, or mail the form in a separate envelope. An electronic comment form was available on the EERA webpage. Comments could also be provided by fax or email. A total of 9 written comments were received and 18 members of the public commented at the public meetings.[113]

a. Oral Comments

97. *Mr. William Tointon*, a planning consultant in Rochester, Minnesota, and appearing on behalf of Westridge Hills, expressed Westridge Hills' opposition to the pipeline going through its planned residential development. Similarly, *Mr. Gene Peters*, an owner of Westridge Hills property, stated that he did not oppose the Application Preferred Route, but opposed the portion of it intersecting his property.[114] *Mr. Walt Hruska*, also appearing on behalf of Westridge Hills, inquired about why the preferred route became as such and whether a lot parallel to the pipeline could be built on.[115]

98. *Mr. Bruce Ryan*, a landowner who owns property along the Application Alternate Route, stated that he opposed said route because it would cut across the front of his home, interfering with a line of mature trees, but agreed that this issue was covered in the CEA.[116]

99. *Mr. Harry Meyer*[117] expressed concerns regarding existing tile lines and stated that he preferred the Application Alternate Route along the BP Pipeline.[118]

100. *Mr. John Donovan* inquired as to who monitors the installation of the pipeline to ensure that it is at its required depth and that the installation is done as proposed. Mr. Donovan further asked whether, when a pipeline is to be installed parallel to a road, the pipeline is built as close as possible to the right-of-way.[119]

[113] Ex. 113 at 2-3 (Reply to Substantive Comments); Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA).

[114] Ex. 111 at 20-23, 32-35 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[115] Ex. 111 at 44-52 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[116] Ex. 111 at 36-37 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[117] The transcripts of the public meeting inadvertently name Mr. Harry Meyer as Mr. Gary Meyer. *See* Ex. 111 at 38-44 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[118] Ex. 111 at 38-44 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[119] Ex. 111 at 53-58 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

101. *Ms. Lori Shaw* inquired about the size of the pipe used for the Project.[120]

102. *Mr. Mike Robinson* inquired about the size and depth of the pipeline.[121]

103. *Ms. Edie Cranston* inquired about whether having a home located in close proximity to the TBS will have any sort of impact on the home.[122]

104. *Ms. Virginia Ranweiler* inquired as to whether the Company's proposed pipeline was going to be built in conjunction with the BP Pipeline.[123]

105. *Mr. Jerry Dee* inquired as to what conditions would need to be met to implement the alternate or scoping routes.[124]

106. *Mr. Stanley Dee*, a landowner who owns property along the Application Preferred Route, expressed concern that a portion of the pipeline runs through the middle of his farm property and asserted that a goal of drafting the CEA should be to ensure that the pipeline conforms with property lines.[125]

107. *Mr. Charles Passe*, a landowner who owns property along the Application Alternate Route, stated his opposition to said route and inquired as to whether he would be able to tap into the pipeline.[126]

108. *Mr. Rick Lutzi*, a Salem Township Board Member, inquired about the township's rights-of-way, road maintenance, and ditch depth.[127]

109. *Ms. Mary Pyfferoen*, a landowner with property along the Application Preferred Route, inquired as to how lands currently enrolled in a Conservation Reserve Program will be

[120] Ex. 111 at 58-59 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[121] Ex. 111 at 84-85, 94-95 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[122] Ex. 111 at 85-87 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[123] Ex. 111 at 88-90 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[124] Ex. 111 at 90-92 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[125] Ex. 111 at 92-94 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[126] Ex. 111 at 96-97 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[127] Ex. 111 at 97-100 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

affected by a pipeline crossing and how landowners will be compensated if property values are affected by the pipeline.[128]

b. Written Comments

110. *Mr. Larry Franck*, a landowner with property along the Modified Preferred Route, expressed concerns with the location of the pipeline, namely concerns with why the pipeline crosses the road at some points along the route.[129]

111. *Ms. Cathy Roetzler*, a landowner with property along the Application Preferred Route, suggested that the Modified Preferred Route be considered for the chosen pipeline route.[130]

112. *Mr. Brad Larsen*, General Partner at Graham Properties LTD., encouraged approval of the scoping route to keep the Northern Natural Gas Company pipeline and proposed pipeline together, eliminating the disturbance of additional land. Mr. Larsen stated that if the Application Preferred Route were selected, the pipeline should run entirely along the south side of 19th Street NW instead of crossing under the road twice to avoid interfering with a parallel creek and fishing area.[131]

113. *Mr. Eric Funk* expressed concerns with water flow issues resulting from the construction of the pipeline and inquired whether, if water flow changes after completion of the pipeline and causes damage to properties, the Company will work to resolve the issues.[132]

114. *Mr. Anthony Roetzler* submitted written comments supporting the Modified Preferred Route.[133]

115. *Mr. Greg Perry* expressed concerns with Route Segment 11, as the pipeline associated with this plan would infringe on a wet lands and Mr. Perry's property. Mr. Perry suggested that the pipeline follow the right-of-way to ensure no impact on personal property.[134]

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[128] Ex. 111 at 100-06 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (6:00 p.m. meeting).

[129] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Larry Franck Email Comment).

[130] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Cathy Roetzler Email Comment).

[131] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Brad Larsen Email Comment). Although the Company has stated a preference for the alignment that follows 19th Street SW, the Company has no objection to locating the pipeline in this area (Segment Alternative AB-2 instead of Segment Alternative AB-1) so long as the anticipated alignment were located south of the existing Northern Natural Gas Company natural gas transmission pipeline to avoid two crossings of that infrastructure. Evidentiary Hearing Transcript at 25:18-26:4 (Lyle).

[132] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Eric Funk Email Comment).

[133] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Anthony Roetzler Comment Form).

116. *Ms. Margaret Simonson* expressed a preference for the Modified Preferred Route, stating that it is a more direct route with less environmental impact.[135]

117. The Minnesota Pollution Control Agency ("MPCA") also provided written comments on the draft CEA, which are discussed in detail in Section VII.B.4 below.[136]

3. Summary of Testimony at the Public Hearings

118. Pursuant to Minnesota Rule 7852.1700, the Administrative Law Judge conducted public hearings to elicit public comment regarding the routing of the proposed Project. Two public hearings were held on November 9, 2016, at 1:00 p.m. and 6:00 p.m., at the Centerstone Plaza Hotel in Rochester, Minnesota. Twenty-one members of the public testified at the public hearings.[137]

119. The public comment period closed on November 21, 2016.[138] Six members of the public submitted written comments.[139]

a. Oral Comments

120. *Mr. Bruce Ryan* stated that he favored the Modified Preferred Route, as the Application Preferred Route would impact mature trees currently located on his property.[140]

121. *Mr. William Tointon*, a planning consultant representing Westridge Hills, and *Mr. Gene Peters*, owner of Westridge Hills property, expressed concerns that the Application Preferred Route and Modified Preferred Route bifurcates a residential development plan on Westridge Hills' property and interferes with utility flow for the development, and stated a preference for a pipeline route that abuts the development easement.[141] *Mr. David Kell*, representing Hope Summit Christian Church which owns property adjacent to Westridge Hills, stated concerns with respect to retaining the ability to construct a church on the property and preserving the viability of future development of adjacent lands. Mr. Kell recommended locating the entire pipeline along the 40th Street right-of-way, an option not presented by the Company, and, secondarily, supported the Application Alternate Route.[142]

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[134] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Greg Perry Comment Form).

[135] Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (Margaret Simonson Comment Form).

[136] *See* Ex. 113 at 12-14 (Reply to Substantive Comments).

[137] Public Hearing Transcript at 1, 3-4.

[138] Public Hearing Transcript at 11.

[139] *See* Public Comments of Carol Overland (eDocket No. 201611-126682-01); Public Comment (eDocket No. 201611-126768-01).

[140] Public Hearing Transcript at 24-25 (2:00 p.m. hearing).

[141] Public Hearing Transcript at 26-30, 34-26 (2:00 p.m. hearing).

[142] Public Hearing Transcript at 36-39, 61-64 (2:00 p.m. hearing).

122. *Mr. Harry Meyer* testified that he opposes the Application Preferred Route, expressing concerns that the route would interfere with the tile lines on his property and stated support for the Application Alternate Route.[143]

123. *Mr. Charles Passe* stated his support for the Application Preferred Route and wanted to ensure that the route would not impact trees along his property on the east side of 60th Avenue. Company representative Ms. Amber Lee responded that the proposed alignment runs on the west side of 60th Avenue. Mr. Passe also inquired about what would happen in the future if road expansion occurs or the high-speed rail is constructed along the pipeline corridor.[144]

124. *Ms. Carol Overland* stated concerns with the safety of installing a pipeline close to residential areas, questioned the need for the pipeline, and inquired about the limitations placed on use of land after the pipeline is installed. Ms. Overland further inquired about specific designations included on the maps present at the public hearings. Ms. Overland also submitted written comments, articulating similar sentiments as provided at the public hearing, with the additional assertion that eminent domain should not apply to the Project because, according to Ms. Overland, the pipeline is being constructed for a "private market purpose."[145]

125. *Mr. William Oldfield*, a landowner with property along the Application Preferred Route and Modified Preferred Route, raised concerns that the pipeline may disturb his ability to develop the property. Mr. Oldfield stated that he supports the Application Alternate Route.[146]

126. *Gerry and Carolyn Pettelko*, landowners with property along the Application Alternate Route, raised concerns with pipeline safety and the impact the pipeline may have on property values. They also inquired about the size of the right-of-way and why the pipeline does not avoid residential areas when a significant amount of undeveloped property is located near the Application Preferred Route. Mr. and Mrs. Pettelko stated a preference that the pipeline be routed through open fields rather than close to residential areas.[147]

127. *Ms. Mary Pyfferoen* expressed concerns about the impact the pipeline may have on property values and pipeline safety and inquired about the possibility of future road expansion along the pipeline route.[148]

128. *Ms. Carol Ausrud*, a landowner with property along the Modified Preferred Route, inquired about how far from the road the pipeline would be built. Ms. Ausrud, along with *Mr. Dallas Ausrud*, also submitted written comments requesting that the Application Alternate

[143] Public Hearing Transcript at 30-32 (2:00 p.m. hearing).

[144] Public Hearing Transcript at 32-33 (2:00 p.m. hearing).

[145] Public Hearing Transcript at 40-43, 72-75 (2:00 p.m. hearing); Public Comments of Carol Overland (eDocket No. 201611-126682-01).

[146] Public Hearing Transcript at 44-50, 67-68 (2:00 p.m. hearing).

[147] Public Hearing Transcript at 50-52, 65-67, 69-70. (2:00 p.m. hearing).

[148] Public Hearing Transcript at 52-54, 70-72 (2:00 p.m. hearing).

Route not be implemented due to its proximity to homes and stated a preference for the Application Preferred Route and the Modified Preferred Route.[149]

129. *Mr. Mark Darnell*, speaking on behalf of himself and *Mr. Stanley Dee*, stated concerns that the Application Preferred Route severs Mr. Darnell's and Mr. Dee's properties and would impact their haying and farming operations. Mr. Darnell stated that he and Mr. Dee were in favor of the Modified Preferred Route, Application Alternate Route, and scoping route. Mr. Dee personally inquired as to whether individual homes would have access to natural gas after construction was complete.[150]

130. *Mr. Craig Milde*, a landowner with property adjacent to the Modified Preferred Route, inquired about land use restrictions after the pipeline is built and whether the construction of the pipeline would impact the vegetation on his property.[151]

131. *Mr. Irrold Hanson* expressed concern that Route Segment 7P may interfere with leveling and developing his property. Mr. Hanson also submitted written comments reiterating his oral comments during the public hearing.[152]

132. *Mr. Rick Lutzi* stated that culvert replacement and tile line installation would be occurring along the Modified Preferred Route and wanted to ensure that the Salem Township Board and the Company effectively communicate regarding work on and along the roadways.[153]

133. *Mr. Larry Franck* and *Mr. John Adamson*, landowners with property along the Application Preferred Route and Modified Preferred Route along 70th Street SW, separately inquired about why the Modified Preferred Route crosses the road at some points along the route rather than maintaining a path along one side of the road. Mr. Franck also submitted written comments stating that he would like the pipeline to avoid his property and submitted a map with an alternate alignment on the east side of 70th Avenue SW.[154]

134. *Mr. Brian Connelly* inquired about the depth of the pipeline, whether installation of the pipeline would affect existing tile lines, and whether any safeguards are in place to combat the possible impact erosion on agricultural lands may have on the depth of the pipeline and associated safety concerns. Mr. Connelly also asked about how close a landowner needs to be located to hookup to the pipeline.[155]

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[149] Public Hearing Transcript at 54-58 (2:00 p.m. hearing); Public Comment of Dallas and Carol Ausrud (eDocket No. 201611-126768-01).

[150] Public Hearing Transcript at 95-104 (6:00 p.m. hearing).

[151] Public Hearing Transcript at 110-13 (6:00 p.m. hearing).

[152] Public Hearing Transcript at 113-16 (6:00 p.m. hearing); Public Comment of Irrold Hanson (eDocket No. 201611-126768-01).

[153] Public Hearing Transcript at 116-19 (6:00 p.m. hearing).

[154] Public Hearing Transcript at 119-24 (6:00 p.m. hearing); Public Comment of Larry Franck (eDocket No. 201611-126768-01).

[155] Public Hearing Transcript at 124-28 (6:00 p.m. hearing).

b. Written Comments

135. *Ms. Cathy Roetzler* submitted written comments supporting the Modified Preferred Route, stating concerns that construction of the Application Preferred Route would interfere with future organic farming plans, damage farm land, and affect a natural spring.[156]

136. Other written comments received were by stakeholders who testified at the public hearing. The information contained in their written comments is included with their public hearing testimony summarized above.

B. Local Government and State Agency Participation

1. Minnesota Department of Transportation

137. MnDOT submitted written comments on April 13, 2016, addressing the scope of the CEA, requesting that the CEA address the permit requirements of MnDOT, as well as relevant permits or authorizations the Company must obtain from road authorities relating to any formal policy and procedures for accommodation of utilities on highway right-of-ways. MnDOT also addressed permit requirements for crossing highways US 14 and US 63 and oversize/overweight permits for the hauling of pipe and equipment, providing that MnDOT should be involved in planning and coordinating activities that may affect MnDOT rights-of-way.[157]

2. Minnesota Department of Natural Resources

138. The MnDNR submitted written comments on April 13, 2016, addressing the scope of the CEA and suggesting that potential impacts to several sensitive, rare, and valuable features within the Project area be fully explored and considered in the CEA and route selection. The MnDNR also commented that calcareous fens and impacts are regulated by the MnDNR in accordance with the Minnesota Wetland Conservation Act. The MnDNR noted that several of the Company's proposed Route Segments involve the crossing of a MnDNR public water, wetland, or land and that crossing these features requires a MnDNR License to Cross, and suggested that consideration of routes or Route Segments that avoid impacting protected natural resource features may be warranted. The MnDNR also suggested that the CEA include an assessment of HDD as a mitigation measure for any impacts to sensitive environmental features found in surveys and requested a description of where wildlife-friendly erosion control would be used, recommending it be used wherever possible.[158]

3. Rochester-Olmsted Planning Department

139. The ROPD submitted written comments on April 13, 2016, addressing the scope of the CEA, noting that the Application Preferred Route bisects developed, residentially-planned land within the present Rochester urban growth area that will affect the development potential of

[156] Public Comment of Cathy Roetzler (eDocket No. 201611-126768-01).

[157] Ex. 115 (Letter from MnDOT to EERA (4-13-16)).

[158] Ex. 116 (Letter from MnDNR (4-14-16)).

these properties and suggested that moving the route further south would not have a negative effect on the growth of the area. The ROPD raised concerns that the proposed pipeline cuts through a sensitive bedrock formation and suggested that, to minimize the impact, the Company should minimize grading, install seep collars or other mitigation strategies to control ground water movement along the pipe, and use vegetation to control erosion to mitigate potential changes to groundwater flows. The ROPD also questioned what construction mitigation strategies would be employed if subsurface excavation uncovers or exacerbates karst features and if it is possible to replace tree cover within the pipeline right-of-way to minimize impact on wildlife habitat and visual appeal. The ROPD requested that the Company share its hazard mitigation documents with several local government agencies to ensure inclusion of the hazard/mitigation strategies in public emergency management plans.[159]

140. At the September 28, 2016, public information meeting to discuss the draft CEA, *Mr. Michael Sheehan*, an employee of the Olmsted County Public Works Department, expressed concern regarding what a 500-foot-width route means in the preliminary property rights that the Company is obtaining. Mr. Sheehan speculated that County Road 117 and County Road 104 may need to be reconstructed in the future and requested that the Company work with Olmsted County to ensure that the pipeline does not need to be relocated due to future road construction activities, but stated that there is no timeline for expansion and the expansion is not included in the county's five-year plan.[160] Mr. Sheehan's oral comments were submitted in conjunction with written comments submitted by *Mr. Thomas Canan*, Senior Assistant Olmsted County Attorney, who expressed the same concerns articulated by Mr. Sheehan.[161]

141. In its October 25, 2016, Reply to Substantive Comments, EERA responded to the written and oral comments of Mr. Sheehan and Mr. Canan, respectively.[162]

142. The Company met with the Olmsted County Public Works Department and the Olmsted County Engineer on October 17, 2016. The Company confirmed that it would work with the county and county engineer on the final alignment for the Project as it relates to road rights-of-way and future development plans to determine where appropriate mitigation measures may be incorporated to avoid duplicate construction of infrastructure wherever practicable along the selected route.[163]

143. At the November 9, 2016, public hearing, *Ms. Kaye Bieniek*, an Olmsted County engineer representing the Olmsted County Public Works Department, expressed concerns regarding the impact the pipeline may have on future expansion capabilities of roadways marked for improvements though the long-range (2040) transportation plan prepared by the Rochester-Olmsted Council of Governments. Ms. Bieniek noted that the Olmsted County Public Works

[159] Ex. 117 (Olmsted County Planning Department (4-13-16)).

[160] Ex. 111 at 23-32 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (2:00 p.m. meeting).

[161] Ex. 112 (Public Comment – Additional Public Comment).

[162] Ex. 113 at 3-4, 9 (Reply to Substantive Comments).

[163] Ex. 19 at 10:14-21 (Direct Testimony of Amber S. Lee).

Department had met with Company representatives to discuss available options that would allow flexibility in planning roadway improvements.[164]

4. *Minnesota Pollution Control Agency*

144. The MPCA provided written comments on the draft CEA that focused on the informational needs associated with the MPCA 401 Water Quality Certification for the proposed Project and the potential requirements the MPCA may necessitate through the 401 Certification. The MPCA requested confirmation that no Outstanding Resource Value Waters, impaired waters, trout waters, or wild rice waters would be crossed in the construction of the pipeline. The MPCA also requested details of the crossing method and best management practices used when crossing the Zumbro River, and Cascade and Willow Creeks; descriptions of how the Company will return each wetland temporarily impacted by the construction of the pipeline to pre-construction contours and wetland quality; and clarification as to whether the Company anticipates impacts to stream banks and, if so, how the Company will stabilize and return each streambank impacted during crossing to its original form and function.[165]

145. In its October 25, 2016, Reply to Substantive Comments, EERA responded to the MPCA's comments.[166]

IX. ROUTE SELECTION LAW AND RULE

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146. Minnesota Statutes section 216G.02 subdivision 2 prohibits construction a pipeline without a pipeline routing permit issued by the Commission unless the pipeline is exempted from the commission's routing authority, and a pipeline requiring a permit may only be constructed on a route designated by the Commission.

147. Minnesota Statutes section 216G.02, subdivision 3 requires that the Commission "adopt rules governing the routing of pipelines" and that the rules must "provide criteria that the Commission will use in determining pipeline routes, which must include, . . . the impact of the proposed pipeline on the natural environment." In compliance with this requirement, the Commission adopted Minnesota Rules chapter 7852. Specifically, Minnesota Rule 7852.1900 sets forth the criteria that the Commission shall consider in selecting a route for designation and issuance of a pipeline Route Permit.[167]

148. Minnesota Rule 7852.1900, Subpart 3 requires that the Commission consider the impact on the pipeline of the following:

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A. human settlement, existence and density of populated areas, existing and planned future land use, and management plans;

[164] Public Hearing Transcript at 104-10 (6:00 p.m. hearing).

[165] Ex. 113 at 12-14 (Reply to Substantive Comments); Ex. 111 (Comments: Public Comments (Verbal and Written) Received on Draft CEA) (MPCA 401 Water Quality Certification Review).

[166] Ex. 113 at 13-14 (Reply to Substantive Comments).

[167] Minn. R. 7852.1900, subp. 3.

B. the natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;

C. lands of historical, archaeological, and cultural significance;

D. economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;

E. pipeline cost and accessibility;

F. use of existing rights-of-way and right-of-way sharing or paralleling;

G. natural resources and features;

H. the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;

I. cumulative potential effects of related or anticipated future pipeline construction; and

J. the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.

149. In determining the route of a proposed pieline, the Commission must consider the characteristics, the potential impacts, and methods to minimize or mitigate the potential impacts of all proposed routes so that it may select a route that minimizes human and environmental impact.[168]

A. Effects on Human Settlement

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150. Minnesota Rule 7852.1900, Subpart 3(A) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to human settlement, the existence and density of populated areas, existing and planned future land use, and management plans.

1. Displacement

151. Displacement is the forced removal of a residence or building to facilitate the safe operation of a pipeline.[169]

[168] Minn. R. 7852.1900, subp. 2.

[169] Ex. 108 at 65 (CEA).

152. To evaluate the potential for impacts to human settlement, EERA included in the CEA an evaluation of the construction right-of-way associated with the anticipated alignment for all Segment Alternatives. For purposes of the evaluation, the pipeline centerline was in the middle of the permanent right-of-way and the permanent right-of-way was in the center of the construction right-of-way.[171]

153. There are numerous residences, commercial and agricultural buildings, and other buildings within the anticipated permanent right-of-way and construction area of Route Segments 4P, 7P, and 29. There are agricultural buildings within the anticipated construction area of Route Segment 5P.[172]

154. The Applicant indicates that it intends to use variations within the route width to design the pipeline within the approved route such that the permanent right-of-way would avoid direct impacts to residential or other buildings. Additionally, the temporary right-of-way would be configured accordingly to avoid direct impacts to residential or other buildings, for example, the temporary right-of-way may be located all on one side of the permanent right-of-way or split between the two sides of the permanent right-of-way in some way so as to ensure that no structures were within the right-of-way.[176]

155. The route width for the Project has been requested by Applicant to ensure that, during detailed design of, and easement acquisition for, the pipeline, the alignment and construction right-of-way (including both the permanent and temporary rights-of-way) can be modified from the anticipated alignment to minimize impacts to human settlement and environmental features.[177]

156. It is anticipated that final pipeline design will place the pipeline within the permitted route, such that the permanent right-of-way would avoid direct impacts to residneces or other buildings. Impacts resulting from displacement are anticipated to be minimal for the proposed Project.[178]

2. Air Quality

157. Short-term impacts would occur during construction. Air emissions during construction would primarily consist of emissions from both road and non-road construction equipment. These emissions will include carbon dioxide, mono-nitrogen oxides (NOx), and particulate matter (for example, dust generated from earth-disturbing activities). Localized construction emissions would be dependent on weather conditions, the amount of equipment at any location at a given time, and the length of time equipment is in operation for a given

[171] Ex. 108 at 66 and Tables B-25 to B-30 (CEA); *see* 62 for discussion regarding Geographic Information Systems (GIS) analysis.

[172] Ex. 108 at Tables B-27 through B-30 (CEA).

[176] Ex. 108 at 62, 66, 137, 140, 144, 147 (CEA).

[177] Ex. 108 at 65, 66, 68, 71, 107, 109, 111-113, 114, 116, 117, 121, 122 (CEA).

[178] Ex. 108 at 144 (CEA).

Deleted: The route width for the Project has been requested by Applicant to ensure that, during detailed design of, and easement acquisition for, the pipeline, the alignment and construction right-of-way (including both the permanent and temporary rights-of-way) can be modified from the anticipated alignment to minimize impacts to human settlement and environmental features.

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Deleted: The Application Preferred Route, the Application Alternate Route, and the Modified Preferred Route all have no residences within the permanent right-of-way within 50 feet of the anticipated alignment. The Modified Preferred Route is the only route with a residence within the temporary right-of-way within 50 feet of the anticipated alignment.[173] For purposes of evaluation, the CEA evaluated that the temporary right-of-way would be evenly split between both sides of the permanent right-of-way.

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The Application Preferred Route, the Application Alternate Route, and the Modified Preferred Route all have at least one agricultural structure within the permanent right-of-way of the anticipated alignment. The Application Alternate Route and the Modified Preferred Route both have one commercial structure within the permanent right-of-way of the anticipated alignment.

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Although there are residential, commercial, agricultural, and other buildings within the anticipated permanent right-of-way of Route Segments 4P, 7P, and 29 and agricultural buildings within the anticipated temporary right-of-way of Route Segment 5P,

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construction phase. Emissions would occur in localized areas for short periods. During excavation, trenching, and other earthmoving operations, there would be a potential for windblown fugitive dust emissions. The impact from fugitive dust emissions can be mitigated by a variety of means, including watering, covering, or seeding exposed soils, or watering unpaved driving surfaces as-needed.[179]

158. Pipeline operations are anticipated to result in minimal, long-term impacts to air quality. Minor vehicle emissions would occur during routine inspections and maintenance activities. Minor stationary source emissions will also occur at TBS and DRS sites due to routine use of natural gas-fired line heaters at the aboveground stations.[180]

159. Short-term construction impacts (fugitive dust and air emissions) and long-term operation impacts (air emissions) to air quality impacts will occur as a result of the proposed Project. Impacts are unavoidable but minimal.[181]

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3. Noise

160. Noise and vibration impacts would be similar for all route segment alternatives. The primary impacts associated with the proposed project would result from project construction. Construction noise is highly variable because the equipment operating at any location changes with each construction phase. Therefore, impacts would be short-term and temporary.[182]

161. Blasting may be required to excavate the pipeline trench where bedrock could be encountered at depths that interfere with conventional excavation or rock-trenching methods. Blasting would occur during daytime hours after notifying nearby residents and building inhabitants. Vibration would be controlled using charge size limits and charge delays that stagger each charge in a series of explosions.[183]

162. Certain project testing and start-up activities may require 24 hours of activity for limited time periods (presumably one to three days). These impacts are unavoidable and may violate state noise standards; however, the effects would be temporary.[184]

163. Short-term noise impacts associated with Project construction are anticipated. Impacts are unavoidable but minimal with use of standard permit conditions and mitigation discussed on pages 80 through 81 of the CEA. Long-term noise impacts associated with

[179] Ex. 108 at 87 (CEA).

[180] Ex. 108 at 87 (CEA).

[181] Ex. 108 at 138, 141, 145, 148 (CEA).

[182] Ex. 108 at 79 (CEA).

[183] Ex. 108 at 79 (CEA).

[184] Ex. 108 at 79, 80 (CEA).

operation and maintenance of the pipeline are anticipated to be minimal and unavoidable. Impacts from vibration are not anticipated.[185]

4. Population and Employment

164. Short-term, local economic benefits would result from an influx of labor workforce during project construction. Demand for housing and public services from the non-local workers is anticipated to be minimal. Expenditures would include workforce lodging and fuel, grocery, and restaurant sales. Miscellaneous construction-related materials may be purchased locally. Additional positive impacts include easement payments, permit fees, and property tax revenues. Construction would create temporary jobs for both local and non-local workers. Operation of the pipeline would not be expected to employ any additional permanent staff.[186]

165. The proposed Project is not anticipated to negatively impact minority or low-income populations.[187]

166. Impacts to population and employment across all Segment Alternatives and routes are anticipated to be short- and long-term, minimal, and positive.[188]

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5. Public Safety

167. Several members of the public commented about concerns regarding the possibility of an explosion on the natural gas pipeline for the Project.[189] The "blast zone," "impact radius," and "high consequence areas" referred to in these comments are related to natural gas transmission pipelines that are high-stress pipelines.[190] The Project pipeline is a low-stress pipeline.[191] A low-stress pipeline like the Project, if it produced a leak near an ignition source, would result in a flame or burn and not an explosion or "impact radius" like that of a high-stress natural gas transmission pipeline.[192]

[185] Ex. 108 at 137, 141, 145, 148 (CEA).

[186] Ex. 108 at 65 (CEA).

[187] Ex. 108 at 64, 65 (CEA).

[188] Ex. 108 at 137, 140, 144, 147 (CEA).

[189] Public Hearing Transcript at 42:22-25 (Overland) ("Who would want to live next to a gas transmission line if it explodes could burn up to 300 feet, 600 feet depending, from the line."); Public Hearing Transcript at 53:7-17 (Pyfferoen) ("I've been doing some research on blast zones . . . my personal home is . . . maybe 100 feet from where this pipeline is supposed to go and if there's really a blast zone of 500 feet . . . ."); Public Hearing Transcript at 50:21-51:2 (Pittelko) ("I grew up in Texas, 20 miles from a Phillips 66 plant. I cannot even count the number of explosions that I heard in my house . . . . I cannot even imagine having a pipeline explosion across the road from my house . . . .").

[190] Evidentiary Hearing Transcript at 19:12-14 and 26:9-23 (Lyle).

[191] Evidentiary Hearing Transcript at 19:9-12 (Lyle).

[192] Evidentiary Hearing Transcript at 20:8-20 (Lyle).

6. Existing and Planned Future Land Use

168. Segment alternatives that bisect a planned or proposed development would require that the development be designed to accommodate the pipeline resulting in significant impacts. Segment alternatives that follow the edge of a planned or proposed development would be easier to accommodate but would still require plan modifications resulting in moderate impacts. Impacts are not solely based on the on-the-ground effects of pipeline construction and operation, but also include the extra time and process related to designing a real estate development in a manner that meets the various added constraints resulting from the occurrence of a pipeline.[193]

169. Segment Alternatives FH-1, FI-2, GH-2, GI-2, HJ-2, and IJ-2 cross a proposed future development area. Therefore, impacts along these alternatives will be significant.[195]

170. Segment Alternatives FH-1, FI-2, GH-2, and GI-2 include Route Segment 7P, and bisect the development area identified as Westridge Hills.[196]

171. The Westridge Hills General Development Plan ("GDP") is a planned community development in Rochester Township near the Willow Creek Golf Course. The project would develop 79 acres for 86 single-family homes and a church.[198]

172. The Westridge Hills GDP developers, their engineer, and a church representative all provided comments during the Route Permit proceedings.[199] The developers expressed concerns that Route Segment 7P bifurcates the Westridge Hills' property and interferes with utility flow for the development, and stated a preference for a pipeline route that abuts the development easement (Route Segments 23 and 24).[200] The anticipated alignment follows the property line of two parcels that were included in the 2007 Westridge Hills GDP.[201]

173. A GDP from the City of Rochester is only valid for a period of two years unless subsequent development approvals occur according to the City of Rochester Land Use Plan, Section 61.216.[203] The properties included within the GDP have not been platted.[204] According

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Deleted: The Westridge Hills GDP is no longer valid and the properties included within the GDP have not been platted.

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[193] Ex. 108 at 71 (CEA).

[195] Ex. 108 at 137, 140, 144, 147 (CEA).

[196] Ex. 21 at Schedule 1 at 7-10 (Direct Testimony of Rick J Moser); Ex. 108 at Figure 10 at 8 (CEA).

[198] Ex. 108 at 70 (CEA).

[199] Ex. 106 at 18-19 (Comments & Recommendations: Scoping for CEA and Route Proposals for the Project); Ex. 111 at Transcript at 20:16-23:2 (Tointon), 35:6-8 (Peters), 44:11-48:12 (Hruska), and Exhibit A from Public Meeting (Comments: Public Comments (Verbal and Written) Received on Draft CEA); Ex. 122 (Comments of Eugene Peters – Westridge Hills Corp.); Public Hearing Transcript at 26:9-29:25 (Tointon), 34:5-36:3 (Peters); 36:11-39:12 (Kell); Ex. B (Bill Tointon Submission); Ex. C (David Kell Submission).

[200] Public Hearing Transcript at 26-30, 34-26 (2:00 p.m. hearing).

[201] Ex. 19 at 13:3-8 (Direct Testimony of Amber S. Lee).

[203] Ex. 19 at 12:14-15 (Direct Testimony of Amber S. Lee).

[204] Ex. 19 at 12:8-11 and Schedule 3 (Direct Testimony of Amber S. Lee).

to the City of Rochester, no action has occurred on the Westridge Hills GDP since 2007, and the development does not appear on the Olmsted County Subdivision Plat records or on the Olmsted County Zoning Information website.[205] This information does not appear in the CEA.

174. There are three residential developments in Olmsted County that were successfully designed around natural gas transmission pipelines.[207] It is feasible to design residential or commercial developments around a natural gas pipeline when incorporated early in the process.[208]

175. Route Segment 26 bisects the development identified as Willow Creek Commons and Willow Creek Commons West (the "Willow Creek Development").[213] The Application Preferred Route and the Application Alternate Route include Route Segment 26.[214]

176. The owner of the Willow Creek Development contains mixed use developments over 83 acres.[215] A portion of the Willow Creek Development was platted in November 2014 with the remainder still under development.[216] Route Segment 26 bisects platted properties within the Willow Creek Development.[217] The Willow Creek Development is being actively developed and has been partially platted, including the portion bisected by Route Segment 26.[218]

B. Natural Environment

177. Minnesota Rule 7852.1900, Subpart 3(B) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to the natural environment, public lands, and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands.

178. Minnesota Rule 7852.1900, Subpart 3(G) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to natural resources and features.

1. Groundwater

179. Direct impacts to groundwater resources could occur if pipeline installation through shallow bedrock alters the flow of groundwater by creating a new, lower resistance

[205] Ex. 19 at 12:16-18 (Direct Testimony of Amber S. Lee).

[207] Ex. 20 at 9:16-19 and Schedule 1 (Direct Testimony of Lindsay K. Lyle).

[208] Ex. 20 at 10:7-11 (Direct Testimony of Lindsay K. Lyle).

[213] Ex. 21 at Schedule 1 at 10-11 (Direct Testimony of Rick J. Moser).

[214] Ex. 108 at Table 4-1 at 47 and Table 4-5 at 53 (CEA).

[215] Ex. 108 at 71 (CEA).

[216] Ex. 108 at 71 (CEA).

[217] Ex. 108 at Figure 10 at 9 (CEA).

[218] Ex. 19 at 11:10-12:4, 13:3-8 and Schedules 2 and 3 (Direct Testimony of Amber S. Lee); Ex. 108 at 70-71 and Figure 10 at 8-9 (CEA).

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Segment Alternatives HJ-2 and IJ-2 both include

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pathway for groundwater movement. Impacts to groundwater quality could also occur as a result of temporary surface construction activities within areas, such as the Decorah Edge, that have been identified as serving important water filtration functions. Additional direct impacts to groundwater quality could occur as a result of a spill or leak of fuels or hazardous materials associated with construction or maintenance equipment if not cleaned up immediately.[219]

180. The Decorah Edge contains resources that are unique, on a state-wide basis, but are not uncommon in the Project Area. Route Segments 3P, 4P, 9P, 11, 12, 18, 24, and 26-29 travel through the Decorah Edge.[220]

181. Segment Alternatives EF, EG, FH, FI, GH, and GI have relatively higher geologic sensitivity, but less length in the Decorah Edge.[222] These Route Segments also have greater portions of their length within bedrock of less than five feet.[223]

182. Most Segment Alternatives have relatively similar geologic sensitivity. With the use of general permit conditions and other mitigation measures discussed in the CEA, impacts are anticipated to be minimal for all Route Segment Alternatives except EG-8, HJ-2, IJ-2.[224]

2. Surface Water

183. Direct impacts on surface waterbodies could occur as a result of construction activities associated with waterbody crossings.[226]

184. Direct impacts to surface water resources are anticipated to be short-term and minimal with use of general permit conditions, proposed construction practices, and best management practices. Impacts would be similar within the different comparison areas. Surface waters would be crossed using HDD. Aboveground facilities, including the TBS 1D, Proposed TBS, Proposed DRS, and the temporary storage yard would not be sited in waterbodies.[227]

3. Wetlands

185. Direct impacts on wetlands could occur as a result of pipeline construction activities. These impacts would be short-term. Specifically, construction using the traditional trench method would require excavation and fill, meeting the definition of an impact under both the Minnesota Wetland Conservation Act and the United States Army Corps of Engineers Section 404 permit. Wetland impacts could be avoided by using HDD to install the pipeline.[228]

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Deleted: Impacts to surface water, including wetlands, are anticipated to be short-term and minimal as Applicant intends to use HDD at all waterbody crossings, the other mitigation measures discussed in the CEA, and general route permit conditions.[229] From the Proposed TBS to the Proposed DRS, there are no waterbody crossings for any Segment Alternative.[230] Conversion of woody wetlands to a different wetland type may occur, but are anticipated to be minimal with the use of general permit conditions and construction techniques discussed in the CEA.[231]

[219] Ex. 108 at 100, 101 (CEA).

[220] Ex. 108 at 100 (CEA).

[222] Ex. 108 at 149 (CEA).

[223] Ex. 108 at 149 (CEA).

[224] Ex. 108 at 138, 142, 146, and 149 (CEA).

[226] Ex. 108 at 101 (CEA).

[227] Ex. 108 at 103 (CEA).

[228] Ex. 108 at 104 (CEA).

186. It will be necessary to clear woody vegetation in shrub and forested wetlands to allow for routine surveys required during operation and maintenance. Leak surveys, in particular, require that the right-of-way be clear of woody vegetation to be completed properly. Removing woody vegetation within these areas will not reduce overall wetland acreage, but will convert the wetland to a different vegetation community and wetland type. The Applicant indicates that any wetlands, or portions thereof, that will be converted from forested to non-forested wetlands as a result of vegetation clearing in the permanent right-of-way will be identified and reviewed by the United States Army Corps of Engineers to determine if any wetland mitigation is necessary.[232]

187. Calcareous fens are highly sensitive to groundwater disruption and surface water contamination. Direct and indirect impacts to the two calcareous fens identified in the vicinity of the proposed project would likely be avoided since both fens are located more than 0.5 miles from proposed route segments.[233]

188. Potential impacts to wetlands are anticipated to be minimal with use of general permit conditions, construction techniques, and best management practices discussed in the CEA.[234]

4. Fauna

189. Construction activities at and near waterbodies may affect aquatic resources as a result of inadvertent release of drilling fluids during HDD under waterbody and wetland crossings. Likewise, trenching through wetlands if HDD crossing of wetlands is not practical has potential to increase sedimentation to adjacent waterbodies as a result of construction and dewatering activities, and vehicle access. These short-term impacts may result during construction and would be minimized through BMPs, as discussed above. Long-term impacts can be mitigated. No unique resources would be affected.[235]

190. Potential short-term impacts to wildlife from construction include the loss or alteration of wildlife habitats, which could result in disturbance and displacement of individuals from construction areas and adjacent habitats to less suitable habitats. Small, less-mobile mammals, reptiles, and amphibians could experience direct mortality as they may not be able to escape the construction area. As noted by DNR, wildlife may also be impacted by entanglement in, and death from, plastic netting and other man-made plastic materials frequently used for erosion control.[236]

[232] Ex. 108 at 104, 105 (CEA).

[233] Ex. 108 at 105 (CEA).

[234] Ex. 108 at 139, 142, 146, 149 (CEA).

[235] Ex. 108 at 111 (CEA).

[236] Ex. 108 at 112 (CEA).

191. The MnDNR requested that the Company use wildlife-friendly erosion control materials during Project construction.[237] Applicant has stated no objection to using these materials in higher priority areas, consistent with the MnDNR guidelines.[238]

192. Impacts to wildlife and wildlife habitat across all Segment Alternatives are anticipated to be minimal with the use of mitigation measures discussed in the CEA.[239] Removal of tall, woody vegetation will permanently impact upland forest habitat but impacts are anticipated to be minimal.[240]

5. Threatened and Endangered Species

193. No direct impacts to any federally listed threatened and endangered species are anticipated, provided that preconstruction surveys are completed. All segment alternatives would have similar impacts as they all cross the same habitats that may be used by federally listed species. Indirect, long-term impacts to habitat suitable for northern long-eared bat may result from loss of forested habitat within the permanent right-of-way.[241]

Deleted: Impacts to threatened, endangered, or special status species are anticipated to be minimal across all Segment Alternatives with the use of the mitigation measures discussed in the CEA.[242]

194. Impacts to state-listed plants could occur as a result of vegetation removal through clearing, chipping, grubbing, and blading during construction or as a result of periodic clearing of woody species as part of regular maintenance activities. All route alternatives and segment alternatives would have similar impacts as they all cross the same habitats that may be used by state-listed species. If surveys identify state-listed plants in the construction area direct impacts would be moderate and long-term.[243]

195. Impacts to state-listed birds could occur as a result of the loss or alteration of bird habitats, which could result in disturbance and displacement of individuals from construction areas and adjacent habitats to less suitable habitats. Direct impacts are anticipated to be minimal.[244]

196. Impacts to state-listed mussels (Ellipse and Elktoe) and fish species (Ozark minnow) could occur as a result of construction activities associated with waterbody crossings or as a result of indirect impacts through increased sedimentation to adjacent waterbodies. All route alternatives and segment alternatives would have similar impacts because they all cross the same aquatic resource habitats. Impacts are anticipated to be minimal.[245]

[237] Ex. 116 (Letter from MnDNR (4-14-16)).

[238] Ex. 21 at 11:4-5 (Direct Testimony of Rick J. Moser).

[239] Ex. 108 at 139, 142, 146, 149 (CEA).

[240] Ex. 108 at 142 (CEA).

[241] Ex. 108 at 114 (CEA).

[243] Ex. 108 at 116, 117 (CEA).

[244] Ex. 108 at 118 (CEA).

[245] Ex. 108 at 119 (CEA).

197. The loss of forested habitat from tree clearing within the construction area and permanent right-of-way would be long-term to permanent impact to state-listed reptile species. Permanent impacts would be restricted to individual members of a species and not cause a trend towards state or federal listing of the species. Wildlife may also be impacted by entanglement in, and death from, plastic netting and other man-made plastic materials frequently used for erosion control. Impacts related to wildlife entanglement in, and death from, plastic netting would be avoided through use of wildlife friendly erosion control.[246]

6. Flora

198. Construction activities could result in a range of impacts from compaction and partial removal of aboveground vegetation to full vegetation removal through clearing, chipping, grubbing, and blading. Construction impacts would be temporary to permanent depending on the type of vegetation cover affected. Impacts to herbaceous communities, such as grasslands would be temporary as these areas would revegetate following construction and restoration. Impacts to forested areas within the permanent right-of-way would be permanent as a result of tree clearing and conversion to an open vegetation type (that is, grasslands).[247]

199. All Segment Alternatives have similar vegetation types when evaluated against the comparable alternatives in each segment. Right-of-way impacts to forested cover types will be permanent but are anticipated to be minimal with the use of general permit conditions, construction techniques, and proposed best management practices discussed in the CEA.[248]

200. Five sites of NHIS-identified native plant communities and/or MBS sites of high to moderate biodiversity occur within the Project Area: Marion 30, Rochester 24, Rochester 31, Salem 14, and the Railroad Rights-of-Way Prairie. The DNR recommends that greenfield crossings of these communities be avoided, particularly if the crossing would impact a Site of Biodiversity Significance, rare feature record, native plant community, or it fragments habitat.[249] The MnDNR requested that "greenfield routes" be avoided.[250] Greenfield crossings are those portions of a route that are not parallel to existing rights-of-way. Most of the greenfield Route Segments for the Project are within agricultural cover types that typically do not contain native plant communities or rare features.[251]

Deleted: In comments filed on April 13, 2016, the MnDNR commented it was concerned about the crossing of native plant communities and/or Minnesota Biological Survey ("MBS") sites of moderate to high biodiversity.

201. Any potential impacts to the MBS sites located within the buffer for the Proposed TBS or the buffer for the DRS can be avoided by locating the TBS and the DRS outside the boundaries of the MBS site.[252]

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[246] Ex. 108 at 119 (CEA).

[247] Ex. 108 at 108 (CEA).

[248] Ex. 108 at 139, 142, 146, 149 (CEA).

[249] Ex. 108 at 108 (CEA).

[250] Ex. 116 (Letter from MnDNR (4-14-16)).

[251] Ex. 108 at 108 (CEA).

[252] Ex. 21 at 13:4-5 (Direct Testimony of Rick J. Moser).

202. Applicant has stated that if any route that incorporates Segment Alternatives HJ-1, HJ-2, IJ-1, or IJ-2, where MBS sites have been identified, it would install the pipeline using HDD underneath the wetland complex.[253] Although large woody vegetation that would need to be removed from an area measuring five feet on either side of the pipeline centerline for access for inspection purposes, the area of this MBS site is not classified as forested or forested wetland so vegetation clearing is anticipated to be minimal.[254] Additionally, vegetation management in this area could be accomplished during the winter months to minimize overall impacts to the site.[255]

203. Applicant has stated that direct impacts to the MBS site along Segment Alternative BC-1 can be avoided through the use of HDD underneath the railroad right-of-way.[256]

204. Applicant has stated that direct impacts to the MBS site along Segment Alternative EG-8 can be avoided by locating the permanent right-of-way and construction area outside the MBS site.[257]

205.

7. Geology and Soils

206. Impacts to geology could occur as a result of pipeline installation through shallow bedrock. Additional impacts could occur in areas where the pipeline overlaps the Decorah Edge if boring, ripping, or shattering of bedrock alters area hydrology through creation of a new, lower resistance pathway for groundwater movement.[260]

207. Impacts to geologic resources within Segment Alternatives AB-1, AB-2, BC-1, DE-1, DE-2, EF-1, and EG-1 are not anticipated. Segment Alternatives CD-1 and CD-2 are within an area of low to moderate probability for sinkhole formation but impacts are anticipated to be minimal with the use of general permit conditions. Impacts to geologic resources across Segment Alternatives EF-2, EF-3, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, FH-1, FH-2, FH-3, FI-1, FI-2, FI-3, GH-1, GH-2, GI-1, GI-2, GI-3, HJ-1, HI-2, HJ-3, HJ-4, IJ-1, IJ-2, IJ-3, and IJ-4 are anticipated to be moderate with the use of general permit conditions.[261]

208. During construction, ground penetrating radar analysis will be used in areas of high probability for sinkhole formation to determine if sinkholes, underground cavities, or

Deleted: <#>Segment Alternative BC-1 would be required to be used for any route selected for the Project as no other alternatives were proposed for this area. Segment Alternative HJ-1 is incorporated into the Modified Preferred Route. Segment Alternative HJ-2 is incorporated into the Application Preferred Route. Segment Alternative IF-2 is incorporated into the Application Alternate Route.[258]¶ All Segment Alternatives have similar vegetation types when evaluated against the comparable alternatives in each segment. Right-of-way impacts to forested cover types will be permanent but are anticipated to be minimal with the use of general permit conditions, construction techniques, and proposed best management practices discussed in the CEA.[259].

[253] Ex. 21 at 12:5-7 (Direct Testimony of Rick J. Moser).

[254] Ex. 21 at 12:7-11 (Direct Testimony of Rick J. Moser); Ex. 108 at 109 (CEA).

[255] Ex. 21 at 12:11-12 (Direct Testimony of Rick J. Moser); Ex. 108 at 109 (CEA).

[256] Ex. 21 at 14:9-13 (Direct Testimony of Rick J. Moser); Ex. 108 at 109 (CEA).

[257] Ex. 21 at 12:14-18 (Direct Testimony of Rick J. Moser); Ex. 108 at 109 (CEA).

[260] Ex. 108 at 95 (CEA).

[261] Ex. 108 at 138, 142, 145, 149 (CEA).

enlarged features are present prior to trenching. If these features are identified along the route, the Applicant indicates that the pipeline can be relocated to avoid impacting the feature.[262]

209. If karst features are inadvertently encountered during trenching, the Applicant indicates that the pipeline can be rerouted and the feature repaired to limit further sinkhole formation and subsidence in addition to reducing the potential for changes in groundwater flow.[263]

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210. Temporary impacts to soils within the construction area may include soil compaction, soil erosion, and introduction of rock into the topsoil. Following construction and restoration, impacts on soils could continue to occur as a result of poor vegetative regrowth following restoration leading to continued erosion and loss of soil productivity resulting from the mixing of topsoil.[264]

211. Direct impacts to soils along any Segment Alternative are anticipated to be minimal. All routes and Segment Alternatives would have similar impacts on soils and would impact comparative amounts of designated Prime Farmland and highly erodible land.[265] Direct impacts to soils at the locations of TBS 1D, the Proposed TBS, and the Proposed DRS footprints will be permanent and significant.[266] These impacts are of a small size, do not affect unique resources, and are unavoidable.[267]

212. Impacts to soils can be minimized through the implementation of best management practices utilized in compliance with the required erosion control plan for the Project.[268] Additionally, construction procedures outlined in the Agricultural Mitigation Plan can minimize impacts to soils or ensure appropriate landowner compensation if impacts to agricultural soils are encountered.[269]

C. Lands of Historical, Archaeological, and Cultural Significance

213. Minnesota Rule 7852.1900, Subpart 3(C) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to lands of historical, archaeological, and cultural significance.

214. The majority of the Project Area has not been surveyed; however, the available data indicates that Paleoindian, Archaic, and/or Woodland period sites may be encountered within the Phase Ia Study Area. Site types may include lithic scatters and artifact scatters that

[262] Ex. 108 at 96 (CEA).

[263] Ex. 108 at 96 (CEA).

[264] Ex. 108 at 97 (CEA).

[265] Ex. 108 at 97 (CEA).

[266] Ex. 108 at 97 (CEA).

[267] Ex. 108 at 98 (CEA).

[268] Ex. 108 at 98 (CEA).

[269] Ex. 108 at 97, 138, 142, 145, 149 (CEA).

may be associated with raw material procurement and short-term habitation. Sites in Olmsted County appear to be concentrated along drainages, and as the anticipated alignment transects multiple drainages, streams, and rivers there is a high probability of encountering precontact archeological sites in these areas.[270]

215. Although no previously recorded historic archaeological sites are recorded and the number of previously recorded architectural properties is relatively low, there is a moderate to high potential to encounter historic resources within the Project Area.[271]

216. EERA concluded that the potential for impact to historical, archaeological, and culturally significant lands is considered to be equal for all Segment Alternatives. Impacts to historic and archaeological sites are anticipated to be minimal with the use of general Route Permit conditions, construction practices, and best management practices discussed in the CEA. Additional surveys will be conducted prior to construction and further consultation with the State Historic Preservation Office may result in additional mitigation measures for the Project construction.[272]

Deleted: While previously-undiscovered resources may be encountered during construction, a

217. In the event of an unanticipated discovery during project construction, the Applicant indicates it will immediately halt all construction activity within a 100-foot radius of the discovery and implement interim measures to protect the discovery from looting and vandalism. The Applicant would then notify the proper authorities to determine appropriate actions.[273]

D. Land Use Economies

218. Minnesota Rule 7852.1900, Subpart 3(D) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations.

Deleted: Impacts to agriculture for any route selected will be short-term.

219. Comparison areas would have similar impacts because the different alternatives cross similar amounts of agricultural land. Land within the construction area would not be able to be cultivated during construction. Following construction and restoration, agricultural activities would be allowed to resume along the pipeline's permanent right-of-way, therefore the impacts on the agricultural land use would be temporary. Negotiated easements with affected landowners along the approved route would mitigate temporary impacts on agricultural production by providing payment for the inability to plant crops or for crop damage. Impacts can be mitigated by compensation to landowners and use of measures outlined in the Agricultural Mitigation Plan.[274]

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[270] Ex. 108 at 93 (CEA).

[271] Ex. 108 at 93 (CEA).

[272] Ex. 108 at 136 (CEA).

[273] Ex. 108 at 93, 94 (CEA).

[274] Ex. 108 at 120, 121, 139, 143, 146, 150 (CEA).

220. Long-term impacts would include permanent conversion of approximately 3 acres of agricultural land for the aboveground facilities.[275]

221. Impacts to current mining operations along any route selected for the Project are not anticipated.[276] The potential for Segment Alternatives to prevent expansion of the mine located along Segment Alternative CD-1, DE-1, or EF-1is greater than the other Segment Alternatives evaluated in this area.[277] The potential for impacts in this location could be further minimized based on post-permit discussions with the landowner regarding placement of the pipeline. Indirect impacts may occur in the future as the presence of a buried pipeline may preclude development of new mining operations. The Applicant indicates it will coordinate with mining companies should future developments or expansions be identified.[278]

222. Impacts to forestry, commercial or industrial, or recreational uses by the Project are not anticipated.[279] No direct or indirect impacts to forestry or silviculture are anticipated.[280] Direct impacts to existing commercial and industrial land-based economies would be avoided as no existing or proposed buildings or infrastructure would be impacted by construction of the pipeline or aboveground facilities. The proposed project would preclude construction of structures within the permanent right-of-way, which may or may not impact future commercial or industrial uses. Temporary impacts related to construction noise, traffic or short-term access changes may occur. These impacts will be mitigated using standard BMPs and access management and consultation with affected businesses.[281] No known federal, state, or county parks, forests, or recreational areas would be affected by the proposed Project. While the City of Rochester offers several recreational opportunities and public infrastructure, the Project would be located away from these recreational resources.[282]

E. Pipeline Cost and Accessibility

223. Minnesota Rule 7852.1900, Subpart 3(E) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to pipeline cost and accessibility.

224. Nearly all Segment Alternatives have similar cost and accessibility considerations.[283]

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[275] Ex. 108 at 120 (CEA).

[276] Ex. 108 at 139, 143, 146, 150 (CEA).

[277] Ex. 108 at 139, 140, 143 (CEA).

[278] Ex. 108 at 124, 125 (CEA).

[279] Ex. 108 at 139, 143, 146, 150 (CEA).

[280] Ex. 108 at 122 (CEA).

[281] Ex. 108 at 122 (CEA).

[282] Ex. 108 at 124 (CEA).

[283] Ex. 21 at 9:3-14 (Direct Testimony of Rick J. Moser).

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Deleted: ; Ex. 108 at 136 (CEA)

225. Applicant has identified accessibility, design, and engineering concerns with Segment Alternatives CD-2, DE-2, EF-2, EG-2, EG-3, and EG-4.[284] The alternatives all, in some form, follow the existing BP Pipeline, which was constructed in the late 1940s, prior to implementation of state or federal standards for petroleum pipeline depth of cover.[285] During both public information meetings held for the Project, landowners commented on depth of cover concerns associated with the BP Pipeline, including some reports of field or farm equipment encountering the pipeline in recent years.[286]

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226. While these Segment Alternatives CD-2, DE-2, EF-2, EG-2, EG-3, and EG-4 could be constructed, accessibility of these areas is a concern unique to these Segment Alternatives and additional separation between the BP Pipeline and the proposed Project would be necessary, resulting in greater impacts to landowners' property and higher costs as matting over the BP Pipeline right-of-way would also be necessary to minimize the risk of damage to the BP Pipeline.[287]

227. Applicant provided testimony that Segment Alternatives HJ-2, HJ-4, IJ-3, and IJ-4 cross through densely developed commercial areas. Property in this area is estimated to be five times the cost of property along other Segment Alternatives that could be used in this area, resulting in the estimation of the overall cost for these four Segment Alternatives to be much higher than other Segment Alternatives.[288]

228. Applicant also identified concerns with accessibility and more difficult constructability along Route Alternatives 13, 17, and 20.[289] The concerns related to the topography of the roadways and curves in 50th Street SW as it joins 55th Avenue SW.[290] Topography is also a concern for construction along 48th Street SW.[291]

229. Should the Commission select Route Segment 10, Applicant has requested that the anticipated alignment be located south of the Northern Natural Gas Company pipeline instead of on the north as it is currently shown on CEA maps.[292] Placement of the Project along the south side in this area would avoid the need for the Project pipeline to cross Northern Natural Gas Company's natural gas transmission line twice.[293]

[284] Ex. 20 at 7:18-19 (Direct Testimony of Lindsay K. Lyle).

[285] Ex. 20 at 7:23-25 (Direct Testimony of Lindsay K. Lyle).

[286] Ex. 20 at 7:25-8:2 (Direct Testimony of Lindsay K. Lyle).

[287] Ex. 20 at 8:2-23 (Direct Testimony of Lindsay K. Lyle).

[288] Ex. 19 at 9:13-17 (Direct Testimony of Amber S. Lee).

[289] Evidentiary Hearing Transcript at 22:13-22 (Lyle).

[290] Evidentiary Hearing Transcript at 22:25-23:20 (Lyle).

[291] Evidentiary Hearing Transcript at 24:9-25:8 (Lyle).

[292] Evidentiary Hearing Transcript at 25:18-26:4 (Lyle).

[293] Evidentiary Hearing Transcript at 26:2-4 (Lyle).

F. Use of Existing Rights-of-Way and Right-of-Way Sharing or Paralleling

230. Minnesota Rule 7852.1900, Subpart 3(F) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to the use of existing rights-of-way and right-of-way sharing or paralleling.

231. Segment Alternatives AB-1, AB-2, BC-1, CD-1, CD-2, DE-1, DE-2, EF-1, EG-1, EG-4, EG-7, EG-8, FH-3, FI-3, GH-1, GI-1, HJ-1, and IJ-1 parallel existing rights-of-way for a significant portion of their length.[294]

Deleted: The only Segment Alternative incorporated into the Modified Preferred Route that does not parallel existing rights-of-way for a significant portion of its length is Segment Alternative FH-1.[295] Applicant has stated that following the existing rights-of-way in this area (48th Street SW) poses constructability concerns.[296]

G. Extent Human or Environmental Effects are Subject to Mitigation by Regulatory Control and Permit Conditions

232. Minnesota Rule 7852.1900, Subpart 3(H) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.2400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices.

233. On August 2, 2016, the Commission filed a Generic Route Permit Template for review and comment.[297] The Generic Route Permit Template references an Environmental Mitigation Plan.[298]

234. Unlike an Agricultural Mitigation Plan, which has already been prepared for this Project, no Environmental Mitigation Plan has been prepared for this Project and none is defined or discussed in the CEA.

235. Condition 5.2 should be modified to state that the Environmental Mitigation Plan "shall be provided upon filing of the first Plan and Profile submission for the Project." Additionally, the condition should clarify that the Environmental Mitigation Plan shall include the Agricultural Mitigation Plan, the Vegetation Management Plan, and the Stormwater Pollution Prevention Plan. It shall also include, by reference, any environmental control plans or other special conditions imposed by permits or licenses issued by state or federal agencies related to agency-mandated resources. It shall also include:

> 1. Identification of and contact information for an Environmental Monitor to oversee the construction process and monitor compliance with the Environmental Mitigation Plan and all plans therein.
>
> 2. A process for reporting construction status to the Commission.

[294] Ex. 21 at Schedule 1 at 1-11 (Direct Testimony of Rick J. Moser); Ex. 108 at 143, 147, 150 (CEA).

[297] Ex. 63 (Generic Route Permit Template and Certificate of Service).

[298] Ex. 63 at 3 (Generic Route Permit Template and Certificate of Service).

3. A process for internal tracking of construction management, including required plan or permit inspection forms.

236. Condition 5.5 states that the construction practices and material specifications described in the Application shall be followed.[299] Applicant has identified that while the Application stated that "burning of slash, brush, stumps, or other project debris is prohibited," Applicant would like to retain the ability to perform these activities so long as such activity is agreeable to the landowner.[300]

237. The Route Permit should be clarified to allow this activity.

238. As requested by the MnDNR and agreed to by Applicant, the Route Permit should contain a special condition regarding the use of wildlife-friendly erosion control materials.

239. The proposed language in the Generic Route Permit Template is appropriate.[301].

240. Preconstruction environmental survey consultations should be completed to determine if any federally-listed threatened or endangered species are along the permitted route.[302] Preconstruction environmental survey consultations should also be completed to determine if any state-listed or rare species occur within the Project area.[303]

241. The example special condition in the Generic Route Permit Template for "Rare Species Surveys" should not be used.[304] Instead, the following special condition is appropriate for the Project:

> The Permittee, in consultation with the USFWS and the MnDNR, will determine the need for rare species surveys (pre-construction) within the approved route. In the areas where these species are known to exist or where the right-of-way passes through habitats where the species are likely to exist, field surveys may be required. In the event impacts cannot be avoided, the Permittee may need to obtain a take permit from the MnDNR or the USFWS for the species of concern. The Permittee shall submit the results of these efforts to the Commission with its Plan and Profile filing.

242. The example special condition on the Generic Route Permit Template for "Rare and Unique Resources" is not necessary for this Project.[305]

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[299] Ex. 63 at 4 (Generic Route Permit Template and Certificate of Service).

[300] Ex. 17 at 3 (Minnesota Energy Resources Comments on CEA).

[301] Ex. 63 at 11 (Generic Route Permit Template and Certificate of Service).

[302] Ex. 108 at 114 (CEA).

[303] Ex. 108 at 118 (CEA).

[304] Ex. 63 at 11 (Generic Route Permit Template and Certificate of Service).

[305] Ex. 63 at 11 (Generic Route Permit Template and Certificate of Service).

243. In compliance with the recommendations of the CEA, the following special condition should be included in the Route Permit:[306]

> Permittee shall submit a Vegetation Management Plan (VMP) with the Environmental Control Plan. The purpose of the VMP shall be to identify measures to minimize the disturbance and removal of vegetation for the Project, prevent the introduction of noxious weeds and invasive species, and re-vegetate disturbed non-cropland areas with appropriate native species in cooperation with landowner and state, federal, and local resource agencies, such that such re-vegetation does not negatively impact the safe and reliable operation of the Project.

244. Applicant has stated the intent to phase the construction of the Project over a period of approximately six years.

245. Because of the likelihood of periods where no construction activity will occur, the requirement of Condition 10.2 for Applicant to complete weekly reports from the "submittal of the plan and profile for the project and continue until completion of restoration" should be revised to include the following:

> In the event the Permittee proceeds with phased construction of the Project, such weekly reports should be filed beginning with the submittal of the plan and profile for that phase and continue until the completion of restoration of that phase. If there is any period of time where no construction activity is occurring, restoration of the prior phase of the Project has been completed, and the overall Project is not yet completed, Permittee need only provide status reports monthly.

246. Because of the possibility for identification of sinkholes, underground cavities, and enlarged fractures that may require rerouting of the pipeline outside the route width, because of the possibility of road development in the area over the time the Project will be constructed, and to accommodate the possibility a landowner may want the pipeline located elsewhere on that landowner's property (so long as such location is agreeable to Applicant),[307]

247. It is appropriate for the Commission to include the following special condition that has been used in other petroleum pipeline proceedings:

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> Route width variations may be allowed for the Permittee to overcome potential site-specific constraints. These constraints may arise from any of the following:
>
> 1. Unforeseen circumstances encountered during the detailed engineering and design process, including a landowner request for

[306] Ex. 108 at 110 (CEA).

[307] *See* Public Hearing Transcript at 68:2-7 (Oldfield).

a different location entirely on that landowner's property so long as the Permittee is agreeable to the proposed location.

2. Federal or state agency requirements.

3. Existing infrastructure within the pipeline route, including but not limited to railroads, natural gas and liquid pipelines, road expansion projects, high voltage electric transmission lines, or sewer and water lines.

Any alignment modifications arising from these site specific constraints that would result in right-of-way placement outside of this designated route shall be located to have the same or less impacts relative to the criteria in Minnesota Rule 7852.1900 as the alignment identified in this permit and be specifically identified in and approved as part of the Plan and Profile submitted pursuant to Part VI of this permit.

248. To ensure sufficient workspace for HDD crossings for the Project, it is appropriate to include the following special condition in the Route Permit for the Project:

> The Permittee may obtain extra temporary workspace that is needed at locations where the project will cross features such as waterbodies, roads, railroads, side slopes, and other special circumstances and HDD will be utilized. Extra temporary workspace will be allowed for construction activities including, but not limited to, staging equipment and stockpiling spoil material to facilitate construction of the pipeline. These dimensions will vary depending on actual site-specific conditions, but will typically be 20,000 square feet on each side of the features crossed. Extra temporary workspaces that may be required outside the approved Route Width are identified on the maps attached to this Route Permit.[308]

H. Cumulative Potential Effects of Related or Anticipated Future Pipeline Construction

249. Minnesota Rule 7852.1900, Subpart 3(I) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to cumulative potential effects of related or anticipated future pipeline construction.[309]

250. EERA concluded that all Segment Alternatives are equal with respect to this criteria because, regardless of what route is selected for the Project, the connected pipeline

[308] Ex. 19 at 14:14-30 (Direct Testimony of Amber S. Lee); Ex. 20 at 6-7 (Direct Testimony of Lindsay K. Lyle).

[309] Minn. R. 7852.1900, Subp. 3(I).

facilities to be owned by Northern Natural Gas Company will be constructed in the same general location.[310]

I. Other Local, State, or Federal Rules and Regulations

251. Minnesota Rule 7852.1900, Subpart 3(J) states that in selecting a route for designation and issuance of a Route Permit, the Commission shall consider the impact of the pipeline as it relates to the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws, including ordinances adopted under Minnesota Statutes section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.[311]

252. EERA concluded that all Segment Alternatives are equal with respect to this criteria in that any route selected by the Commission will be subject to, and must comply with, the relevant applicable policies, rules, and regulations of other state and federal agencies.[312]

X. NOTICE

253. Minnesota statutes and rules require notice be provided to the public and local governments before and during the Application for a Route Permit process.[313]

254. Applicant, Commission, and EERA provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.[314]

Based on the foregoing Findings of Fact and the record in this proceeding, the Administrative Law Judge makes the following:

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Deleted: Some of these notices were provided by EERA and the Commission and were provided in satisfaction of Minnesota statutes and rules.

Deleted: [315] ¶
<#>COMPLETENESS OF CEA¶
The Commission is required to determine the completeness of the CEA.

Deleted: [316] A CEA is complete if it and the record address the issues and alternatives identified in the scoping decision.¶
The evidence on the record demonstrates that the CEA is adequate because the CEA, EERA's pre-filed testimony, and the record created at the public hearing and during the subsequent comment period address the issues and alternatives raised in the proposed scope for the CEA that was approved by the Commission.

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[310] Ex. 108 at 136 (CEA).

[311] Minn. R. 7852.1900, Subp. 3(J)

[312] Ex. 108 at 136 (CEA). As stated in Minnesota Statutes section 216G.02, subdivision 4, a pipeline Route Permit is the only site approval required to be obtained by the person constructing the pipeline. The pipeline routing permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local, and special purpose governments.

[313] Minn. Stat. § 216G.02, subds. 3(b)(2)-(3); Minn. R. 7852.0900; Minn. R. 7852.1300, subp. 2; Minn. R. 7852.1600; Minn. R. 7852.2000, subp. 6; Minn. R. 1405.0500.

[314] Ex. 5 (Affidavit of Mailing of Revisions to Route Permit Application); Ex. 6 (Affidavits of Mailing of Route Permit Application); Ex. 9 (Affidavit of Publication of Notice of First Public Information Meeting); Ex. 11 (Affidavit of Notice of Supplemental Comment Period); Ex. 15 (Affidavit of Notice of Publication of Second Public Information Meeting); Ex. 16 (Affidavit of Mailing of Comparative Environmental Analysis); Ex. 22 (Affidavit of Mailing of MERC Direct Testimony to the Rochester Public Library); Ex. 23 (Affidavit of Mailing of Route Permit Applications to the Rochester Public Library); Ex. 24 (Affidavit of Publication of Notice of Public Hearing). Ex. 57 (Notice of Application Acceptance – Public Information and CEA Scoping Meeting and Certificate of Service); Ex. 65 (Notice of Public and Evidentiary Hearings and Certificates of Service); Ex. 66 (Corrected Notice of Public and Evidentiary Hearings, Erratum, and Certificate of Service); Ex. 102 (Notice of Permit Application Acceptance, MEQB Monitor); Ex. 107 (DOC EERA: Landowner Letter, September 9, 2016); Ex. 109 (Notice of Draft CEA Availability and Public Meeting); Ex. 110 (Notice of Draft CEA Availability and Public Comment Meeting).

CONCLUSIONS

1. The Commission has jurisdiction to consider Minnesota Energy Resources Corporation's Application for a Route Permit.

2. The Commission determined that the Application was substantially complete and accepted the Application on February 3, 2016.[318]

3. EERA has conducted an appropriate environmental analysis of the proposed Project for purposes of this Route Permit proceeding and the CEA satisfies Minnesota Rule 7852.1500. Specifically, the CEA and the record address the issues and alternatives identified in the proposed scope for the CEA approved by the Commission to a reasonable extent and includes the items necessary for the Commission to evaluate the criteria identified in Minnesota Rule 7852.1900.

4. Notice was provided as required by Minnesota Statutes section 216G.02 and Minnesota Rule chapter 7852.

5. Public hearings were conducted in the community near the Project area. Proper notice of the public hearings was provided, and the public was given the opportunity to speak at the hearings and to submit written comments. All procedural requirements for the Route Permit were met.

6. The evidence on the record demonstrates that all Route Segments, Segment Alternatives, and routes are constructible and all satisfy the criteria in Minnesota Rule 7852.1900 that the Commission shall consider with issuing a Route Permit.

7. The evidence on the record demonstrates that all Route Segments, Segment Alternatives, and routes do not present the potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.

8. The evidence on the record demonstrates that the Modified Preferred Route, with one adjustment to the anticipated alignment along 70th Street SW, is the best alternative on the record for the Project because it most appropriately balances the criteria identified in Minnesota Rule 7852.1900.

9. The evidence on the record demonstrates that the Route Permit should be granted for the Modified Preferred Route with the anticipated alignment along the east side of 70th Avenue SW between the BP Pipeline and 10th Street SW in Salem Township.

10. The evidence on the record also supports the use of Segment Alternative AB-2 instead of AB-1 for the Modified Preferred Route.

11. The evidence on the record demonstrates that the general Route Permit conditions, as clarified in Section VIII.G of this Report are appropriate for the Project.

[318] Ex. 56 (Order on Completeness).

12. The evidence on the record demonstrates that the special Route Permit conditions identified in Section VIII.G of this Report are appropriate for the Project

13. Any of the forgoing Findings more properly designated as Conclusions are hereby adopted as such.

Based upon these Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATIONS

The Commission should issue to Minnesota Energy Resources Corporation the following permit for the Project:

A Route Permit for a natural gas distribution pipeline along the Modified Preferred Route which is depicted on the maps attached hereto, differing from what was proposed by the Company in the proceeding only in the area of 70th Avenue SW in Salem Township, in Olmsted County, Minnesota.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated on _____

_____
Eric L. Lipman
Administrative Law Judge

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

PIPELINE ROUTE~~I~~ING PERMIT
FOR CONSTRUCTION OF A LARGE NATURAL GAS PIPELINE
AND ASSOCIATED FACILITIES

IN
OLSMSTED COUNTY

ISSUED TO
MINNESOTA ENERGY RESOURCES CORPORATION

PUC DOCKET NO. G-011/GP-15-858

In accordance with the requirements of Minnesota Statutes Chapter 216G and Minnesota Rules Chapter 7852 this route permit is hereby issued to:

MINNESOTA ENERGY RESOURCES CORPORATION (MERC)

MERC is authorized by this route permit to construct: approximately 5.1 miles of 16-inch outside diameter and 8.0 miles of 12-inch outside diameter steel pipe designed to operate at pressures between 400-475 pounds per square inch gauge (psig), two town border stations (TBS), one district regulator station (DRS) and other associated facilities.

The pipeline and associated facilities shall be built within the route identified in this permit and as portrayed on the ~~official route maps~~, aerial photos attached to this permit and in compliance with the conditions specified in this permit.

Approved and adopted this ____ day of March, 2017

BY ORDER OF THE COMMISSION

_____

Daniel P. Wolf,
Executive Secretary

CONTENTS

FIGURES (Not attached)

ATTACHMENTS

Permit Condition	**Generic Template Language**	**EERA Proposed Route Permit Language**	**Rationale**
1.0	**1.0 ROUTE PERMIT**	**1.0 ROUTE PERMIT**	
	The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to [Permittee Name] (Permittee) pursuant to Minnesota Statutes Chapter 216G and Minnesota Rules Chapter 7852. This permit authorizes [Permittee Name] to construct [Provide a brief description of the project as authorized by the Commission], and as identified in the attached route permit maps, hereby incorporated into this document.	The Minnesota Public Utilities Commission (Commission) hereby issues this pipeline routeing permit to Minnesota Energy Resources Corporation (herein after Permittee or MERC) pursuant to Minnesota Statutes Chapter 216G and Minnesota Rules Chapter 7852. This permit authorizes MERC to construct: approximately 5.1 miles of 16-inch outside diameter and 8.0 miles of 12-inch outside diameter steel pipe designed to operate at pressures between 400-475 pounds per square inch gauge (psig), two town border stations (TBS), one district regulator station (DRS), and other associated facilities. "Construction," as defined in Minn R. 7852.0100 Subp. 11 "means any clearing of land, excavation, or other action for the purpose of constructing new pipeline that would adversely affect the natural environment of a pipeline	Minn R. 7852.0100 Sub. 28 defines "Pipeline Routing Permit" as "the written document issued by the commission to the permittee that designates a route for a pipeline and associated facilities, conditions for right-of-way preparation, clean-up, and restoration. The permit may not set safety standards for pipeline construction." Proposed modifications to this permit condition include definitions of the terms "construction" and "associated facilities" as defined in Minn. Rules, Ch. 7852, to provide the reader with an understanding of how these definitions are applied in this permit.

		route. Construction does not include…securing survey or geological data, including necessary borings to ascertain soil conditions." "Associated facilities," as defined in Minn R. 7852.0100 Subp. 7" means all parts of those physical facilities through which hazardous liquids or gas moves in transportation, including but not limited to pipe, valves, and other appurtenances connected or attached to pipe, plumbing and compressor units, fabricated assemblies associated with pumping and compressor units, metering and delivery stations, regulations stations, holders, breakout tanks, fabricated assemblies, cathodic protection equipment, telemetering equipment, and communication instrumentation located on the right-of-way."	
	1.1 Pre-emption Pursuant to Minn. Stat. § 216G.02, subd. 4, this permit shall be the sole route approval required to be obtained by the Permittee for construction of the pipeline facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional,	**1.1 Pre-emption** Pursuant to Minn. Stat. § 216G.02, subd. 4, this permit shall be the sole route approval required to be obtained by the Permittee for construction of the pipeline and associated facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated	This proposed modification more accurately reflects what falls under the "Pre-emption" provision of Minn. Stat. § 216G.02.

	county, local and special purpose government	by regional, county, local and special purpose government	
2.0	**2.0 PROJECT DESCRIPTION**	**2.0 PROJECT DESCRIPTION**	
	[*Provide a description of the project as authorized by the Commission*]	The Rochester Natural Gas Pipeline Project is comprised of approximately 5.1 miles of 16-inch outside diameter and 8.0 miles of 12-inch outside diameter steel pipe designed to operate at pressures between 400-475 pounds per square inch gauge (psig).	This language provides a brief description of the project, associated facilities, including the TBSs and other associated facilities.
	2.1 Associated Facilities	**2.1 Associated Facilities**	
	[*Provide a detailed description of the associated facilities authorized by the Commission*]	Consist of two town border stations (TBS) and one district regulator station (DRS). A TBS serves as the custody transfer point of natural gas carried by transmission pipelines (usually from an "interstate transmission operator" to an "intrastate distributor operator" (public utility). A TBS is also the point where the high pressure transmission gas (900 to 1,000 or more psig) is regulated down to the level of high pressure distribution gas (400 to 500 psig). The TBSs will include installation of pressure regulation and flow control valves, a line heater, odorization, and supervisory control and data acquisition (SCADA) station and metering.	

		The district regulator station (DRS) will regulate high pressure distribution gas (400 to 500 psig) down to standard distribution pressure (60 to 100 psig) for delivery to a low pressure distribution system that directly serves customers. The DRS will include pressure regulation and flow control valves, a line heater and SCADA. Other associated facilities include required signage indicating the presence of a natural gas pipeline as required by 49 CFR 192.707 and applicable corrosion control requirements, such cathodic protection required by 49 CFR 192.463.	
		2.2 Timing of Project Construction The Rochester Natural Gas Pipeline Project will be constructed in three distinct phases, as described below and illustrated on Figure XX, attached to this permit. • Phase I of the project includes construction of a new MERC TBS 1D in the same area as the existing Northern Natural Gas TBS 1D located in the northwest quarter of section 30 in Cascade	Because the Rochester Natural Gas Pipeline Project is proposed to be built in three (3) phases over six (6) years, it is reasonable to incorporate a permit condition to reflect the anticipated project schedule.

		Township. Construction of Phase 1 is scheduled for completion in 2017. • Phase 2 of the project includes the installation of 5.1 miles of 16-inch outside diameter steel pipe. This phase of the project will connect the new MERC TBS 1D with the new proposed TBS. The expected in-service date for completion of Phase 2 is 2019. • Phase 3 of the project includes installation of approximately 8.0 miles of 12-inch pipe outside diameter from the new TBS to the new district regulator station (DRS). This phase also includes construction of the new DRS, with an expected in-service date of 2022. After completion of Phase 3, NNG will remove the existing Rochester 1BTBS.	
		2.3 Design Pressure The proposed pipelines will be designed and constructed with a maximum allowable operating pressure of 500 psig.	During the review of this project, several individuals inquired about pressure thresholds of the proposed pipeline. This condition is offered as a way of informing interested

			persons about the pressure threshold of the project.
		2.4 Class Location	
		The pipeline will be designed to a minimum of a Class 3 location. Class location is guided by the requirements of 49 CFR 192.5.	Natural gas pipelines are designed to comply with a class location, as determined by the code of federal regulations. This permit condition identifies that class location and the reference to the federal regulations.
2.2	**2.2 Project Location**	**2.5 Project Location** *Language to be added later*	Numbering change necessary because of additional permit condition language proposed above.
3.0	**3.0 DESIGNATED ROUTE**	**3.0 DESIGNATED ROUTE**	
	The route designated by the Commission in this permit is the route described below and shown on the route maps attached to this permit. The route is generally described as follows: [*Provide detailed description of the authorized route including the route widths and any other specifics relevant to each segment. Also include a reference to the relevant route map to be attached to the permit.*]	The route designated by the Commission in this permit is the route described below and as shown on the ~~route maps~~ aerial photos attached to this permit (See Appendix __). The route is generally described as follows: [*Provide detailed description of the authorized route including the route widths and any other specifics relevant to each segment. Also include a reference to the relevant route map to be attached to the permit.*]	Modification proposed to clarify that designated route will be illustrated on aerial photos. Also provides consistency with permit cover page language.
	The identified route widths will provide	The identified route widths on the	Provided for clarification.

	the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized by the Commission.	attached aerial photos will provide the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way and temporary workspace) will be located within this designated route unless otherwise authorized by the Commission. The Permittee has identified a proposed alignment within the designated route that minimizes potential impacts to the criteria identified in Minn. R. 7852.1900, and as such this permit anticipates that the actual right-of-way will generally conform to this proposed alignment, except as otherwise provided by this permit. Any alignment modification within this designate route shall be located to have the same or less impacts relative to the criteria in Minn. R. 7852.1900 as this alignment identified in this permit. Route width variations may be allowed for the Permittee to overcome potential site specific constraints. These constraints may arise from any of the following:	MERC, in its direct testimony at the public hearing in November 2016 and in its December 2, 2016, proposed Findings of Fact (No. 204) and Post- Hearing Brief (pages 27-28) provided this language and recommended that it be included as a permit condition, "because of the possibility for identification of sinkholes, underground cavities, and enlarged fractures that may require rerouting of the pipeline outside of the route width, because of the possibility of road development in the rea over the time the project will be constructed, and to accommodate the possibility a landowner may want the pipeline located elsewhere on that landowner's property (so long as such location is agreeable to the

		1. Unforeseen circumstances encountered during the detailed engineering and design process. 2. Federal or state agency requirements. 3. Existing infrastructure within the pipeline route, including but not limited to railroads, natural gas and liquid pipelines, high voltage electric transmission lines, or sewer and water lines. Any alignment modifications arising from these site specific constraints that would result in right-of-way placement outside of this designated route shall be located to have the same or less impacts relative to the criteria in Minn. R. 7852.1900 as the alignment identified in this permit and be specifically identified in and approved as part of the Plan and Profile submitted pursuant to Condition _XX_ of this permit.	Applicant), it is appropriate for the Commission to include" this language, in this part of the permit or as a special condition. This language has appeared in previous pipeline permit dockets (MinnCan (05-2003), Southern Lights (07-360) and Alberta Clipper 06-361)) issued by the Commission; however, it has not appeared in other permits issued by the Commission in recent years. This provision, used infrequently, has been both timely and effective when used. Examples include the discovery of calcareous fens, previously unrecorded burial mounds, state agency requests, infrastructure plans and modifications. EERA Staff can provide detailed examples and supporting documentation that demonstrate application of this provision if desired by the Commission. EERA Staff believes that inclusion of this language as a permit condition is reasonable and appropriate for this project.

3.1	**3.1 Permanent Right-of-Way**	**3.1 Permanent Right-of-Way**	
	The approved right-of-way width for the project is up to [*X*] feet [*Describe any right-of-way width variations along the route, as necessary, including that needed for associated facilities*].	~~The approved right-of-way width for the project is up to [*X*] feet [*Describe any right-of-way width variations along the route, as necessary, including that needed for associated facilities*].~~ This Route Permit authorizes the Permittee to obtain a new permanent right-of-way for the pipeline up to 50-feet in width and a permanent easement measuring 200-feet by 200-feet (0.92 acres) for TBS 1D, the Proposed TBS and the Proposed DRS. If, however, the landowner does not grant an easement for the TBS or DRS and requests that the Permittee obtain these properties in in fee, from the landowner, the Permittee will purchase the land required from the landowner.	This language identifies the land requirements for the permanent right-of-way, TBS and DRS.
3.2	**3.2 Temporary Right-of-Way** The Permittee shall limit temporary right-of-way to special construction access needs required outside of the authorized permanent rights-of-way. Temporary right-of-way shall be selected to limit the removal and impacts to vegetation.	**3.2 Temporary Right-of-Way/Work Space** ~~The Permittee shall limit temporary right-of-way to special construction access needs required outside of the authorized permanent rights-of-way. Temporary right-of-way shall be selected to limit the removal and~~	The proposed edits clarify that the Permittee's application and all other documents that address temporary right-of-way and workspace requirements have stated the need for 50-feet of temporary

		~~impacts to vegetation~~. Construction of the proposed pipeline project will require a 50-foot wide temporary right-of-way/workspace at most locations in addition to the 50-foot wide permanent right-of-way authorized in permit condition 3.1. The temporary right-of-way/workspace will be adjacent to the permanent right-of-way and may all be located to one side of the permanent right-of-way or split between the two sides as determined necessary by the Permittee. The Permittee is authorized to obtain up a 50-foot wide temporary construction right-of-way/workspace.	work space adjacent to the proposed-foot wide permanent right-of-way. The proposed site condition modification distinguishes the difference between the permanent right-of-way and temporary right-of-way/workspace requirements to construct the proposed project and associated facilities.
3.3		**3.3 Extra Temporary Right-of-Way/Workspace**	
		The Permittee may obtain extra temporary workspace that is needed at locations where the project will cross features such as water bodies, road, railroads, side slopes and other special circumstances where horizontal directional drilling (HDD) will be utilized. Extra temporary workspace will be allowed for construction activities including, but not limited to, staging equipment and stockpiling spoil material to facilitate construction of the	MERC in its direct testimony at the public hearing in November 2016 and in its December 2, 2016, proposed Findings of Fact (No. 205) and Post- Hearing Brief (page 28) provided portions of this language and recommended that it be included to ensure sufficient workspace for HDD crossings.

		pipeline. These dimensions will vary depending on actual site-specific conditions, but will typically be 20,000 square feet on each side of the features crossed. Extra temporary workspaces that may be required outside the approved Route Width are identified on the aerial photos attached to this Route Permit.	
3.3	**3.3 Right-of-Way Conformance**	**3.~~3~~4 Right-of-Way Conformance**	
	This permit anticipates that the right-of-way will generally conform to the alignment identified on the attached route permit maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or are otherwise provided for by this permit. Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7852.1900, as does the right-of-way identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 8.1 of this permit	This permit anticipates that the right-of-way will generally conform to the alignment identified on the attached route permit maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or are otherwise provided for by this permit. Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7852.1900, as does the right-of-way identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile ~~submitted pursuant to Section 8.1 of this~~ required by this permit.	Renumbered to accommodate insertion of other permit conditions and strikes a reference to language not included in the generic template.

4.0 **3.5**	**4.0 STATE AND FEDERAL MINIMUM DEPTH OF COVER REQUIREMENTS**	**~~4.0 STATE AND FEDERAL MINIMUM DEPTH OF COVER REQUIREMENTS~~** **3.5 State and Federal Minimum Depth of Cover Requirements**	This modification provides for renumbering of this permit condition.
	Minn. Stat. § 216G.07, subd. 1, requires the pipeline trench to be excavated to a depth that sufficiently allows for at least 54 inches (4.5 feet) of backfill from ground surface to the top of pipeline in all areas where the pipeline crosses the right-of-way of any public drainage facility or any county, town, or municipal street or highway and where the pipeline crosses agricultural land. Where the pipeline crosses the right-of-way of any drainage ditch the pipeline shall be installed with a minimum level cover of not less than 54 inches (4.5 feet) below the authorized depth of the ditch, unless waived in the manner provided in Minn. Stat. § 216G.07, subd. 2 and 3. In agricultural land, the Permittee may seek a depth requirement waiver from the affected landowners to install the pipeline at the same depth as the existing pipelines. In all cases, the pipeline trench shall be	Minn. Stat. § 216G.07, subd. 1, requires the pipeline trench to be excavated to a depth that sufficiently allows for at least 54 inches (4.5 feet) of backfill from ground surface to the top of pipeline in all areas where the pipeline crosses the right-of-way of any public drainage facility or any county, town, or municipal street or highway and where the pipeline crosses agricultural land. Where the pipeline crosses the right-of-way of any drainage ditch the pipeline shall be installed with a minimum level cover of not less than 54 inches (4.5 feet) below the authorized depth of the ditch, unless waived in the manner provided in Minn. Stat. § 216G.07, subd. 2 and 3. In agricultural land, the Permittee may seek a depth requirement waiver from the affected landowners to install the pipeline at the same depth ~~as the existing pipelines~~ required by 49 CFR 192.327. In all cases, the pipeline trench shall be	Technical correction. Code of Federal Regulations (CFR) Part 195.248 refers to liquid pipelines, not natural gas pipelines. CFR 192.327 refers to gas lines.

	excavated to a depth that sufficiently allows for at least 36 inches (3 feet) of backfill from ground surface to the top of pipeline in accordance with U.S. Department of Transportation regulations (49 CFR 195.248).	excavated to a depth that sufficiently allows for at least 36 inches (3 feet) of backfill from ground surface to the top of pipeline in accordance with U.S. Department of Transportation regulations (49 CFR ~~195.248~~ 192.327).	
		4.0 ADMINISTRATIVE COMPLIANCE The following administrative compliance procedures require submissions to the Commission. Submissions must be made by electronic filing (eFiling). **~~5.3~~ 4.1 Permit Distribution to Local Governments and Residents** The Permittee shall, ~~W~~within 10 days of receipt of the pipeline routing permit from the Commission, ~~permit issuance, the Permittee shall~~ send a copy of the permit to the office of each regional development commission~~,~~ of a development region, soil and water conservation district, watershed district, watershed management district, office of the county auditor, and the clerk of each city and township crossed by the designated route.	This permit condition provides for a new general heading that consolidates requirements for: • 4.1 Permit distribution, to units of government and landowners. • 4.2 Notification of landowners prior to entry • 4.3 Field representative identification and contact information. • 4.4 Agricultural and County Inspector identification. • 4.5 Training of personnel. Other modifications are proposed for clarification and consistency.

	Within 30 days of permit issuance, the Permittee shall provide all affected landowners with a copy of this permit and the complaint procedures. In no case shall the landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the permitted route. The Permittee shall provide all affected landowners with complete information about the project keeping them informed throughout the initial survey, right-of-way acquisition, right-of-way preparation, construction, restoration, and future operation and maintenance. As provided by applicable laws and regulations the Permittee shall provide educational materials about the project and any restrictions or dangers associated with the project to landowners within the route whose land is crossed by the pipeline and, upon request, to any interested persons.	Within thirty (30) days of permit issuance, the Permittee shall ~~provide all affected~~ send a printed copy of the permit and the complaint procedures to all affected landowners ~~with a copy of this permit and the complaint procedures~~. In no case shall the affected landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the ~~permitted~~ designated pipeline route authorized by this permit. The Permittee shall provide all affected landowners with information concerning, at a minimum, the initial survey, right-of-way acquisition, right-of-way preparation, construction, and restoration, ~~and future operation and maintenance.~~ As provided by applicable laws and regulations the Permittee shall provide educational materials about the project and any restrictions or dangers associated with the project to landowners within the route whose land is crossed by the pipeline and, upon request, to any interested persons.	Operation and maintenance of a pipeline is a safety related item and outside of the Commission's jurisdiction.

		4.2 Notification The Permittee shall notify landowners or their designee at least fourteen (14) days in advance but not greater than 60 days in advance of entering the property. **4.3 Field Representative** At least fourteen (14) days, prior to the start of construction and continuously throughout construction and completion of restoration of the areas affected by construction, ~~T~~the Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this ~~p~~Permit ~~during construction of the project~~. This person (or a designee) shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration. The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction. The Permittee shall provide the field representative's contact information to	

		affected landowners, residents, local government units and other interested persons 14 days prior to commencing construction. The Permittee may change the ~~site manager~~ field representative at any time upon notice to the Commission by eFiling as well as posting to a project website maintained by the Permittee and by providing a telephone number to affected landowners, residents, local government units and other interested persons that provides current contact information for the field representative. **4.4 Agricultural Monitor and County Inspector Notification Requirements** The Permittee shall at least fourteen (14) days prior to the start of construction provide notice to all landowners affected by construction with the name, telephone number and email address of the Agricultural Monitor and County inspector designated by the County, if appointed. **~~5.5.3~~ 4.5 Employee Training and Education of Permit Terms and Conditions** ~~The Permittee shall inform all employees, contractors, and other persons involved in construction of the~~	

		~~terms and conditions of this permit.~~ Prior to any construction, the Permittee shall file an affirmative statement with the Commission, certified by a senior company official, that all Permittee personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of environmental mitigation measures in this permit that are appropriate to their jobs before becoming involved with construction and restoration activities associated with the project.	
5.0	**5.0 GENERAL CONDITIONS**	**5.0 GENERAL CONDITIONS**	
	The Permittee shall comply with the following conditions during pipeline right-of-way preparation, construction, cleanup, and restoration over the life of this permit.		No proposed modification to this permit condition.
5.1	**5.1 Agricultural Protection Plan [*if applicable*]** The Permittee shall comply with the Agricultural Protection Plan (APP) that is attached to this permit (*Appendix XX*) and incorporated herein. The obligation to comply with the APP as a condition	**5.1 Agricultural Protection Plan [~~*if applicable*~~]** The Permittee shall comply with the Agricultural Protection Plan (APP) ~~that is~~ attached to this permit (*Appendix XX*) and incorporated herein. The obligation to comply with the APP as a condition	Bob Patton representing the Minnesota Department of Agriculture on December 14, 2016, indicated that review of the APP has been completed and that there

	of this permit shall expire with the termination of Commission jurisdiction over this permit as prescribed by Minn. R. 7852.3900, unless otherwise specified in the APP. The Minnesota Department of Agriculture must approve of any amendments to the APP. The Permittee shall file the amended APP with the Commission within 10 days of Minnesota Department of Agriculture approval.	of this permit shall expire with the termination of Commission jurisdiction over this permit as prescribed by Minn. R. 7852.3900, unless otherwise specified in the APP. The Minnesota Department of Agriculture must approve of any amendments to the APP. The Permittee shall file ~~the~~ an amended APP with the Commission within 10 days of Minnesota Department of Agriculture approval.	are no changes to the APP as proposed. Minor edits for clarification.
5.2	**5.2 Environmental Mitigation Plan [*if applicable*]** The Permittee shall comply with the Environmental Mitigation Plan that is attached to this permit (*Appendix XX*) and incorporated herein. The Permittee shall also comply with all additional conditions that may be added as a result of permits issued by other agencies or governmental units.	**5.2 Environmental Mitigation Plan [~~*if applicable*~~]** The Environmental Mitigation Plan shall include all environmental control plans and special conditions imposed by permits or licenses issued by state or federal agencies related to agency-managed resources. Plans within the Environmental Mitigation Plan shall include the Agricultural Mitigation Plan (AMP), a Vegetation Management Plan (VMP), and a Stormwater Pollution Prevention Plan (SWPPP). The Environmental Mitigation Plan shall include the following: 1. Identification of and contact information for an Environmental Monitor to	MERC's proposed Findings of Fact (No. 198) and Post-Hearing Brief (p.25) point out, "no such plan has been prepared for this project and none is defined or discussed in the CEA." To address the absence of an environmental mitigation plan (EMP) MERC requested that Condition 5.2 be revised to provide that an EMP be filed with the first Plan and Profile submission for the project and define what is to be contained in the plan. MERC provided the proposed language that appears in Condition 5.2. EERA Staff believes the language proposed by MERC is reasonable.

		oversee the construction process and monitor compliance with the Environmental Mitigation Plan and all plans therein. 2. A process for reporting construction status to the Commission. 3. A process for internal tracking of construction management, including required plan or permit inspection forms.	The Comparative Environmental Analysis (CEA), Volume I and II (released on September 16, 2016) discussed Best Management Practices (BMP), which are often individual components bundled or incorporated into an EMP. EERA Staff requested examples of MERC's BMPs and the following examples were included in Appendix G of the CEA of as follows: • G-1 Dewatering • G-2 Erosion Mats • G-3 Sediment Control • G-4 Restoration – Mulching, Seeding and Sod • G-5 Frac Out Response Plan and Report Form In EERA's "Reply to Substantive Comments," dated October 25, 2016, Appendices D, E and F, and G were included as additional examples of BMPs: • D. Fraction Mitigation Plan (as an example that included more information than the one provided by MERC in G-5

			• E. Wetland and Waterbody Construction and Mitigation Procedures • F. Upland Erosion Control, Revegetation, and Maintenance Plan • G 2013 Revisions to FERC Plans and Procedures As noted in EERA's "Reply to Substantive Comments," dated October 25, 2016, at pages 14-15, response "BMP's may be specifically designed or existing ones modified for certain project conditions or projects. BMP's have been included as requirements in route permits issued by the Commission. As EERA discussed in the CEA, there is an upstream component of this project that will require Northern Natural Gas (NNG) to construct approximately 11 miles of high pressure natural gas pipeline that will provide gas to MERC's new TBS. The NNG project will be reviewed by FERC and upon issuance of a certificate the NNG project will need to comply with FERC's requirements for wetland and waterbody construction and

			upland erosion control (as required by Appendices E and F) to EERA's "Reply to Substantive Comments," dated October 25, 2016). These BMPs were revised in 2013 and Appendix G, to EERA's "Reply to Substantive Comments," dated October 25, 2016, discusses those changes and modifications. Many of the requirements in these detailed BMPs contain language similar to the Commission's pipeline routing permit conditions, and address issues and/or concerns identified by the Minnesota Department of Natural Resources and the Minnesota Pollution Control Agency. EERA Staff believes many of the requirements in FERC's BMPs should be incorporated into the EMP or modified to comport with standardization of Commission-issued permit conditions and requirements for linear facility projects. EERA has edited FERC's "Upland Erosion Control, Revegetation, and Maintenance Plan" and "Wetland and Waterbody Construction and Mitigation Procedures." The edited

			versions are provided as separate attachments for consideration by the ALJ. The edits have eliminated the reference to "FERC" and other miscellaneous items and provides them as generic examples for consideration as BMP's that may be included in an EMP. These edited examples of BMP's cover many of the conditions in this proposed permit and may provide a solid framework for standardization of permit conditions in other projects permitted by the Commission.
5.3	**5.3 Permit Distribution** Within 10 days of permit issuance, the Permittee shall send a copy of the permit to the office of each regional development commission, soil and water conservation district, watershed district, watershed management district, office of the auditor of each county, and the clerk of each city and township crossed by the designated route. Within 30 days of permit issuance, the	**~~5.3~~ ~~Permit Distribution~~**	Moved to 4.1 above with modifications.

	Permittee shall provide all affected landowners with a copy of this permit and the complaint procedures. In no case shall the landowner receive this route permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the permitted route. The Permittee shall provide all affected landowners with complete information about the project keeping them informed throughout the initial survey, right-of-way acquisition, right-of-way preparation, construction, restoration, and future operation and maintenance. As provided by applicable laws and regulations the Permittee shall provide educational materials about the project and any restrictions or dangers associated with the project to landowners within the route whose land is crossed by the pipeline and, upon request, to any interested persons.		
5.4	**5.4 Notification** The Permittee shall notify landowners or their designee at least 14 days in advance but not greater than 60 days in advance of entering the property.	**~~5.4 Notifications~~**	Moved to 4.2 with no modifications.

5.5	**5.5 Construction Practices** The Permittee shall follow those specific construction practices and material specifications described in [*Permittee Name*] Application to the Commission for a route permit for the [*Project Application Name and Environmental Information Report*], dated [*Date*], and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail. The Permittee shall comply with the conditions for right-of-way preparation, construction, cleanup, and restoration contained in Minn. R. 7852.3600.	**5.~~5~~3 Construction Practices** The Permittee shall follow those specific construction practices and material specifications described in ~~[*Permittee Name*]~~ Minnesota Energy Resources Corporation Application to the Commission for a route permit for the ~~[*Project Application Name and Environmental Information Report*]~~ Rochester Natural Gas Pipeline Project, dated ~~[*Date*]~~ November 3, 2015, and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail. The Permittee shall comply with the conditions for right-of-way preparation, construction, cleanup, and restoration contained in Minn. R. 7852.3600.	Renumbered. Edits to complete the required information.
5.5.1	**5.5.1 Field Representative** The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during construction of the project. This person shall be accessible by telephone or	**~~5.5.1 Field Representative~~**	Moved and renumbered as 4.3, with modifications.

	other means during normal business hours throughout site preparation, construction, cleanup, and restoration. The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons 14 days prior to commencing construction. The Permittee may change the site manager at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons.		
5.5.2	**5.5.2 Agricultural Monitor and County Inspector Notification Requirements** The Permittee shall at least 14 days prior to the start of construction provide notice to all landowners affected by construction with the name, telephone number and email address of the Agricultural Monitor and County	~~**5.5.2Agricultural Monitor and County Inspector Notification Requirements**~~	Moved up and renumbered as 4.4, with proposed modifications.

	inspector designated by the County, if appointed. **5.5.3 Employee Training and Education of Permit Terms and Conditions** The Permittee shall inform all employees, contractors, and other persons involved in construction of the terms and conditions of this permit.	**~~5.5.3 Employee Training and Education of Permit Terms and Conditions~~**	Moved up and renumbered as 4.5, with proposed modifications.
5.5.4	**5.5.4 Public Services, Public Utilities, and Existing Easements** During construction, the Permittee shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these would be temporary and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate mitigation measures if not already considered as part of this permit.	**5.~~5.~~4 Public Services, Public Utilities, and Existing Easements**	Condition renumbered. No modifications proposed for this permit condition.
5.5.5	**5.5.5 Access to Property for Construction**	**5.5.~~5~~ 2 Access to Property for Construction**	

	The Permittee shall obtain all necessary permits authorizing access to public rights-of-way prior to any construction. The Permittee shall obtain approval of the landowners for access to private property prior to any construction. The Permittee shall consult with property owners to identify and address any special problems the landowners may have that are associated with the pipeline prior to any construction. The Permittee shall work with landowners to provide access to their property, to locate the pipeline on their property to minimize the loss of agricultural land, forest, and wetlands, with due regard for proximity to homes and water supplies, even if the deviations will increase the cost of the pipeline, so long as the landowner's requested relocation does not adversely affect environmentally sensitive areas. The Permittee shall negotiate agreements with landowners that will give the landowners access to their property; minimize the impact on planned future development of the property; and to assume any additional costs for such development that may be the result of installing roads, driveways		Condition renumbered. No modifications proposed for this permit condition.

	and utilities that must cross the right-of-way. The Permittee shall not unreasonably deny a landowner's request to cross the easement to access the landowner's property.		
5.5.6	**5.5.6 Noise** The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable to ensure nighttime noise level standards will not be exceeded.	**5.5.6~~6~~3 Noise** The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable to ensure ~~nighttime~~ noise level standards will not be exceeded.	Condition renumbered. Edit provides for clarification.
5.5.7	**5.5.7 Site Sediment and Erosion Control** The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency Construction Stormwater Program. The Permittee shall minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by	**5.5.~~7~~ 4 Site Sediment and Erosion Control** ~~The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency Construction Stormwater Program.~~ ~~The Permittee shall minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by~~	

	promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to pre-construction conditions. In accordance with Minnesota Pollution Control Agency requirements, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the Minnesota Pollution Control Agency.	~~promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to pre-construction conditions.~~ ~~In accordance with Minnesota Pollution Control Agency requirements, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the Minnesota Pollution Control Agency.~~ <u>The Permittee shall develop a Soil Erosion and Sediment Control Plan prior to construction and submit the Plan to the Commission at least fourteen (14) days prior to the start of construction. This Plan may be the same as the Storm Water Pollution Prevention Plan (SWPP) submitted to the MPCA as part of the National Pollutant Discharge Elimination System (NDPES) permit</u>	Condition renumbered. This site permit condition language was modified for clarification and consistency with other Commission- issued permits that have this requirement.

		application provided it identifies the information in the following paragraph. The Soil Erosion and Sediment Control Plan shall address what types of erosion control measures will be implemented during each Project phase and shall at a minimum identify: plans for grading, construction, and restoration of the areas affected by construction activities; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive re-vegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, and stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material. Erosion and sedimentation control measures shall be implemented prior to construction and maintained until restoration activities are completed for each phase of the Project.	
5.5.8	**5.5.8 Topsoil Protection**	**5.5.8~~4~~5 Topsoil Protection**	

	The Permittee shall take precautions to minimize mixing of topsoil and subsoil during excavation of the trench for the pipe unless otherwise negotiated with the affected landowner.		Condition renumbered. No modifications proposed for this permit condition.
5.9	**5.5.9 Soil Compaction** Compaction of agricultural lands by the Permittee must be kept to a minimum and mitigated in accordance with its agricultural protection plan [*if applicable*].	**5.5.~~9~~ 6 Soil Compaction** Compaction of agricultural lands by the Permittee must be kept to a minimum and mitigated in accordance with its agricultural protection plan. ~~[ifapplicable]~~ See Appendix XX.	Condition renumbered. Edit provides reference to APP.
5.5.10	**5.5.10 Landscape Preservation** Care shall be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of all pipeline construction and restoration activities.	**5.5.~~10~~7 Landscape Preservation**	Condition renumbered. No modifications proposed for this permit condition.
5.5.11	**5.5.11 Sensitive Areas** The Permittee shall stabilize stream banks and other sensitive areas disturbed by pipeline construction in accordance with the requirements of	**5.5.~~11~~8 Sensitive Areas**	Condition renumbered. No modifications proposed for this permit condition.

	applicable state or federal permits.		
5.5.12	**5.5.12 Wetlands and Water Resources** Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No temporary workspace areas shall be placed within or adjacent to wetlands or water resources, as practicable. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and shall be according to permit requirements by the applicable permitting authority. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area. Dewatering during periods of excessive precipitation or in areas where the natural groundwater table intersects the pipeline trench will not be directed into wetlands or water bodies. Dewatering	**5.5.~~12~~9 Wetlands and Water Resources** Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No temporary workspace areas shall be placed within or adjacent to wetlands or water resources, as practicable. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and shall be according to permit requirements by the applicable permitting authority. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area. Dewatering during periods of excessive precipitation or in areas where the natural groundwater table intersects the pipeline trench will not be directed into wetlands or water bodies. Dewatering	Permit condition renumbered. This part of the permit condition may need additional clarification.

	discharges will be directed toward well vegetated upland areas. Should discharge activities need to be directed off the right-of-way landowner consent will be obtained and locations will be chosen to minimize impacts. All discharge activities will comply with applicable agency permits or approvals. Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.	discharges will be directed toward well vegetated upland areas. Should discharge activities need to be directed off the right-of-way landowner consent will be obtained and locations will be chosen to minimize impacts. All discharge activities will comply with applicable agency permits or approvals. Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.	
5.5.13	**5.5.13 Vegetation Removal and Protection** The Permittee shall clear the permanent right-of-way and temporary right-of-	**5.5.10~~3~~ Vegetation Removal and Protection** The Permittee shall clear the permanent right-of-way and temporary right-of-	Condition renumbered. This proposed permit modification

	way preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not impact the safe operation, maintenance, and inspection of the pipeline and are in compliance with all applicable laws and regulations. Tree stumps will be removed at the landowner's request or when necessitated due to trench location. The Permittee will dispose of all debris created by clearing at a licensed disposal facility.	way preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not impact the safe operation, maintenance, and inspection of the pipeline and are in compliance with all applicable laws and regulations. Tree stumps will be removed at the landowner's request or when necessitated due to trench location. ~~The Permittee will dispose of all debris created by clearing at a licensed disposal facility.~~ Cleared vegetation may be disposed of in a manner authorized by the responsible governmental unit or as agreed to with the landowner, provided disposal complies with local regulations.	allows a local unit of government to determine the manner in which woody vegetation removed from the right-of-way and temporary workspace for construction is disposed of rather than requiring disposal at a licensed facility. Vegetation disposal if commonly addressed by local permitting authorities. In some instances the permitting authority may authorize burning or require chipping in order to make it available for: mulch, erosion control berms, silt fencing, gardens, livestock bedding or other beneficial uses rather than requiring disposal at a licensed facility. Landowners may also the wood for use in stoves, fireplaces and may have other uses for the wood on land owned by them.
5.5.14	**5.5.14 Application of Pesticides** The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture, Minnesota Department of Natural Resources, and the U.S. Environmental Protection Agency. Selective foliage or basal	**5.5.11~~4~~ Application of Pesticides**	Condition renumbered. No modifications proposed for this permit condition.

	application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of pesticide prior to any application on their property. The landowner may request that there be no application of pesticides on any part of the right-of-way within the landowner's property. All pesticides shall be applied in a safe and cautious manner so as not to damage crops, orchards, tree farms, or gardens. The Permittee shall provide notice of pesticide application to affected landowners and known beekeepers operating apiaries within three miles of the project site at least 14 days prior to such application.		
5.5.15	**5.5.15 Invasive Species** The Permittee shall employ best management practices to avoid the potential spread of invasive species on lands disturbed by project construction activities.	**5.5.12~~5~~ Invasive Species** The Permittee shall ~~employ best management practices to avoid the potential spread of invasive species on lands disturbed by project construction activities~~ develop and Invasive Species Plan to prevent the introduction of invasive species on lands disturbed by Project construction activities. This requirement may be included as an element of the Soil Erosion and Sediment Control Plan. .	Condition renumbered. Provides clarification and opportunity to consolidate permit requirements.

5.5.16	**5.5.16 Noxious Weeds** The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of pipeline construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.	**5.5.13~~6~~ Noxious Weeds** The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of pipeline construction and restoration of all areas affected by construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.	Condition renumbered. Permit modification proposed to clarify requirement of permit condition.
5.5.17	**5.5.17 Roads (Public and Private)** Equipment involved in pipeline construction shall be moved into the right-of-way using existing public or private roads unless a temporary road is negotiated with the landowner and approved by the [*Environmental Monitor and the Agricultural Monitor when on agricultural lands*]. Prior to commencement of construction, the Permittee shall	**5.5.14~~7~~ Roads (Public and Private)** ~~Equipment involved in pipeline construction shall be moved into the right-of-way using existing public or private roads unless a temporary access road is negotiated with the landowner and approved by the [*Environmental Monitor and the Agricultural Monitor when on agricultural lands*].~~ Prior to commencement of construction, the Permittee shall identify all state,	Condition renumbered. Modification proposed to clarify

	identify all state, county or township roads that will be used for the project and shall notify the state, county or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. The Permittee is responsible for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and project related materials. The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction. The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner.	county, city ~~or~~ and township roads that will be used for the project and shall notify the state, county, city or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. The Permittee is responsible for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and project related materials. The Permittee shall cooperate with state, county, city and ~~city~~ township road authorities to develop appropriate signage and traffic management during construction. Equipment involved in pipeline construction shall be moved into the right-of-way using existing public or private roads unless a temporary access road is negotiated with the landowner ~~and approved by the [*Environmental Monitor and the Agricultural Monitor when on agricultural lands*]~~. The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner.	extent of permit condition. Road agreements with responsible governmental units and landowners are likely to be agreed upon prior to the start of construction and selection of inspectors and monitors.

5.5.18	**5.5.18 Archaeological and Historic Resources** The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the transmission facility. In the event that a resource is encountered, the Permittee shall contact and consult with the State Historic Preservation Office and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements. Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. Construction at such	**5.5.15~~8~~ Archaeological and Historic Resources** ~~The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the transmission facility. In the event that a resource is encountered, the Permittee shall contact and consult with the State Historic Preservation Office and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with State Historic Preservation Office and State Archaeologist requirements.~~ The Permittee shall work with the State Historic Preservation Office (SHPO) and the State Archaeologist prior to commencing construction to determine whether any additional archaeological survey work will be necessary for any part of the proposed Project. The Permittee shall contract with a qualified archaeologist to complete such surveys, and shall submit the results to SHPO, the State Archaeologist and the Commission.	Condition renumbered. Revised for consistency with language in other Commission issued permits.

	location shall not proceed until authorized by local law enforcement or the State Archaeologist.	The SHPO and the State Archaeologist will make recommendations for the treatment of any significant archaeological sites which are identified. Any issue in the implementation of these recommendations will be resolved by the Commission in consultation with SHPO and the State Archaeologist. Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. ~~If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement or the State Archaeologist.~~ If any previously unrecorded archaeological sites are found during construction, the Permittee shall mark and preserve the sites and promptly notify the SHPO, the State Archaeologist, and the Commission of such discovery. The Permittee shall not excavate at such	

		locations until so authorized by the Commission in consultation with the SHPO and the State Archeologist. If human remains are encountered during construction, the Permittee shall immediately halt construction at that location and promptly notify local law enforcement authorities and the State Archaeologist. Construction at the human remains location shall not proceed until authorized by local law Enforcement authorities or the State Archaeologist. If any federal funding, permit, or license is involved or required, the Permittee shall notify the SHPO as soon as possible in the planning process to coordinate Section 106 (36 C.F.R. part 800) review.	
5.5.19	**5.5.19 Livestock** Precautions to protect livestock must be taken by the Permittee unless otherwise negotiated with the affected landowner.	**5.5.16~~9~~ Livestock Protection** ~~Precautions to protect livestock must be taken by the Permittee unless otherwise negotiated with the affected landowner.~~ The Permittee shall take precautions to	Condition renumbered. Modified

		protect livestock during all phases of construction and restoration of the areas affected by construction.	for clarification as to requirement and intent of permit condition.
5.5.20	**5.5.20 Security** The Permittee will install temporary gates or similar barriers, as needed, to prohibit public access to the right-of-way during construction.	**5.5.~~20~~17 Security** The Permittee will install temporary gates or similar barriers, as needed, to prohibit public access to the right-of-way during construction	Condition renumbered. No modifications proposed for this permit condition.
5.5.21	**5.5.21 Restoration** The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the pipeline to the natural conditions that existed immediately before construction of the pipeline and as required by other federal and state agency permits. Restoration must be compatible with the safe operation, maintenance, and inspection of the pipeline. Within 60 days after completion of all restoration activities the Permittee shall advise the Commission in writing of the completion of such activities.	**5.5.~~21~~8 Restoration** The Permittee shall restore the right-of-way, temporary work spaces, access roads, ~~abandoned right-of-way~~, and other public or private lands affected by construction of the pipeline to the natural conditions that existed immediately before construction of the pipeline and as required by other federal and state agency permits. Restoration must be compatible with the safe operation, maintenance, and inspection of the pipeline. Within 60 days after completion of all restoration activities the Permittee shall advise the Commission in writing of the completion of such activities.	Modified for clarification. EERA staff is not aware of any situation where an abandoned right-of-way requires restoration. The land on which the right-of-way is located is owned by a public or private entity and if that land was affected by pipeline construction activity, it will be restored.

5.5.22	**5.5.22 Cleanup** All waste and scrap that is the product of construction shall be removed from the right-of-way and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.	**5.5.~~22~~19 Cleanup**	Condition renumbered. No modifications proposed for this permit condition.
5.5.23	**5.5.23 Pollution and Hazardous Wastes** All appropriate precautions to protect against pollution of the environment must be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during pipeline construction and restoration of the right-of-way.	**5.5.20~~3~~ Pollution and Hazardous Wastes**	Condition renumbered. No modifications proposed for this permit condition.
5.5.24	**5.5.24 Damages** The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other	**5.5.214 Damages**	Condition renumbered. No modifications proposed for this permit condition.

	damages sustained during construction.		
5.6	**5.6 Other Requirements**	**5.6 Other Requirements**	
5.6.1	**5.6.1 Other Permits and Regulations** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. A list of the permits known to be required is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.	**5.6.1 Other Permits and Regulations** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. A list of the permits known to be required is included in the permit application. The Permittee shall ~~submit a copy of such permits to the Commission upon request~~ file a copy of all permits of with the Commission.	Modification proposed to require filing of other required permits. Having access to all other project required permits will be helpful in the event of a conflict between permit conditions and requirements of other permitting entities. Will expands our knowledge base of what is cover by other permitting entities and may provide useful examples to interested persons.
6.0	**6.0 SPECIAL CONDITIONS** Special conditions shall take precedence over other conditions of this permit should there be a conflict. [*Describe any special conditions*] ***Special Conditions Example Language***	**6.0 SPECIAL CONDITIONS** Special conditions shall take precedence over other conditions of this permit should there be a conflict. [*Describe any special conditions*] ***Special Conditions Example Language*** *Aquatic Invasive Species*	Aquatic Invasive Species is also

	Aquatic Invasive Species *As part of the preconstruction reports, the Permittee will include a section evaluating the potential for the occurrence of aquatic invasive species in the project area and describing, if any, the best management practices that apply. The Permittee should identify any infested waters or otherwise indicate that aquatic invasive species are not anticipated. The DNR must be provided an opportunity to review and comment on the plan. The DNR must be notified if any aquatic invasive species are identified in an area not previously identified as infested water.* *Wildlife-Friendly Erosion Control Materials* *The Permittee, in cooperation with the Minnesota Department of Natural Resources, shall use wildlife-friendly erosion control materials in areas known to be inhabited by wildlife species (birds, small mammals, reptiles, and amphibians) susceptible to entanglement in plastic netting.* *Rare and Unique Resources* *The Permittee shall follow measures and recommendations for avoiding and minimizing impacts to Blanding's turtle*	*As part of the preconstruction reports, the Permittee will include a section evaluating the potential for the occurrence of aquatic invasive species in the project area and describing, if any, the best management practices that apply. The Permittee should identify any infested waters or otherwise indicate that aquatic invasive species are not anticipated. The DNR must be provided an opportunity to review and comment on the plan. The DNR must be notified if any aquatic invasive species are identified in an area not previously identified as infested water.* *Wildlife-Friendly Erosion Control Materials* *The Permittee, in cooperation with the Minnesota Department of Natural Resources, shall use wildlife-friendly erosion control materials in areas known to be inhabited by wildlife species (birds, small mammals, reptiles, and amphibians) susceptible to entanglement in plastic netting.* *Rare and Unique Resources* *The Permittee shall follow measures and recommendations for avoiding and minimizing impacts to Blanding's turtle populations as outlined in the Minnesota Department of Natural*	addressed in this permit at condition 5.5.12 (as renumbered above). This part of special condition 6 or permit condition 5.5.12 should be removed as duplicative. Alternatively, the language in this condition could replace the language in 5.5.12. EERA Staff recommends this language be substituted for the language in 5.5.12. MERC's proposed findings (No. 199) recommended inclusion of this language supporting wildlife-friendly erosion control materials. EERA Staff finds the language to be appropriate. This requirement is also incorporated into FERC's best management practices (BMPs) that were included in EERA's Reply to Substantive Comments, filed on October 25, 2016. MERC in its proposed Findings (No. 201) suggested that this permit condition is not necessary for this Project.

	populations as outlined in the Minnesota Department of Natural Resources Environmental Review Fact Sheet Series for the Blanding's Turtle. *Construction and maintenance personnel will be made aware of rare resources and plant communities during pre-construction meetings to minimize potential disturbance. The Permittee shall avoid impacts to state-listed endangered, threatened, and special concern species in all areas of the project including temporary workspaces associated with the project.* *Rare Species Surveys* *Known locations of state-listed threatened/endangered species and their habitats have been identified within the project area. These species may occur within the proposed route where suitable habitat exists. The Permittee, in consultation with the DNR, will determine the need for rare species surveys (pre-construction) within the approved route. In the areas where these species are known to exist or where the right-of-way passes through habitats where these species are likely to exist, field surveys may be required. In the event that impacts cannot be avoided, the Permittee would*	*Resources Environmental Review Fact Sheet Series for the Blanding's Turtle.* *Construction and maintenance personnel will be made aware of rare resources and plant communities during pre-construction meetings to minimize potential disturbance. The Permittee shall avoid impacts to state-listed endangered, threatened, and special concern species in all areas of the project including temporary workspaces associated with the project.* ~~*Rare Species Surveys*~~ ~~*Known locations of state-listed threatened/endangered species and their habitats have been identified within the project area. These species may occur within the proposed route where suitable habitat exists. The Permittee, in consultation with the DNR, will determine the need for rare species surveys (pre-construction) within the approved route. In the areas where these species are known to exist or where the right-of-way passes through habitats where these species are likely to exist, field surveys may be required. In the event that impacts cannot be avoided, the Permittee would be required to obtain a takings permit from DNR for impacts to the species. The*~~	MERC's proposed Findings (No. 200), recommended that the proposed "Rare Species Surveys" language not be used, and offered the language that has been inserted below the stricken language. EERA Staff reviewed both examples of the proposed "Rare Species Surveys" requirements and believes the language provided by MERC is preferable.

	be required to obtain a takings permit from DNR for impacts to the species. The Permittee shall submit results of these efforts to the Commission with the Plan and Profile. *Contamination Survey* *The Permittee, in consultation with the MPCA, shall identify any contaminated sites as it performs its detailed survey and acquisition work prior to the submittal of the final plan and profile to the Commission.*	~~*Permittee shall submit results of these efforts to the Commission with the Plan and Profile.*~~ The Permittee, in consultation with the USFWS and the MnDNR, will determine the need for rare species surveys (pre-construction) within the approved route. In the areas where these species are known to exist or where the right-of-way passes through habitats where the species are likely to exist, field surveys may be required. In the event impacts cannot be avoided, the Permittee may need to obtain a take permit from the MnDNR or the USFWS for the species of concern. The Permittee shall submit the results of these efforts to the Commission with its Plan and Profile filing. *Contamination Survey* *The Permittee, in consultation with the MPCA, shall identify any contaminated sites as it performs its detailed survey and acquisition work prior to the submittal of the final plan and profile to the Commission.*	MERC's proposed Findings (No. 202) addressed the requirements for a "Vegetation Management Plan (VMP)" and proposed language to be included in the permit as a

		Permittee shall submit a Vegetation Management Plan (VMP) with the Environmental Control Plan. The purpose of the VMP shall be to identify measures to minimize the disturbance and removal of vegetation for the Project, prevent the introduction of noxious weeds and invasive species, and re-vegetate disturbed non-cropland area with appropriate native species in cooperation with landowner and state, federal, and local resource agencies, such that such re-vegetation does not negatively impact safe and reliable operation of the Project.	special condition. EERA has reviewed this language and supports inclusion of the proposed VMP language as a special condition in this permit.
7.0	**7.0 DELAY IN CONSTRUCTION** If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Commission shall suspend the permit in accordance with Minn. R. 7852.3300. If at the time of suspension, or at a later time, the Permittee decides to construct the pipeline, it shall certify to the Commission that there have been no significant changes in any material aspects of the conditions or circumstances existing when the permit was issued. If the Commission	**7.0 DELAY IN CONSTRUCTION** If the Permittee has not commenced construction or improvement of the designated route within four years after the date of issuance of this permit the Commission shall suspend the permit in accordance with Minn. R. 7852.3300. If at the time of suspension, or at a later time, the Permittee decides to construct the pipeline, it shall certify to the Commission that there have been no significant changes in any material aspects of the conditions or circumstances existing when the permit was issued. If the Commission	This proposed modification provides clarification by indicating that this applies to the designated route.

	determines that there are no significant changes, it shall reinstate the permit. If the Commission determines that there is a significant change, it may order public information meetings or a new hearing and consider the matter further, or it may require the Permittee to submit a new application.	determines that there are no significant changes, it shall reinstate the permit. If the Commission determines that there is a significant change, it may order public information meetings or a new hearing and consider the matter further, or it may require the Permittee to submit a new application.	
8.0	**8.0 COMPLAINT PROCEDURES** Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7852.3700, and as set forth in the complaint procedures attached to this permit [*Attachment Complaint Report Procedures*]. The Permittee shall advise the Commission when such procedure has been established. The Permittee shall notify the Commission of any complaints received during the course of construction pertaining to Minn. R. 7852.3600 that are not resolved within 30 days of the complaint. Upon request, the Permittee shall assist	**8.0 COMPLAINT PROCEDURES**	No proposed modifications to this permit condition.

	the Commission with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.		
9.0	**9.0 PIPELINE SAFETY** In an emergency situation, responders will take appropriate actions necessary to address the emergency. Pursuant to Minn. Stat. § 216G.02, subd. 3(a) the pipeline routing permit may not set safety standards for the construction of pipeline. This would also apply to operation and maintenance. Therefore, this Pipeline Routing Permit does not address pipeline safety related issues.	**9.0 PIPELINE SAFETY**	No modifications proposed for this permit condition.
10.0	**10.0 COMPLIANCE REQUIREMENTS** Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.	**10.0 COMPLIANCE REQUIREMENTS**	No modifications proposed for this permit condition.

10.1	**10.1 Plan and Profile** At least 30 days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the segment of pipeline for which construction is scheduled. The documentation shall include maps depicting the plan and profile including the designated route, right-of-way, and pipeline alignment approved per this permit. The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the plan and profile documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission the Permittee shall notify	**10.1 Plan and Profile** At least 30 days before right-of-way preparation for construction begins on any ~~segment~~ phase or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for each ~~the segment~~ phase of the project ~~pipeline~~ for which construction is scheduled. The documentation shall include maps depicting the plan and profile including the designated route, right-of-way, and pipeline alignment approved per this permit. The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the plan and profile documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission the Permittee shall notify	EERA Staff proposes to amend permit condition 10.1 to reflect that the project will be built in three phases over a period of several years and also require two Town Border Stations and a new District Regulator Station.

	the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit. The Permittee shall also provide the Minnesota Office of Pipeline Safety with the same information provided to the Commission. The Permittee's plan and profile and specifications and drawings, shall become a condition of this permit and shall be complied with by the Permittee in accordance with Minn. R. 7852.3500.	the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit. The Permittee shall also provide the Minnesota Office of Pipeline Safety with the same information provided to the Commission. The Permittee's plan and profile and specifications and drawings, shall become a condition of this permit and shall be complied with by the Permittee in accordance with Minn. R. 7852.3500.	
10.2	**10.2 Status Reports** The Permittee shall report to the Commission on progress during finalization of the route and construction of the pipeline. The Permittee shall report weekly. Reports shall begin with the submittal of the plan and profile for the project and continue until completion of restoration.	**10.2 Status Reports** <u>In the event the Permittee proceeds with phased construction of the Project, such weekly reports shall be filed beginning with the submittal of the plan and profile for that phase and continue until completion of restoration of that phase. If there is any period of time where no construction activity is occurring, restoration of the prior phase of the Project has been completed, and the overall Project is not yet completed, Permittee need only provide status reports monthly.</u>	This permit condition modification was proposed by MERC in its Findings (No. 202). EERA Staff concurs with the language proposed, except for changing "should" to "shall". This proposed language modification represents a reasonable approach, as there may be a gap of several months between restoration of one phase prior to the start of the next phase.

10.3	**10.3 Notification to Commission** At least three days before the pipeline is to be placed into service, the Permittee shall notify the Commission of the date on which the pipeline will be placed into service and the date on which construction was complete.	**10.3 Notification to Commission** At least three days before the pipeline is to be placed into service, the Permittee shall notify the Commission of the date on which each phase of the pipeline project will be placed into service and the date on which construction was complete.	Modification reflects staged construction.
10.4	**10.4 As-Builts** Within 90 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the project.	**10.4 As-Builts** Within 90 days after completion of each phase of construction, the Permittee shall submit copies of all final as-built plans and specifications developed ~~during the project~~ for each project phase (See Route Permit at Section_XX).	As proposed, the proposed Project will take approximately six years to complete and will be built in three separate phases. This permit condition is modified to require the as-built plans for each phase to be submitted upon completion, rather than requiring the submission of all the as-built plans and specifications only upon completion of project construction.
10.5	**10.5 GPS Data** Within 90 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates,	**10.5 GPS Data** Within 90 days after completion of each phase of construction (See Route Permit at Section_XX), the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS	As proposed, the Project will take approximately six years to complete. It is not reasonable to wait six years to receive all the GPS data.

	associated database of characteristics) for the pipeline and associated facilities.	geodatabase or shapefiles, GPS coordinates, associated database of characteristics) for the pipeline and associated facilities.	Compliance with the Gopher State One-Call (Minn. Stat. Ch. 216D) requirements is necessary when an underground portion of the project goes into service.
11.0	**11.0 RIGHT OF ENTRY** The Permittee shall allow Commission designated representatives to perform the following, upon reasonable notice, upon presentation of credentials and at all times in compliance with the Permittee's site safety standards: a. To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations. b. To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations. c. To sample and monitor upon the facilities easement of the property. d. To examine and copy any	**11.0 RIGHT OF ENTRY**	No modifications proposed for this section.

	documents pertaining to compliance with the conditions of this permit.		
12.0	**12.0 PERMIT AMENDMENT** The Permittee may apply to the Commission for an amendment of the route designation or to conditions specified in the permit in accordance with the requirements and procedures of Minn. R. 7852.3400.	**12.0 PERMIT AMENDMENT**	No modifications proposed for this permit condition.
13.0	**13.0 PERMIT MODIFICATION OR SUSPENSION** If the Commission determines that substantial evidence supports a finding that a violation of the terms or conditions of this pipeline routing permit has occurred or is likely to occur, it may take action to modify or suspend this permit in accordance with Minn. R. 7852.3800. The Commission may at any time re-consider modification or suspension of this permit if the Permittee has undertaken effective measures to correct the violations.	**13.0 PERMIT MODIFICATION OR SUSPENSION** .	No modifications proposed for this permit condition

14.0	**14.0 PIPELINE CONSTRUCTION COMPLETION CERTIFICATE** In accordance with Minn. R. 7852.3900, the Permittee shall file with the Commission a written certification that the construction and remediation of the permitted pipeline has been completed in compliance with all permit conditions and landowner agreements. The certification shall be considered by the Commission within 60 days of its filing. The Commission shall accept or reject the certification of completion and make a final determination regarding cost or reimbursements due. If the certification is rejected, the Commission shall inform the Permittee in writing which deficiencies, if corrected, will allow the certification to be accepted. When corrections to the deficiencies are completed, the Permittee shall notify the Commission, and the certification shall be reconsidered as soon as possible. After acceptance of the certification, the Commission's jurisdiction over the Permittee's pipeline routing permit shall be terminated.	**14.0 PIPELINE CONSTRUCTION COMPLETION CERTIFICATE**	No modifications proposed for this permit condition.

MINNESOTA PUBLIC UTILITIES COMMISSION COMPLAINT HANDLING PROCEDURES FOR PERMITTED ENERGY FACILITIES			
A.	**A. Purpose** To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site preparation, construction, cleanup, restoration, operation, and maintenance.	**A. Purpose** To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for route and/or site preparation, construction, cleanup, and restoration~~, operation, and maintenance~~.	Modification proposed to clarify that this requirement applies to both a route and/or a site associated with the proposed Project.
B.	**B. Scope** This document describes complaint reporting procedures and frequency.		
C.	**C. Applicability** The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities		

	Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.		
D.	**D. Definitions** **Complaint:** A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other route and associated facilities permit conditions. Complaints do not include requests, inquiries, questions or general comments. **Substantial Complaint:** A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations. **Unresolved Complaint:** A complaint which, despite the good faith efforts of the permittee and a person, remains unresolved or unsatisfactorily resolved to one or both of the parties. **Person:** An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.		

E.	**E. Complaint Documentation and Processing** 1. The permittee shall designate an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals. 2. A person presenting the complaint should to the extent possible, include the following information in their communications: a. name, address, phone number, and email address; b. date of complaint; c. tract or parcel number; and d. whether the complaint relates to a permit matter or a compliance issue. 3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following: a. docket number and project name; b. name of complainant, address, phone number and email address; c. precise description of property or parcel number; d. name of permittee representative receiving complaint and date of receipt; e. nature of complaint and the applicable		

	permit condition(s); f. activities undertaken to resolve the complaint; and g. final disposition of the complaint.		
F.	**F. Reporting Requirements** The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit. The permittee shall report all complaints to the Commission according to the following schedule: **Immediate Reports:** All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number		
	Monthly Reports: During project construction and restoration, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Daniel P. Wolf, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located		

	at: https://www.edockets.state.mn.us/EFiling/home.jsp If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.		
G.	**G. Complaints Received by the Commission** Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.		
H.	**H. Commission Process for Unresolved Complaints** Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. The complaint will be presented to the		

	Commission for a decision as soon as practicable.		
I.	**I. Permittee Contacts for Complaints and Complaint Reporting** Complaints may filed by mail or email to: [*Name*] [*Mailing Address*] [*Phone*] [*Email*] This information shall be maintained current by informing the Commission of any changes as they become effective.		

MINNESOTA PUBLIC UTILITIES COMMISSION COMPLIANCE FILING PROCEDURE FOR PERMITTED ENERGY FACILITIES			
A.	**A. Purpose** To establish a uniform and timely method of submitting information required by Commission energy facility permits.		
B.	**B. Scope and Applicability** This procedure encompasses all known compliance filings required by permit.		
C.	**C**. **Definitions** **Compliance Filing:** A filing of information to the Commission, where the information is required by a Commission site or route permit.		
D.	**D**. **Responsibilities** 1. The permittee shall file all compliance filings with Daniel P. Wolf, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp General instructions are provided on the eDockets website. Permittees must register on the website to file documents.		

	2. All filings must have a cover sheet that includes: a. Date b. Name of submitter/permittee c. Type of permit (site or route) d. Project location e. Project docket number f. Permit section under which the filing is made g. Short description of the filing 3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Daniel P. Wolf, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198. The Commission may request a paper copy of any electronically filed document.		

PERMIT COMPLIANCE FILINGS[1]

PERMITTEE: MINNESOTA ENERGY RESOURCES CORPORATION
PERMIT TYPE: Pipeline Routing Permit
PROJECT LOCATION: Olmsted County
PUC DOCKET NUMBER: G-011/GP-15-858

Filing Number	Permit Section	Description of Compliance Filing	Due Date

[1] This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

Filing Number	Permit Section	Description of Compliance Filing	Due Date

3.0 Project Location (To be inserted at appropriate place in pipeline routing permit)

[*Describe the location of the project including details such as the county, state, city, and townships, as appropriate*]

County	Township Name	Township	Range	Section

DESIGNATED ROUTE

The route designated by the Commission in this permit is the route described below and shown on the route maps attached to this permit. The route is generally described as follows:

[*Provide detailed description of the authorized route including the route widths and any other specifics relevant to each segment. Also include a reference to the relevant route map to be attached to the permit.*]

The identified route widths will provide the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized by the Commission.

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN

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UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN (PLAN)

I. APPLICABILITY

A. The intent of this Plan is to assist the Permittee by identifying baseline mitigation measures for minimizing erosion and enhancing revegetation. The Permittee shall specify in their filings, any individual measures in this Plan they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. The Permittee shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized, the Permittee can request further changes as variances to the measures in this Plan (or the applicant's approved plan). The Director of the Office of Energy Projects (Director) will consider approval of variances upon the project sponsor's written request, if the Director agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of this Plan is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Project-related impacts on wetland and waterbody systems are addressed in the Wetland and Waterbody Construction and Mitigation Procedures (Procedures).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

2. Environmental Inspectors shall have peer status with all other activity inspectors.

3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the Commission's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements; and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of this Plan, the Procedures, the environmental conditions of the Commission's Orders, the mitigation measures proposed by the project sponsor (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements.

2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;

3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing, and maintained throughout construction;

4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;

5. Identifying erosion/sediment control and soil stabilization needs in all areas;

6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;

7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent reoccurrence; and verifying that dewatering structures are removed after completion of dewatering activities;

8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;

9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;

10. Ensuring restoration of contours and topsoil;

11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;

12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies, cultural resource sites, and sensitive species habitats) and onto roads, and determining the need for additional erosion control devices;

13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:

    a. on a daily basis in areas of active construction or equipment operation;

    b. on a weekly basis in areas with no construction or equipment operation; and

    c. within 24 hours of each 0.5 inch of rainfall;

14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;

15. Keeping records of compliance with the environmental conditions of the Commission's Orders, and the mitigation measures proposed by the Permittee in the application submitted to the Commission, and other federal or state environmental permits during active construction and restoration;

16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and

17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

The project sponsor shall do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. The project sponsor must ensure that appropriate cultural resources and biological surveys are conducted, as determined necessary by the appropriate federal and state agencies.

2. The Permittee is encouraged to consider expanding any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.

3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.

2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within 3 years of the authorized construction.

3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.

4. Engage qualified drain tile specialists, as needed to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

The Permittee must coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the Commission's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.

2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities.

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.

4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

The Permittee shall develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy must be filed with the Commission prior to construction and made available in the field on each construction spread.

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, project sponsors shall: avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment, or as specified in landowner agreements; fence the edge of the construction work area for a distance of 100 feet on either side of the residence; and restore all lawn areas and landscaping immediately following clean up operations, or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

If construction is planned to occur during winter weather conditions, the Permittee shall develop and file a project-specific winter construction plan with the Commission.

The plan shall address:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);

2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, stormwater control during spring thaw conditions); and

3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. INSTALLATION

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance shall be limited to the construction right-of-way, extra work space areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the Commission's Orders. Any project- related ground disturbing activities outside these areas will require prior Commission approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements, and landowner easement agreements.

2. The construction right-of-way width for a project shall not exceed 100 feet or that described in the application filed by the Permittee unless otherwise modified by a Commission Order. However, in limited, non-wetland areas, this construction right-of- way width may be expanded by up to 25 feet without Commission approval to accommodate full construction right-of-way topsoil segregation and to ensure safe construction where topographic conditions (e.g., side-slopes) or soil limitations require it. Twenty-five feet of extra construction right-of-way width may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable

   Project use of these additional limited areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. When additional areas are used, each one shall be identified and the need explained in the weekly or biweekly construction reports to the Commission, if required. The following material shall be included in the reports:

   a. the location of each additional area by station number and reference to previously filed alignment sheets, or updated alignment sheets showing the additional areas;

   b. identification of the filing with the Commssion containing evidence that the additional areas were previously surveyed;

c. a statement that landowner approval has been obtained and is available in project files.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves otherwise, prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:

   a. cultivated or rotated croplands, and managed pastures;

   b. residential areas;

   c. hayfields; and

   d. other areas at the landowner's or land managing agency's request.

2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.

3. Where topsoil segregation is required, the project sponsor must:

   a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and

   b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.

4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.

5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.

6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.

2. Probe all drainage tile systems within the area of disturbance to check for damage.

3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.

4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems, unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction.

2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.

3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers

   a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope

breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.

b. Install temporary slope breakers on all disturbed areas, as necessary to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing (closer spacing shall be used if necessary):

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Direct the outfall of each temporary slope breaker to a stable, well vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.

d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.

b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.

b. At a minimum, install and maintain temporary sediment barriers across the entire construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.

c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary to prevent sediment flow into the wetland or waterbody.

4. Mulch

a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding, where necessary to stabilize the soil surface and to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent, unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.

b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion control fabric, or some functional equivalent.

c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:

(1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or

(2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.

d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.

e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).

f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.

g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.

h. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat, unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

V. RESTORATION

A. CLEANUP

1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

   If construction or restoration unexpectedly continues into the winter season when conditions could delay successful decompaction, topsoil replacement, or seeding until the following spring, file with the Commission for the review and written approval of the Executive Secretary, a winter construction plan (as specified in section III.I).

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F. and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.

3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris, unless approved for use as mulch or for some other use on the construction work areas by the landowner or land managing agency.

4. Remove excess rock from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.

5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.

6. Remove construction debris from all construction work areas unless the landowner or land managing agency approves leaving materials onsite for beneficial reuse, stabilization, or habitat restoration.

7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers

a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.

b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing as and upslope of permanent slope breakers.

c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.

d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland. Install trench breakers at wetland boundaries, as specified in the Procedures. Do not install trench breakers within a wetland.

2. Permanent Slope Breakers

a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.

b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land managing agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

Slope (%)	Spacing (feet)
5 - 15	300
>15 - 30	200
>30	100

c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.

d. Slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Where slope breakers extend beyond the edge of the construction right-of-way, they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.

2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil.

If subsequent construction and cleanup activities result in further compaction, conduct additional tilling.

3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

a. The project sponsor is responsible for ensuring successful revegetation of soils disturbed by project-related activities, except as noted in section V.D.1.b.

b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request, or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.

b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.

c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary

seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.

d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within 6 working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c.

e. Base seeding rates on Pure Live Seed. Use seed within 12 months of seed testing.

f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).

g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land managing agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

A. signs;

B. fences with locking gates;

C. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and

D. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.

2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.

   Continue revegetation efforts until revegetation is successful.

3. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.

4. Restoration shall be considered successful if the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land managing agency per section V.A.6), revegetation is successful, and proper drainage has been restored.

5. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands shall not be done more frequently than every 3 years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case shall routine vegetation mowing or clearing occur during the migratory bird nesting season between April 15 and August 1 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.

6. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. The project sponsor shall maintain records that identify by milepost:

   a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;

   b. acreage treated;

   c. dates of backfilling and seeding;

   d. names of landowners requesting special seeding treatment and a description of the follow-up actions;

   e. the location of any subsurface drainage repairs or improvements made during restoration; and

   f. any problem areas and how they were addressed.

2. The project sponsor shall file with the Commission monthy activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least 2 years following construction.

WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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WETLAND AND WATERBODY
CONSTRUCTION AND MITIGATION PROCEDURES (PROCEDURES)

I. APPLICABILITY

A. The intent of these Procedures is to assist the Permittee by identifying baseline mitigation measures for minimizing the extent and duration of project-related disturbance on wetlands and waterbodies. The Permittee shall specify in their pre-construction filings, any individual measures in these Procedures they consider unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. The Permittee shall also explain how those alternative measures would achieve a comparable level of mitigation.

Once a project is authorized by the Commission, the Permittee can request further changes as variances to the measures in these Procedures (or the applicant's approved procedures). The Commission will consider approval of variances upon the Permittee's written request, if the Commission agrees that a variance:

1. provides equal or better environmental protection;

2. is necessary because a portion of these Procedures is infeasible or unworkable based on project-specific conditions; or

3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

The Permittee must receive written approval for any variances in advance of construction.

Project-related impacts on non-wetland areas are addressed in the Commission's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:

   a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;

   b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and

   c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

A. The following information must be filed with the Commission prior to the beginning of construction, for the review and written approval by the Commission:

1. site-specific justifications for extra work areas that would be closer than 50 feet from a waterbody or wetland; and

2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.

B. The following information must be filed with the Commission prior to the beginning of construction.

1. Spill Prevention and Response Procedures specified in section IV.A;

2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated coldwater fishery, and within any waterbody identified as habitat for federally-listed threatened or endangered species. The project sponsor will revise the schedule as necessary to provide Commission staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;

3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in section V.B.6.d;

4. site-specific plans for major waterbody crossings, described in section V.B.9;

5. a wetland delineation report as described in section VI.A.1, if applicable; and

6. the hydrostatic testing information specified in section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.

B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

A. The project sponsor shall develop project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy must be filed with the Commission prior to construction and made available in the field on each construction spread.

1. It shall be the responsibility of the Permittee and its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. The Permittee and its contractors must, at a minimum, ensure that:

a. all employees handling fuels and other hazardous materials are properly trained;

b. all equipment is in good operating order and inspected on a regular basis;

c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the

project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;

f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary, unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;

g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and

h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.

2. The Permittee and its contractors must structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, the Permittee and its contractors must:

a. ensure that each construction crew (including cleanup crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;

c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S. Coast Guard and the National Response Center) that must be notified of a spill; and

d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

The Permittee must coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the Commission's Orders.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.

2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.

3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.

4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate federal or state agency in writing on a site-specific basis, instream work, except that required to install or remove equipment bridges, must occur during the following time windows:

a. coldwater fisheries - June 1 through September 30; and

b. coolwater and warmwater fisheries - June 1 through November 30.

2. Extra Work Areas

a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where

the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

b. The Permittee shall file with the Commission for review and written approval by the Commission, site-specific justification for each extra work area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the conditions that will not permit a 50-foot setback and measures to ensure the waterbody is adequately

c. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

a. Comply with the USCOE and DNR, or its delegated agency, permit terms and conditions.

b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.

c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.

e. Maintain adequate waterbody flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.

f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the Permittee must comply with all applicable Procedure requirements for "waterbodies" as defined in section I.B.1.

4. Spoil Pile Placement and Control

   a. All spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, must be placed in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas as described in section V.B.2.

   b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

   a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.

   b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:

      (1) equipment pads and culvert(s);
      (2) equipment pads or railroad car bridges without culverts;
      (3) clean rock fill and culvert(s); and
      (4) flexi-float or portable bridges.

      Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

   c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.

   d. Design and maintain equipment bridges to prevent soil from entering the waterbody.

   e. Remove temporary equipment bridges as soon as practicable after permanent seeding.

   f. If there will be more than 1 month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

g. Obtain any necessary approval from the USCOE, or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossings of waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either coldwater or significant coolwater or warmwater fisheries, or federally-designated as critical habitat.

b. Dam and Pump

(1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area, and there are no concerns about sensitive species passage.

(2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:

(i) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
(ii) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
(iii) screen pump intakes to minimize entrainment of fish;
(iv) prevent streambed scour at pump discharge; and
(v) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

c. Flume Crossing

The flume crossing method requires implementation of the following steps:

(1) install flume pipe after blasting (if necessary), but before any trenching;

(2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);

(3) properly align flume pipe(s) to prevent bank erosion and streambed scour;

(4) do not remove flume pipe during trenching, pipelaying, or backfilling activities, or initial streambed restoration efforts; and

(5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, file with the Commission for the review and written approval by the Commission, a plan that includes:

(1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;

(2) justification that disturbed areas are limited to the minimum needed to construct the crossing;

(3) identification of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;

(4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and

(5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. except for blasting and other rock breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours.

Streambanks and unconsolidated streambeds may require additional restoration after this period;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, intermediate waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

a. complete instream construction activities (not including blasting and other rock breaking measures) within 48 hours, unless site-specific conditions make completion within 48 hours infeasible;

b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and

c. all other construction equipment must cross on an equipment bridge as specified in section V.B.5.

9. Crossings of Major Waterbodies

Before construction, the project sponsor shall file with the Commission for the review and written approval by the Commission a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing. This plan must be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan; however, the following specific measures must be implemented at stream crossings:

a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary to prevent the flow of sediments into the waterbody. Removable sediment barriers (or driveable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day, but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;

b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the waterbody; and

c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain coldwater fisheries.

2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.

3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.

4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank recontouring. Do not use synthetic monofilament

mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

5. Application of riprap for bank stabilization must comply with USCOE, or its delegated agency, permit terms and conditions.

6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.

7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.

8. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Plan.

   In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

9. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of riparian areas.

VI. WETLAND CROSSINGS

A. GENERAL

1. The project sponsor shall conduct a wetland delineation and file a wetland delineation report with the Commission before construction.

   This report shall identify:

   a. by milepost all wetlands that would be affected;

   b. the National Wetlands Inventory (NWI) classification for each wetland;

   c. the crossing length of each wetland in feet; and

   d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

   The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 100 feet or less. Prior written approval of the Commission is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet.
   Early in the planning process the project sponsor is encouraged to identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate

4. Wetland boundaries and buffers must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground disturbing activities are complete.

5. Implement the measures of sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of sections V and VI cannot be met, the Permittee must file with the Commission a site-specific crossing plan for review and written approval by the Commission before construction. This crossing plan shall address at a

   a. spoil control;

   b. equipment bridges;

   c. restoration of waterbody banks and wetland hydrology;

   d. timing of the waterbody crossing;

   e. method of crossing; and

   f. size and location of all extra work areas.

6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads

   a. Locate all extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

   b. The Permittee shall file with the Secretary for review and written approval by the Director, site-specific justification for each extra work area with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed land. The justification must specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

   c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).

      In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall

use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.

d. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

a. Comply with USCOE, or its delegated agency, permit terms and conditions.

b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.

c. Use “push-pull” or “float” techniques to place the pipe in the trench where water and other site conditions allow.

d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.

e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.

f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.

The Permittee can burn woody debris in wetlands, if approved by the USCOE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.

g. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related construction constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

h. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are

saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.

i. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.

j. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.

k. Remove all project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in section IV.F.3.a of the Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.

b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.

c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.

2. Restore pre-construction wetland contours to maintain the original wetland hydrology.

3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.

4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.

5. Consult with the appropriate federal or state agencies to develop a project-specific wetland restoration plan. The restoration plan shall include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. File this plan to the Commission upon request.

6. Until a project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).

7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.

8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of adjacent upland areas are judged to be successful as specified in section VII.A.4 of the Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.

3. Time of year restrictions specified in section VII.A.5 of the Plan (April 15 – August 1 of any year) apply to routine mowing and clearing of wetland areas.

4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.

5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:

   a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);

   b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;

   c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and

   d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.

6. Within 3 years after construction, file a report with the Commission identifying the status of the wetland revegetation efforts and documenting success as defined in section VI.D.5, above.

   For any wetland where revegetation is not successful at the end of 3 years after construction, develop and implement (in consultation with a

professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.

2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.

3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.

2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and refueling of these pumps in the project's Spill Prevention and Response Procedures.

3. The Permittee shall file with the Commission before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location. This filing requirement does not apply to projects constructed under the automatic authorization provisions of the FERC's regulations.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.

2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.

3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.

2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.