Office of Energy Projects

September 2016

FERC/FEIS-000268

FINAL ENVIRONMENTAL IMPACT STATEMENT

FOR

Columbia Gas Transmission, LLC – Leach XPress Project

Columbia Gulf Transmission, LLC – Rayne XPress Expansion Project

Docket Nos. CP15-514-000 and CP15-539-000

VOLUME II – COMMENT RESPONSES

Federal Energy Regulatory Commission
Office of Energy Projects
Washington, DC 20426

Cooperating Agencies:

US Army Corps of Engineers
Alaska District

Ohio Environmental Protection Agency

INDEX

Document Number/Commenter

FEDERAL AGENCIES

FA1 – U.S. Department of the Interior

FA-1

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

June 9, 2016

9043.1
ER 16/0219

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Re: Comments on the Draft Environmental Impact Statement for the Leach Xpress Project and Rayne Xpress Expansion Project; FERC No. CP15-514-000 and Docket No. CP15-539-000

Dear Secretary Bose:

The U.S. Department of the Interior (Department) has received the Notice of Availability of the Draft Environmental Impact Statement (DEIS) for the Leach Xpress Project (LX Project) and Rayne Xpress Expansion Project (RXE Project, collectively the Projects), proposed by Columbia Gas Transmission, LLC (the Applicant). We have reviewed the DEIS for the Projects and offer these comments.

These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401; 16 U.S.C. 661 et seq.), the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668c), the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712), and Executive Order 13186 (E.O. 13186): Responsibilities of Federal Agencies to Protect Migratory Birds (January, 2001).

Listed Species

On May 11, 2016, the U.S. Fish and Wildlife Service (Service) received a letter from the Federal Energy Regulatory Commission (FERC) requesting concurrence with their determinations of effects for 19 listed species. The Service will respond to your consultation request in a separate letter; however, please consider these comments about the listed species for your DEIS.

FA1-01 On page 4-89, the DEIS notes that 87.7 miles of the LX Project are outside of the covered lands in Belmont, Guernsey, Monroe, Morgan, Muskingum, Noble, Perry, and Vinton counties. However, your Multiple Species Habitat Conservation Plan (MSHCP) Coverage Overview Map does not show work outside of the covered lands in Belmont, Guernsey, or Vinton counties. In

FA1-02 addition, the DEIS mentions a Supplemental Filing that indicated that spring staging and fall swarming sites are present in Vinton County, Ohio. The Columbus, OH field office (OHFO) has

FA1-01 The March 18, 2016 Supplemental Filing Resource Report Appendix 3C Attachment 1 (Project Mapping and Multi Species Habitat Conservation Plan Coverage) provides detailed maps of MSHCP covered and non-covered areas for the entire route. We have provided an updated map of the MSHCP Coverage Overview Map revised to include areas outside covered lands in Appendix M-3 and referenced in the text.

FA1 – U.S. Department of the Interior
(cont'd)

FA1-02 not received any information or a report on this investigation. Additional surveys may be requested and/or more restrictive seasonal clearing dates may be recommended in areas outside of the covered lands. We request additional coordination on the Vinton County spring staging/fall swarming sites, and we cannot concur with FERC's determination of not likely to adversely affect the Indiana bat or northern long-eared bat in areas outside of the covered lands

FA1-03 until we review this information. The DEIS also does not mention the seasonal clearing timing recommendations the Service made for the Leach Xpress project in Hocking and Fairfield Counties, Ohio. In these counties, the OHFO recommended that tree clearing only occur between November 15 and March 15 due to the proximity of the project to known Indiana bat fall swarming sites. Because the areas in Hocking and Fairfield counties occur within the covered lands, the Avoidance and Minimization Measures (AMMs) that prohibit clearing from April 1 to May 31 and August 2 to November 15 (#14, 30, 31) are non-mandatory. Columbia is covered for the take that will result if the non-mandatory AMMs are not implemented, but the Service requests that FERC and Columbia indicate whether these non-mandatory AMMs will be implemented in the DEIS.

FA1-04 In Section 4.1.2.2 (Blasting and Rock Removal), the DEIS states "In-stream blasting could injure or kill aquatic organisms close to blasting activities." If blasting in or near a federally listed mussel stream is proposed, the Applicant needs to coordinate with the Service to determine if

FA1-05 surveys/avoidance is necessary. We also request this information be added to Section 2.3.2.8 of the Project Description.

FA1-06 In Section 4.6.1.1 (Existing Wildlife Resources / Project Facilities), the DEIS notes the acreage of forest and wetlands affected by the Projects. To better assess impacts on listed species and other trust resources, the Service requests that these acreages be reported within each state, as

FA1-07 well as state-specific acreage covered and not covered by the MSHCP. We also request this information added to Section 2.2 of the Project Description, including Tables 2.2-1, 2.2-2, and 2.2-3.

Migratory Birds

In Section 4.6.1.3 (Migratory Birds), the DEIS states:
"*Furthermore, FWS is currently seeking compensatory mitigation and if accepted would be incorporated into a Migratory Bird Conservation Plan. The FWS is a cooperating agency in the review of this proposal. As such, as this consultation is ongoing, Columbia Gas has not yet provided a draft of its Migratory Bird Conservation Plan for the FWS's and our review, we recommend that:*

- ***Prior to construction, Columbia Gas and Columbia Gulf should each file with the Secretary its Final Migratory Bird Conservation Plan, developed in consultation with the FWS, including the FWS recommended vegetation restriction.*"**

As noted in the second paragraph of section 4.6.1.3, the Federal Energy Regulatory Commission (FERC) and the Service entered into a Memorandum of Understanding (MOU) in 2011 regarding implementation of Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds". In that MOU, the FERC is obligated to:

2

FA1-02 The March 18, 2016 Supplemental Filing Resource Report Appendix 3C Attachment 1 (Project Mapping and Multi Species Habitat Conservation Plan Coverage) provides detailed maps of MSHCP covered and non-covered areas which includes the areas outside of covered lands in Belmont, Guernsey and Vinton counties. Columbia Gas filed additional information on July 22, 2016 indicating that the Project activities in Vinton County, Ohio would occur entirely within lands that are covered under the MSHCP, with the exception of five contractor/staging/pipe yards and associated access roads, which fall outside of the MSHCP-covered lands. However, these five pipe yards are located within open and agricultural land, and no forest would be impacted by Project activities at these locations. Therefore, all forest impacts within Vinton County would occur within lands covered under the MSHCP. As such, Columbia Gas would assume presence of suitable summer habitat, hibernacula, and maternity areas and would implement all applicable AMMs and mitigation required in the MSHCP for Indiana bats.

FA1-03 In the March 18, 2016 supplemental filing, Columbia Gas indicated that its informal consultation request was based on adherence to FWS-recommended winter clearing window for non-covered lands. On July 22, 2016, Columbia Gas filed a statement confirming the Columbia would also employ non-mandatory avoidance and minimization measures 14, 30, and 31 during Project activities on all MSHCP-covered lands. Section 4.7.2.1 has been revised to clarify this.

FA1-04 Per Columbia's Blasting Plan If blasting is necessary, Columbia will submit the final Blasting Plan and schedule to the FERC prior to blasting in streams designated as cold-water fisheries or identified as habitat for federally threatened and endangered species. As outlined in the FERC Wetland and Waterbody Construction and Mitigation Procedures, Columbia will provide notification to FERC no later than 14 days prior to the in-stream blasting activity.

FA1-05 The final Environmental Impact Statement (EIS) has been updated with the requested information.

FA1-06 For wetlands please see Table 4.4.3-1 and Table 4.4.3-2. For forested areas see Table 4.8.1-1.

FA1-07 Species affected by the proposed project in MSHCP covered and non-covered lands are provided in Section 4.7. Mapping of facilities included in the MSHCP covered and non-covered lands are provided in Appendix M-3. The EIS is a summary document intended to disclose the potential impacts of a proposed action. The document incorporates by reference all of the material filed in support of the permits and other

FA1 – U.S. Department of the Interior
(cont'd)

"***Require, as appropriate, applicants to mitigate negative impacts on migratory birds and their habitats by proposed actions***, *in compliance with and/or supporting the intent of the MBTA, Executive Order 13186, BGEPA, ESA, and other applicable statutes.*" [emphasis added]

"*Address migratory birds and their habitats, where appropriate, with emphasis on, but not exclusive to, species of concern, in the scope of any environmental review, including the NEPA analysis.* ***This review shall include, as necessary, identifying and evaluating: … Bird conservation measures and best management practices to avoid or minimize adverse effects and mitigation.***" [emphasis added]

"***Include terms and conditions[5] and appropriate recommendations that the Commission finds are in the public interest*** *in hydropower licenses, exemptions, license amendments, project surrenders, and non-project use of project lands;* ***natural gas certificate/authorizations****; transmission line construction permits; or other authorizing Commission* ***actions to avoid or minimize take of migratory birds and mitigate unavoidable take and adverse effects, as appropriate, with emphasis on species of concern and their habitats***." [emphasis added]

The Department requests that FERC honor the obligations spelled out in the MOU between the Service and the FERC by recommending in the Leach Xpress Environmental Impact Statement (EIS) that the Applicant mitigate the negative impacts to migratory bird habitat. We define "mitigate" using the definition for mitigation in the MOU:

"*a) avoiding the impact altogether by not taking a certain action or parts of an action,*
b) minimizing impacts by limiting the degree or magnitude of the action and its implementation,
c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment,
d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, or
e) compensating for the impact by replacing or providing substitute resources or environments (from 40 CFR, § 1508.20, CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act)."

FA1-08 We therefore request that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable, and providing mitigation funding for the unavoidable impacts to replace or provide substitute resources or environments (which we refer to as providing "mitigation funding").

We recommend that the previously mentioned passage from Section 4.6.1.3 be revised to:

"~~*Furthermore, FWS is currently seeking compensatory mitigation and if accepted would be incorporated into a Migratory Bird Conservation Plan.*~~ *The FWS is a cooperating agency in the review of this proposal* and has recommended that the Applicant avoid, minimize, and provide mitigation funding for impacts to migratory bird habitat to the extent practicable. *As such, as this consultation is ongoing, Columbia Gas has not yet provided a draft of its Migratory Bird Conservation Plan for the FWS's and our review, we recommend that:*

- ***Prior to construction, Columbia Gas and Columbia Gulf should each file with the Secretary its Final Migratory Bird Conservation Plan, developed in consultation with***

3

FA1-07 (cont'd) regulatory clearances required to construct the facilities, should the Commission issue a Certificate of Public Convenience and Necessity (Certificate) for the Project. As such, the presentation and conditions around the MSHCP provided in the EIS and supporting documents is sufficient for the public and decision makers to assess the potential impacts and resulting mitigations for the Project.

FA1-08 The draft EIS discusses numerous minimization and mitigation measures that the applicants would implement to protect migratory birds and their habitat. We are recommending that the applicants further mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable and we believe that development of the Final Migratory Bird Conservation Plan in consultation with the FWS which may include FWS' recommendations and mitigation measures.

FA1 – U.S. Department of the Interior
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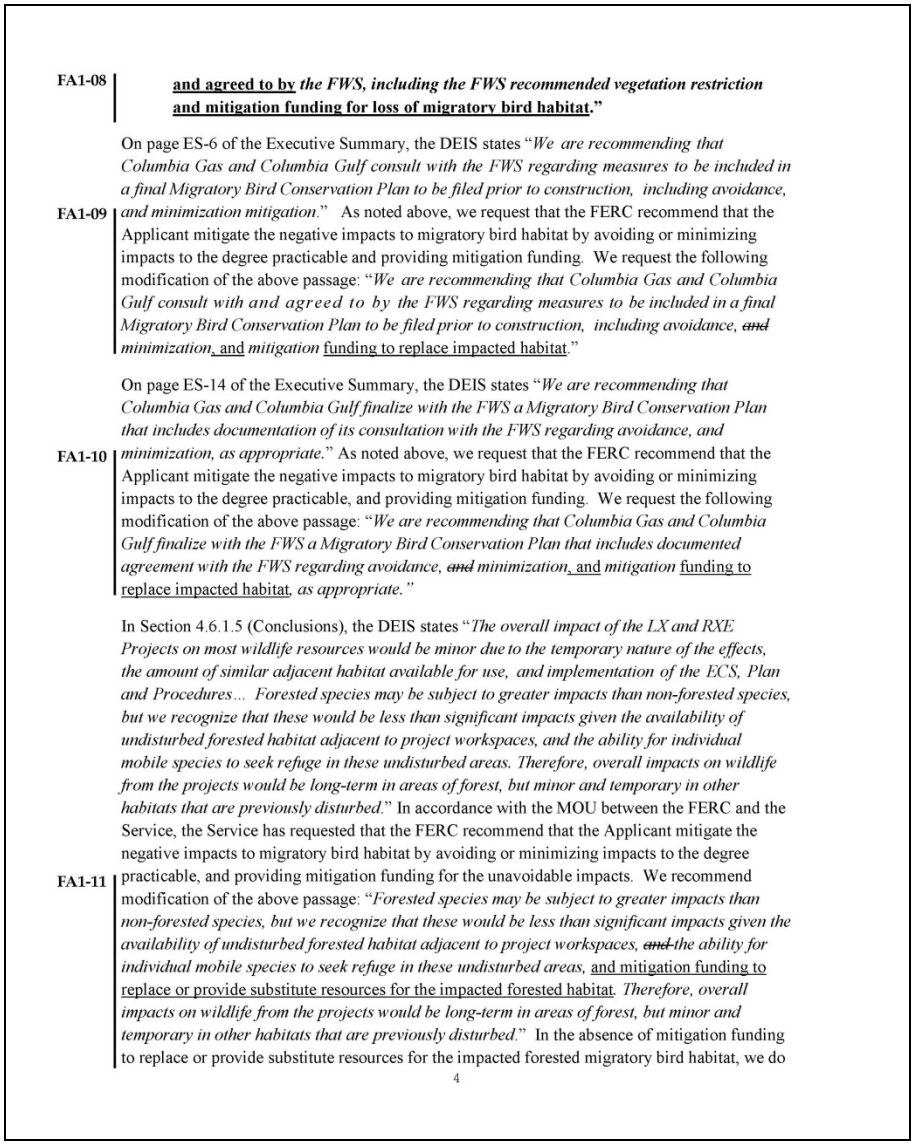


FA1-08 **and agreed to by *the FWS, including the FWS recommended vegetation restriction and mitigation funding for loss of migratory bird habitat*."**

On page ES-6 of the Executive Summary, the DEIS states "*We are recommending that Columbia Gas and Columbia Gulf consult with the FWS regarding measures to be included in a final Migratory Bird Conservation Plan to be filed prior to construction, including avoidance, and minimization mitigation*." As noted above, we request that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable and providing mitigation funding. We request the following modification of the above passage: "*We are recommending that Columbia Gas and Columbia Gulf consult with and agreed to by the FWS regarding measures to be included in a final Migratory Bird Conservation Plan to be filed prior to construction, including avoidance, ~~and~~ minimization*, and *mitigation* funding to replace impacted habitat."

FA1-09

On page ES-14 of the Executive Summary, the DEIS states "*We are recommending that Columbia Gas and Columbia Gulf finalize with the FWS a Migratory Bird Conservation Plan that includes documentation of its consultation with the FWS regarding avoidance, and minimization, as appropriate*." As noted above, we request that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable, and providing mitigation funding. We request the following modification of the above passage: "*We are recommending that Columbia Gas and Columbia Gulf finalize with the FWS a Migratory Bird Conservation Plan that includes documented agreement with the FWS regarding avoidance, ~~and~~ minimization*, and *mitigation* funding to replace impacted habitat, *as appropriate.*"

FA1-10

In Section 4.6.1.5 (Conclusions), the DEIS states "*The overall impact of the LX and RXE Projects on most wildlife resources would be minor due to the temporary nature of the effects, the amount of similar adjacent habitat available for use, and implementation of the ECS, Plan and Procedures… Forested species may be subject to greater impacts than non-forested species, but we recognize that these would be less than significant impacts given the availability of undisturbed forested habitat adjacent to project workspaces, and the ability for individual mobile species to seek refuge in these undisturbed areas. Therefore, overall impacts on wildlife from the projects would be long-term in areas of forest, but minor and temporary in other habitats that are previously disturbed*." In accordance with the MOU between the FERC and the Service, the Service has requested that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable, and providing mitigation funding for the unavoidable impacts. We recommend modification of the above passage: "*Forested species may be subject to greater impacts than non-forested species, but we recognize that these would be less than significant impacts given the availability of undisturbed forested habitat adjacent to project workspaces, ~~and~~ the ability for individual mobile species to seek refuge in these undisturbed areas*, and mitigation funding to replace or provide substitute resources for the impacted forested habitat. *Therefore, overall impacts on wildlife from the projects would be long-term in areas of forest, but minor and temporary in other habitats that are previously disturbed*." In the absence of mitigation funding to replace or provide substitute resources for the impacted forested migratory bird habitat, we do

FA1-11

4

FA1-09 See response to FA1-08.

FA1-10 See response to FA1-08.

FA1-11 See response to FA1-08.

FA1 – U.S. Department of the Interior
(cont'd)

FA1-11 not concur with the DEIS's statement that "*The overall impact of the LX and RXE Projects on most wildlife resources would be minor…*".

On page 5-6 of the Conclusions, the DEIS states: "*A variety of migratory bird species, including BCCs, are associated with the habitats that would be affected by the LX Project pipeline. The clearing of vegetation during the nesting season could have direct impacts on individual migratory birds. Therefore, we are recommending that Columbia Gas consult with the FWS and complete a Final Migratory Bird Conservation Plan that details impacts on upland forest habitat and measures proposed to reduce impacts and offset temporary and permanent impacts through conservation. A final plan developed in coordination with the applicable agencies prior to construction would identify compensatory mitigation for forest habitat loss. Additionally, we are recommending that Columbia Gas and Columbia Gulf each file their Final Migratory Bird Conservation Plan, developed in consultation with the FWS, including the FWS recommended vegetation restriction.*"

FA1-12 We appreciate the reference to compensatory mitigation, but suggest the phrase "compensatory mitigation for forest habitat loss" be changed to "mitigation funding to replace or provide substitute resources for the impacted forested habitat" for consistency with other sections. To ensure that the Applicant's Migratory Bird Conservation Plan adequately addresses impacts to migratory birds and migratory bird habitat, we also request the following modification: "*…Final Migratory Bird Conservation Plan, developed in consultation with* and approved by *the FWS, including the FWS recommended vegetation restriction,* avoidance and minimization measures, and mitigation funding to replace impacted habitat". Likewise, we suggest modification of FERC Staff Recommendation 19 (Section 5.3, page 5-18) to be "*Prior to construction, Columbia Gas and Columbia Gulf shall each file with the Secretary its Final Migratory Bird Conservation Plan, developed in consultation with* and approved by *the FWS, including the FWS recommended vegetation restriction,* avoidance and minimization measures, and mitigation funding to replace impacted habitat. *(section 4.6.1.3)*"

Cumulative Impacts

In Section 4.13.5.3 (Vegetation), the DEIS states "*Further, the Rover Pipeline Project would develop and implement a Forest Mitigation Plan in coordination with the FWS to minimize and offset impacts on forests, which would further reduce the potential for cumulative impacts to occur.*"

FA1-13 The Rover Pipeline Project final EIS has not been issued yet. The Service has not reviewed a Forest Mitigation plan for the project and the Rover DEIS does not provide details for what would be included in the plan. The Service currently cannot determine if the Rover Forest Mitigation Plan would adequately mitigate impacts to forest or not.

Also in Section 4.13.5.3, the DEIS states: "*Potential cumulative impacts on forested areas from construction and operation of the projects discussed above, together with the proposed projects would not be inconsequential. However, siting of pipeline projects within and adjacent to existing rights-of-way, where possible, along with implementation of best management practices, Columbia Gas' ECS and FERC's Plan and Procedures, adequately minimizes and mitigates impacts on forested lands to the extent possible. The overall impact of these projects with the proposed mitigation, and our recommendations made throughout this EIS, would reduce overall cumulative impacts to less than significant levels.*" In accordance with the MOU

5

FA1-12 See response to FA1-08.

FA1-13 The Rover Forest Mitigation Plan is currently being developed and finalized through the environmental review process for that project. A determination on the adequacy of that plan would be discussed in that project's docket.

FA1 – U.S. Department of the Interior
(cont'd)

between the FERC and the Service (see Migratory Birds comments, above), the Service has requested that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable, and

FA1-14 providing mitigation funding for the unavoidable impacts. We request the following modification to the above language: "*Potential cumulative impacts on forested areas from construction and operation of the projects discussed above, together with the proposed projects would not be inconsequential. However, siting of pipeline projects within and adjacent to existing rights-of-way, where possible, along with implementation of best management practices, Columbia Gas' ECS and FERC's Plan and Procedures, adequately minimizes ~~and mitigates~~ impacts on forested lands to the extent possible.* Additionally, the provision of mitigation funding to replace or provide substitute resources for unavoidable impacts to forested habitat ensures that these impacts are fully mitigated. *The overall impact of these projects with the proposed mitigation, and our recommendations made throughout this EIS, would reduce overall cumulative impacts to less than significant levels.*"

In the absence of mitigation funding to replace or provide substitute resources for unavoidable impacts to forested migratory bird habitat, we do not concur with the DEIS's statement that "*The overall impact of these projects with the proposed mitigation, and our recommendations made throughout this EIS, would reduce overall cumulative impacts to less than significant levels…*".

In Section 4.13.5.4 (Wildlife), the DEIS states "*The majority of wildlife impacts from the proposed projects and other nearby projects would be minor and temporary, and permanent impacts are limited in areal and geographic extent. Forested species may be subject to greater impacts than non-forested species, but we recognize that these would represent less than significant impacts given the availability of undisturbed forested habitat adjacent to project workspaces and the ability for individual mobile species to seek refuge in these undisturbed areas. While some adverse impacts on wildlife would occur as a result of construction and operation of the proposed projects, cumulative impacts are expected to be minimal for individual wildlife species relative to existing populations in the region of influence.*" In accordance with the MOU between the FERC and the Service (see Migratory Birds comments, above), the Service has requested that the FERC recommend that the Applicant mitigate the negative impacts to migratory bird habitat by avoiding or minimizing impacts to the degree practicable,

FA1-15 and providing mitigation funding for the unavoidable impacts. We request the following modification to the above language: "*The majority of wildlife impacts from the proposed projects and other nearby projects would be minor and temporary, and permanent impacts are limited in areal and geographic extent.* Cumulative impacts to wildlife, particularly forest dwelling migratory birds, will be minimal if mitigation funding is provided to replace or provide substitute resources for unavoidable impacts to wildlife habitat. *Forested species may be subject to greater impacts than non-forested species, but we recognize that these would represent less than significant impacts given the availability of undisturbed forested habitat adjacent to project workspaces and the ability for individual mobile species to seek refuge in these undisturbed areas. While some adverse impacts on wildlife would occur as a result of construction and operation of the proposed projects, cumulative impacts are expected to be*

6

FA1-14 See response to FA1-08.

FA1-15 See response to FA1-08.

FA1 – U.S. Department of the Interior
(cont'd)

FA1-15 | *minimal for individual wildlife species relative to existing populations in the region of influence.*" In the absence of mitigation funding to replace or provide substitute resources for unavoidable impacts for forested wildlife habitat, we do not concur with the DEIS's statement that "*…cumulative impacts are expected to be minimal for individual wildlife species relative to existing populations in the region of influence*"

FA1-16 | The Service believes that this portion of the Cumulative Impacts analysis would benefit greatly from a re-analysis. We are referring specifically to the loss of migratory bird forest habitat within the area of the Marcellus and Utica Shale Formations (Formations) that are being developed for natural gas extraction. This area is inhabited by a number of Birds of Conservation Concern (BCC) that require large blocks of interior forest and are often concentrated in a relatively few areas (e.g. Wood Thrush (*Hylocichla mustelina*), Cerulean Warbler (*Setophaga cerulea*), and Worm-eating Warbler (*Helmitheros vermivorum*)). Habitat loss is considered one of the primary reasons that their populations are declining and that they are on the BCC list.

For about the past twenty years, natural gas extraction has been occurring in these Formations through the development of hydrological fracking. Since much of this area is forested, the development of well pads, access roads, collector lines, and transport lines are all resulting in both the direct loss of forest habitat utilized by these BCCs along with fragmentation of the habitat. Fragmentation further reduces the habitat value to these birds through nest parasitism by Brown-headed Cowbirds (*Molothrus ater*), increased competition from avian edge species, and increased predation from terrestrial predators.

The narrow, and we believe arbitrary, criteria being used to evaluate cumulative impacts precludes evaluating this issue at an appropriate geographic scale. We believe that the loss of forest habitat for migratory birds, particularly for the BCCs, needs to be evaluated across the entire Formations geographic area. The evaluation time should start at least when natural gas extraction began and continuing through all of the planned and reasonably expected development that will occur. This analysis needs to begin by making a reasonable estimate of the amount of forested habitat directly lost by these and other activities along with acreage lost through forest fragmentation. Only then could an informed conclusion be made of whether this is resulting in a likely impact to BCCs in the area.

While the total forest acreage for an entire state may be relatively constant, this is not necessarily relevant because the BCCs we are concerned with don't always inhabit forests throughout the state. Often they are concentrated in a relatively restricted area which includes most of the area covered by the Formations and/or they utilize restricted habitat such as large contiguous forests.

Doing this analysis will have several advantages. It will more accurately look at cumulative impacts for loss of forested habitat in this region and resultant impacts to migratory birds. It will strengthen the EIS, which we believe is currently vulnerable because it doesn't adequately address this issue. We believe it will more clearly demonstrate why the Service has been seeking mitigation funding for loss of forest habitat and fragmentation. We also believe that it will more clearly demonstrate why the FERC needs to continue working with the Service to ensure this

7

FA1-16 Additional analysis has been added to section 4.13.5.4.

FA1-16 mitigation occurs. Finally, while the FERC has jurisdiction only over those actions for which it provides permits or certificates, it will demonstrate why the FERC is seeking mitigation for loss of forest habitat and provides a strong example for agencies that provide permits or certificates for other related activities.

As both a cooperating agency and an agency with jurisdiction by law, the Service would be pleased and ready to assist you with revising this portion of the Cumulative Impacts section. The Department believes that it would result in both a stronger National Environmental Policy Act (NEPA) document and provide a better insight to the vital function that the FERC serves in balancing energy development with environmental protection.

Conclusion

The Service looks forward to working with the FERC staff to assist in preparation of the Final EIS. The central point of contact for Hydropower Projects for U.S. Fish and Wildlife Service Region 3 is the Regional Office for Region 3. Contact Jeff Gosse, Regional Energy Coordinator, at (612) 713-5138 or jeff_gosse@fws.gov. For the Ohio Field Office, contact Dan Everson, Field Supervisor, at (614) 416-8993 or dan_everson@fws.gov. For the West Virginia Field Office, contact John Schmidt, Project Leader, at (304) 636-6586 or john_schmidt@fws.gov. For the Pennsylvania Field Office, contact Lora Zimmerman, Project Leader, at (814) 234-4090 ext. 7474, or lora_zimmerman@fws.gov. For the Kentucky Field Office, contact Lee Andrews, Project Leader, at (502)695-0468, ext. 108) or lee_andrews@fws.gov.

The Department appreciates the opportunity to provide comments.

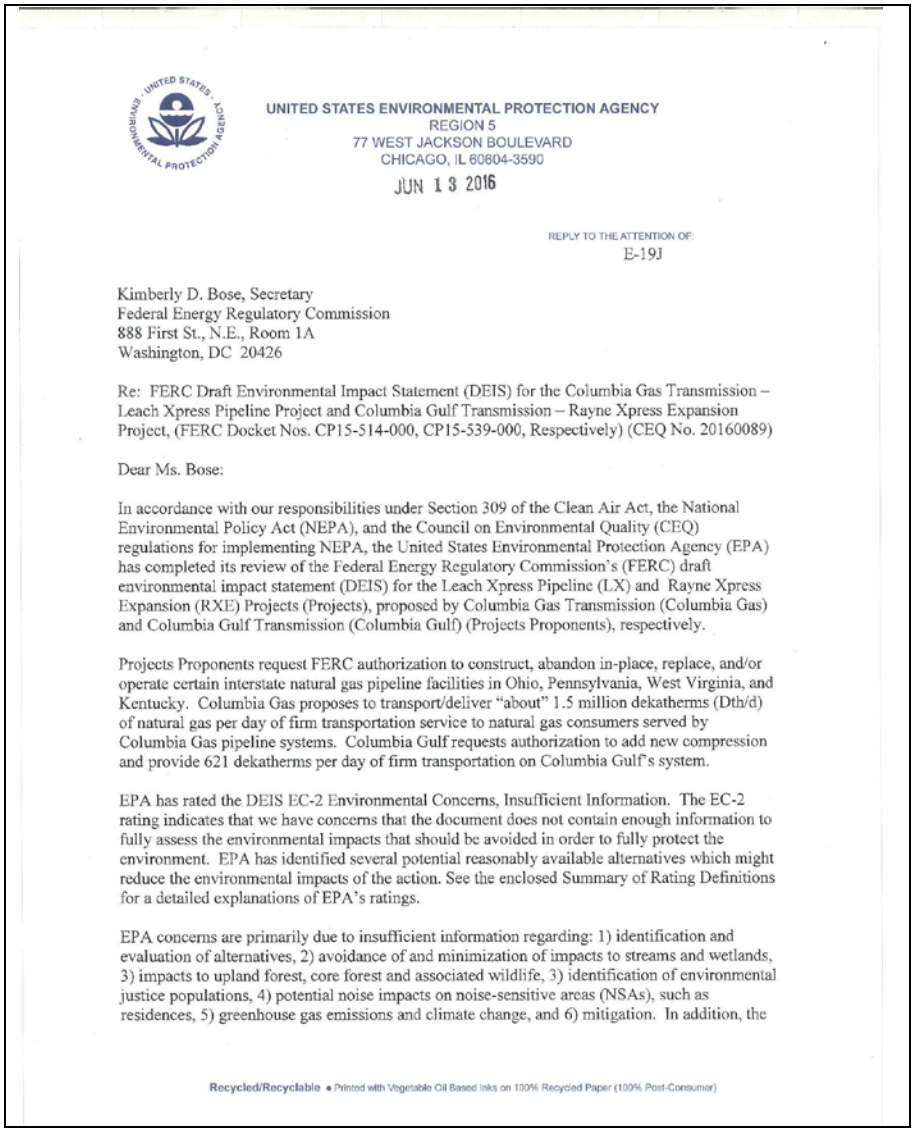
Sincerely,

Lindy Nelson
Regional Environmental Officer

cc: Jeff Gosse, FWS

8

FA2 – U.S. Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 13 2016

REPLY TO THE ATTENTION OF:
E-19J

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426

Re: FERC Draft Environmental Impact Statement (DEIS) for the Columbia Gas Transmission – Leach Xpress Pipeline Project and Columbia Gulf Transmission – Rayne Xpress Expansion Project, (FERC Docket Nos. CP15-514-000, CP15-539-000, Respectively) (CEQ No. 20160089)

Dear Ms. Bose:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the United States Environmental Protection Agency (EPA) has completed its review of the Federal Energy Regulatory Commission's (FERC) draft environmental impact statement (DEIS) for the Leach Xpress Pipeline (LX) and Rayne Xpress Expansion (RXE) Projects (Projects), proposed by Columbia Gas Transmission (Columbia Gas) and Columbia Gulf Transmission (Columbia Gulf) (Projects Proponents), respectively.

Projects Proponents request FERC authorization to construct, abandon in-place, replace, and/or operate certain interstate natural gas pipeline facilities in Ohio, Pennsylvania, West Virginia, and Kentucky. Columbia Gas proposes to transport/deliver "about" 1.5 million dekatherms (Dth/d) of natural gas per day of firm transportation service to natural gas consumers served by Columbia Gas pipeline systems. Columbia Gulf requests authorization to add new compression and provide 621 dekatherms per day of firm transportation on Columbia Gulf's system.

EPA has rated the DEIS EC-2 Environmental Concerns, Insufficient Information. The EC-2 rating indicates that we have concerns that the document does not contain enough information to fully assess the environmental impacts that should be avoided in order to fully protect the environment. EPA has identified several potential reasonably available alternatives which might reduce the environmental impacts of the action. See the enclosed Summary of Rating Definitions for a detailed explanations of EPA's ratings.

EPA concerns are primarily due to insufficient information regarding: 1) identification and evaluation of alternatives, 2) avoidance of and minimization of impacts to streams and wetlands, 3) impacts to upland forest, core forest and associated wildlife, 3) identification of environmental justice populations, 4) potential noise impacts on noise-sensitive areas (NSAs), such as residences, 5) greenhouse gas emissions and climate change, and 6) mitigation. In addition, the

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FA2 – U.S. Environmental Protection Agency (cont'd)

DEIS does not include: 1) a wetland/stream mitigation plan, 2) upland/core forest mitigation plan, nor 3) Columbia Gas's and Columbia Gulf's emergency response plans. Enclosed are our detailed comments, which include recommendations for additional information to include in the Final EIS (FEIS). These comments are consolidated from reviews done by EPA regional offices that cover the affected states.

FA2-01 When FERC submits the FEIS to EPA headquarters, also send paper copies and CDs of the Final EIS to EPA Regional Offices as follows:

- EPA Region 5 (Chicago): one (1) paper copy and three (3) sets of CDs,
- EPA Region 4 (Atlanta): one (1) set of CDs, and
- EPA Region 3 (Philadelphia): one (1) set of CDs.

If you or your staff have any questions or concerns, I can be reached at 312-886-2910, or contact Virginia Laszewski of my staff at laszewski.virginia@epa.gov or 312-886-7501.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosures: Summary of Rating Definitions
EPA Detailed Comments

FA2-01 The EPA's request is noted.

FA2 – U.S. Environmental Protection Agency
(cont'd)

Cc (email): Federal Energy Regulatory Commission, Juan Polit, Environmental Project Manager, juan.polit@ferc.gov
U.S. Army Corps of Engineers, Michael Hatten, Chief, Energy Resources, Huntington District, Michael.E.Hatten@usace.army.mil
U.S. Army Corps of Engineers, Scott Hans, Chief Regulatory, Pittsburgh District, Scott.A.Hans@usace.army.mil
U.S. Fish and Wildlife Service, Lynn Lewis, Assistant Regional Director, Midwest Region Ecological Services, Bloomington, MN Lynn_Lewis@fws.gov
U.S. Fish and Wildlife Service Deborah Rocque, Deputy Regional Director, Northeast Region Ecological Services, Hadley, MA, deborah_rocque@fws.com.
US Fish and Wildlife Service, Region 4 Southeast, Atlanta, GA, Cindy Dohner, cindy_dohner@fws.com.
U.S. Fish and Wildlife Service Region 3, Angela Boyer, Endangered Species Coordinator, Ohio Field Office, angela_boyer@fws.gov
U.S. Fish and Wildlife Service, Lora Zimmerman, Project Leader/Supervisor, Pennsylvania Ecological Services Field Office, lora_zimmerman@fws.gov
U.S. Fish and Wildlife Service, West Virginia Field Office, John Schmidt, Project Leader, John_Schmidt@fws.gov
U.S. Fish and Wildlife Service, Kentucky Field Office, Field Supervisor, Lee Andrews, Lee_Andrews@fws.gov

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

FA2 – U.S. Environmental Protection Agency (cont'd)

U. S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE LEACH XPRESS PIPELINE (LX) PROJECT AND RAYNE EXPRESS EXPANSION (RXE) PROJECT, MICHIGAN, OHIO, PENNSYLVANIA, WEST VIRGINA, KENTUCKY, APRIL 6, 2016 (CEQ NO. 20160089)

Columbia Gas Transmission (Columbia Gas and Columbia Gulf Transmission (Columbia Gulf) (Projects Proponents) propose to construct and operate the following natural gas facilities/components (Projects):

- Columbia Gas – Leach XPress Pipeline (LX): 133 miles of new 30- and 36-inch-diameter natural gas pipeline, 27 miles of 36-inch-diameter looping pipeline, 28 miles of 20-inch-diameter pipeline to be abandoned in place, 3 new compressor stations, and appurtenant facilities including 3 existing compressor station modifications, 4 new and 1 modified regulator stations, 13 pig launcher and receiver facilities, 9 mainline valves and 4 odorization facilities in Ohio, West Virginia and Pennsylvania; and

- Columbia Gulf – Rayne Xpress Expansion (RXE): two new compressor stations, and modify an existing measurement and regulation station in Kentucky.

The majority of the following comments follow the numbered topic order as presented in the Draft Environmental Impact Statement (DEIS).

Executive Summary
Proposed Action (Page ES-1)

FA2-02 | **Recommendation**: EPA recommends the Executive Summary include a more detailed description of the Leach Xpress Pipeline (LX) Project. We recommend the summary include the lengths of pipeline construction and abandonment.

Vegetation, Wildlife, Fisheries, and Federally Listed and State-Sensitive Species (Pages ES-6 and ES-7)
The DEIS (Page ES-7) states: *"WVDEP recommended that water withdrawn from the Ohio River either be discharged back into the Ohio River or be treated with a WVDEP-recommended biocide prior to discharge."* Water discharged from hydrostatic testing should not be treated with certain biocides and could impact fish and aquatic vegetation.

FA2-03 | **Recommendation**: We recommend the FEIS clarify whether a biocide will be used for hydrostatic testing. If a biocide will be used, then further describe it in Section 2.3.1.7, in the Hydrostatic Testing process.

1.0 Introduction
1.1 Project Purpose and Need (Page 1.2)
The description of the project purpose is based on the information provided by the Project Proponents, Columbia Gas and Columbia Gulf. The purpose is to transport natural gas to meet market demand. Specific dekatherm capacities are provided, although it is unclear how these

FA2-02 The Executive Summary already includes a summary of the amount of pipeline construction and abandonment under the subheading Proposed Action. Further details about the proposed facilities are provided throughout section 2.1 of the EIS.

FA2-03 Sections 2.3.1.7 and 4.3.2.7 of the draft EIS related to hydrostatic test water withdrawal and discharge have been revised in the final EIS to provide clarification regarding biocide use. During a February 4, 2015 meeting between Columbia Gas and WVDEP, WVDEP indicated that water withdrawn from the Ohio River must either be returned to its original source or treated with a biocide to control invasive species prior to discharge. With the exception of this requirement, no biocides are proposed for use in hydrostatic testing. Hydrostatic test water withdrawal and discharge would be in accordance with federal, state and local requirements.

FA2 – U.S. Environmental Protection Agency
(cont'd)

units were determined or generated. In the absence of this type of supporting documentation, it is unclear if the stated purpose and need is too narrow, thereby limiting the available range of alternatives.

FA2-04 | **Recommendation:** EPA suggests that a broader purpose and need statement be developed which would allow for a broader range of alternatives to be considered in the EIS.

Binding precedent agreements support the LX Project and Rayne Express Expansion (RXE) Project, which are able to be terminated if certain conditions are not met, including regulatory approvals.

FA2-05 | **Recommendation**: Please clarify if these agreements are duplicative of other agreements entered into by the Project Proponents for other pipeline projects in this region.

1.2 Purpose and Scope of the EIS (Pages 1-2 and 1-3)
The purpose and scope of the EIS includes describing and evaluating reasonable alternatives that would avoid or have substantially less adverse effects on the environment while still meeting project objectives.

FA2-06 | **Recommendation:** EPA recommends expanding the alternatives analysis and consider our recommendations regarding alternatives below under "Alternatives."

1.4 Non-Jurisdictional Facilities (Pages 1-11 - 1-13)
The DEIS (Page 1-11) states: *"Non-jurisdictional facilities necessary to operate the LX Project are anticipated to include two new Point of Receipt (POR) facilities located near Majorsville, West Virginia and Clarington, Ohio, as well as the addition of new power supplies and other utilities at the new compressor stations [CS] and new regulator stations (RS). . . . Non-jurisdictional facilities necessary to operate the RXE Project are limited to the addition of new power and water supply at the Grayson CS and Means CS."*

The DEIS (Page 1-13) states: *"Though construction of the non-jurisdictional electrical facilities may overlap with the construction of the projects, construction of these facilities would result in negligible environmental impacts due to sufficient extension of the existing power service to the proposed facilities; therefore, these facilities are not included in the cumulative impacts analysis in section 4.13."* The DEIS does not include the supporting analysis and documentation that demonstrates these facilities would result in negligible environmental impacts.

FA2-07 | **Recommendations:** EPA recommends the impacts associated with the construction and operation of the new electrical facilities necessary to supply power to operate the LX and RXE Projects be evaluated in the EIS. Explain how connection locations and sources were determined. At a minimum, EPA suggests that these impacts be evaluated under the cumulative impact analysis.

1.5 Permits, Approvals, Consultations, and Regulatory Review (Pages 1-13 – 117)
Table 1.5-2 (Page1-17), covers applicable major permits, licenses, authorizations, and clearances for the RXE Project. For the Kentucky area, the Clean Water Act Section 401 Water Quality

FA2-04 The purpose and need of each project identified in the EIS is based on material filed in support of the applications for a Certificate of Public Convenience and Necessity (Certificate) for the Projects. As identified in section 1.1 of the EIS, the capacities of each project are based on binding precedent agreements between the applicants and their customers. Therefore, the purpose and need has been appropriately defined for each project for NEPA purposes, and any alternatives evaluated should be capable of meeting those contractual capacities.

FA2-05 Information related to LX and RXE binding precedent agreements were included in the final EIS for the purpose of describing the purpose and need of the project under NEPA. The level of detail provided in the final EIS is sufficient for this purpose. Other Commission staff are responsible for reviewing the precedent agreements and other business components of the proposal. Their findings help the Commission determine whether the proposal meets the commission's Policy on Need for Public Convenience and Necessity. This analysis will be included in the Commission's Order approving or disapproving the Project, along with any additional requirements.

FA2-06 See responses to comments FA2-12 through FA2-22.

FA2-07 The cumulative impact analysis was revised in section 4.13 of the final EIS to consider non-jurisdictional facilities.

FA2 – U.S. Environmental Protection Agency (cont'd)

Certification, the status column shows the anticipated submittal as August 2015. We were unable to locate the certification or any information that such permit has been pursued.

FA2-08 **Recommendation:** EPA highly recommends that the Project Proponents contact Quality Certification Section of the Kentucky Division of Water prior to the submission of the application. The State of Kentucky has guidelines for stream relocation/mitigation.

2.0 Projects Description
2.1 Proposed Facilities
2.1.2.1 New Aboveground Facilities (Pages 2-5 to 2.10)

Table 2.1.2-1 Above Ground Facilities for the LX Project, and

Table 2.1.2-2 Above Ground Facilities for the RXE Project

FA2-09 **Recommendation:** Include acres associated with each aboveground facility in Tables 2.1.2-1 and Table 2.1.2-2.

2.3.2 Special Construction Techniques (Pages 2-23 – 2-30)
2.3.2.6 Road Crossings (Page 2-29)

FA2-10 **Recommendation:** We recommend Section 2.3.2.6 of the FEIS discuss the number of roads that will be crossed, the amount of material that will be waste, how waste will be shipped out, and if any of the road material will be recycled.

2.6 Operation, Maintenance, and Safety Controls (Pages 2-34 – 2-35)
2.6.1 Permanent Safety Controls (Page 2-34)

FA2-11 **Recommendation:** We recommend Section 2.6.1 of the FEIS discuss how long the permanent erosion controls will be maintained and the frequency of maintenance. Sedimentation from erosion has a large impact on surface water; these controls have the ability to reduce these long term impacts.

3.0 Alternatives (Pages 3-1 – 3-18)
The DEIS (Page 3-1) states: *"It is important to note that not all conceivable alternatives are technically feasible or practical. Some alternatives may be incapable of being implemented due to limits on existing technologies, constraints of system capacities, or logistical considerations, while others may be impractical because sites are unavailable or cannot be developed for the proposed use."* EPA agrees; however, it is still necessary for the alternatives analysis to present the alternatives considered as well as the rationale for each alternative's dismissal from further consideration.

FA2-12 **Recommendation**: Please include the various alternatives to the proposed action that may have been considered but were dismissed from further consideration, including alternatives that were considered but dismissed during FERC's pre-filing process. Provide the rationale for those alternatives dismissed from further consideration.

FA2-08 Comment noted

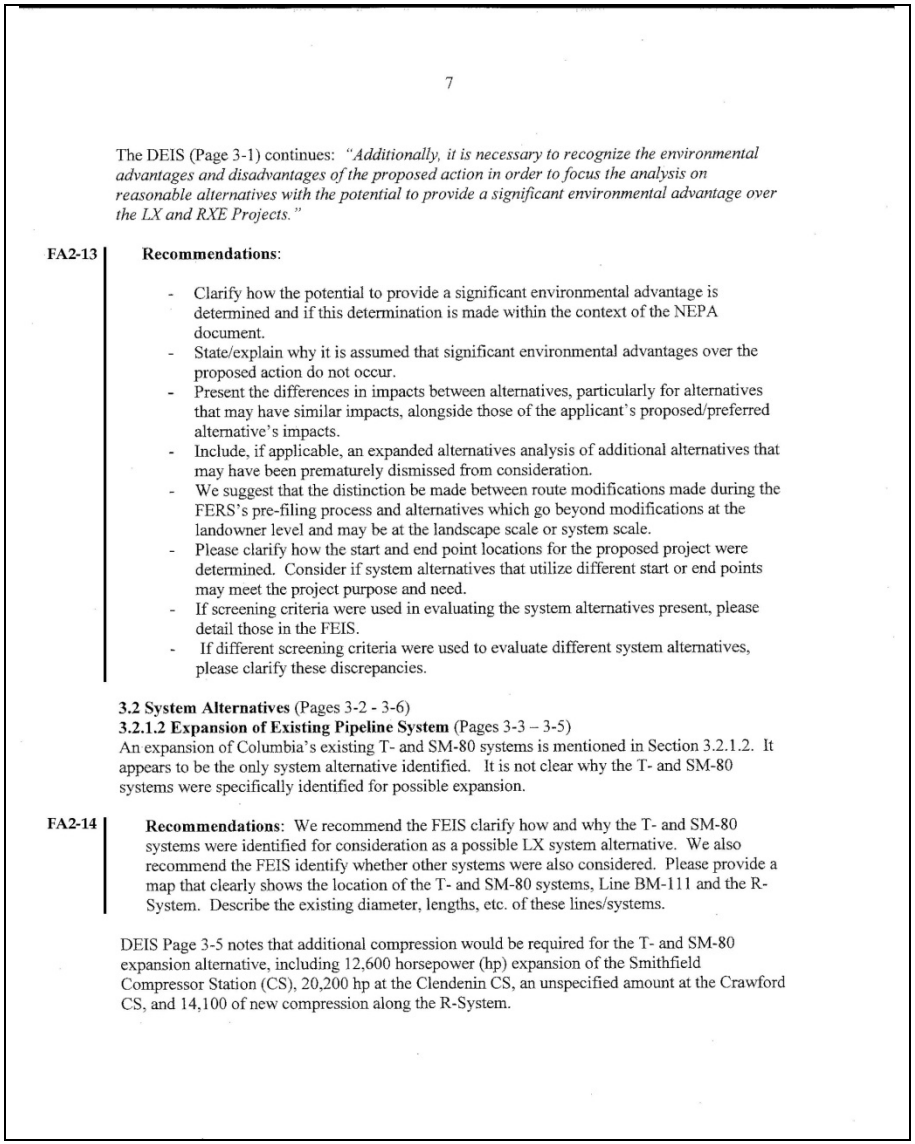
FA2-09 The areas associated with each aboveground facility are discussed in Section 2.2 (Land Requirements) of the FEIS and presented on Tables 2.2-2 and 2.2-3.

FA2-10 Section 2.3.2.6 of the final EIS discusses construction methods. Section 4.9.4.1 of the final EIS discusses project-related construction activities across and within roadways, including identification of the number of roads that would be crossed by the projects. The amount of material that would be waste, how it would be shipped out and if road material would be recycled varies based on the contractor and final project design. The proposed projects would be constructed in accordance with the project-specific Environmental Construction Standards and applicable federal, state, and local requirements.

FA2-11 Permanent erosion control devices are required to be maintained throughout the life of the Project, as needed. See section V of Columbia Gas' ECS which incorporates maintenance requirements as dictated in the Commission's Plan. Further, should erosion issues arise after construction and revegetation, landowners may contact FERC's Landowner Helpline toll free at (877) 337-2237 or by email at LandownerHelp@ferc.gov to report an issue.

FA2-12 Alternatives are discussed in Section 3 of the final EIS. This Section explains why alternatives were dismissed and the justification. The only alternatives identified in pre-filing that were not included in the draft EIS were those that were adopted by Columbia Gas, and therefore, are no longer alternatives. Table 1.3-1 was added to the final EIS to identify the alternatives adopted as a result of pre-filing.

FA2 – U.S. Environmental Protection Agency (cont'd)



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The DEIS (Page 3-1) continues: *"Additionally, it is necessary to recognize the environmental advantages and disadvantages of the proposed action in order to focus the analysis on reasonable alternatives with the potential to provide a significant environmental advantage over the LX and RXE Projects."*

FA2-13 **Recommendations**:

- Clarify how the potential to provide a significant environmental advantage is determined and if this determination is made within the context of the NEPA document.
- State/explain why it is assumed that significant environmental advantages over the proposed action do not occur.
- Present the differences in impacts between alternatives, particularly for alternatives that may have similar impacts, alongside those of the applicant's proposed/preferred alternative's impacts.
- Include, if applicable, an expanded alternatives analysis of additional alternatives that may have been prematurely dismissed from consideration.
- We suggest that the distinction be made between route modifications made during the FERS's pre-filing process and alternatives which go beyond modifications at the landowner level and may be at the landscape scale or system scale.
- Please clarify how the start and end point locations for the proposed project were determined. Consider if system alternatives that utilize different start or end points may meet the project purpose and need.
- If screening criteria were used in evaluating the system alternatives present, please detail those in the FEIS.
- If different screening criteria were used to evaluate different system alternatives, please clarify these discrepancies.

3.2 System Alternatives (Pages 3-2 - 3-6)
3.2.1.2 Expansion of Existing Pipeline System (Pages 3-3 – 3-5)
An expansion of Columbia's existing T- and SM-80 systems is mentioned in Section 3.2.1.2. It appears to be the only system alternative identified. It is not clear why the T- and SM-80 systems were specifically identified for possible expansion.

FA2-14 **Recommendations**: We recommend the FEIS clarify how and why the T- and SM-80 systems were identified for consideration as a possible LX system alternative. We also recommend the FEIS identify whether other systems were also considered. Please provide a map that clearly shows the location of the T- and SM-80 systems, Line BM-111 and the R-System. Describe the existing diameter, lengths, etc. of these lines/systems.

DEIS Page 3-5 notes that additional compression would be required for the T- and SM-80 expansion alternative, including 12,600 horsepower (hp) expansion of the Smithfield Compressor Station (CS), 20,200 hp at the Clendenin CS, an unspecified amount at the Crawford CS, and 14,100 of new compression along the R-System.

FA2-13 Each alternative evaluated in section 3 of the EIS identifies the basis for considering the alternative (e.g. to reduce specific impacts or at landowner request), includes a discussion and/or table identifying the differences in impacts between the alternatives, and our conclusion on whether the alternative provides a significant environmental advantage. Section 3.2 of the EIS addresses system alternatives. See also response to comment FA2-12.

FA2-14 As noted in Section 3.2.1.1 of the final EIS, a system alternative would make use of other existing, modified, or proposed pipeline systems (or other transportation systems) to meet the stated objectives of the LX Project. The T- and SM-80 systems were identified for consideration as a possible LX system alternative because those existing systems would enable shippers participating in the LX Project area to obtain transportation of natural gas via those existing systems located near the existing Crawford CS in Fairfield County, Ohio and Ceredo CS in Wayne County, West Virginia.

As discussed in Columbia Gas' Resource Report 10 and Section 3.2.1.3 of the final EIS, Columbia Gas also evaluated the feasibility of using their R-System pipelines, along with construction of new 20-inch pipeline looping, to increase the capacity of natural gas from the connection with the proposed LEX pipeline in Fairfield County, OH south to markets located outside of Ohio. However, it was determined that the overall operational reliability of the R-System could be improved through the abandonment in place of a 28.21-mile segment of the Line R-501, which was built in 1940. In addition, by simultaneously increasing the diameter of the new pipeline looping from 20 inches to 36 inches, the overall capacity of the R-System could be significantly increased via construction of a single new relay compressor station near Oak Hill, OH.

More detailed information and mapping of the system alternatives, pipeline route alternatives, pipeline minor route deviations, and aboveground facility site alternatives considered is provided in Columbia Gas' Resource Report 10 and Appendix 10A-D, which is available on FERC Docket CP15-514-000.

FA2 – U.S. Environmental Protection Agency (cont'd)

FA2-15 **Recommendation:** Please include the amount of compression needed at the Crawford CS.

The DEIS (Page 3-5) states that the T- and SM-80 expansion system alternative would be 148.5 miles longer than the proposed route and increase land disturbance. However, expansions of existing facilities may require less additional land disturbance to add hp, and other associated connecting infrastructure than the proposed project.

FA2-16 **Recommendations:** Please clarify the length of pipeline looping that is included in the T- and SM-80 expansion alternative, as well as the percentage of the route that is greenfield, percentage collocated, and percentage that occurs on/within existing pipeline right of way. Clarify whether these estimates are based on efforts to avoid and minimize adverse impacts, as was done for the proposed/preferred alternative.

Potential Additional Viable Alternatives

There may be viable alternatives to the applicant's proposed/preferred alternative that have not been considered, evaluated or presented in the LX and RXE DEIS. For example, the applicant has other pipeline projects in the same area that are under FERC consideration. One of these projects is the Mountaineer Xpress Pipeline (MXP), which connects to LX. The recently released final Resource Reports for MXP include several systems and legacy alternatives.

FA2-17 **Recommendations:** Include relevant portions of the analysis presented in MXP Resource Report 10 Alternatives (RR10) in the LX alternatives analysis. Identify, consider and include other similar legacy alternatives specific to LX.

The MXP RR10 also presents an LX alternative and a MXP without LX alternative. It appears that if LX was not constructed, only 26 miles and 25,000 hp would need to be constructed in addition to the proposed MXP. It is unclear why or if the applicant has dismissed this alternative as unviable. All viable alternatives should be evaluated, particularly if there is the potential to drastically reduce the combined adverse impacts of MXP and LX.

FA2-18 **Recommendations:** These additional alternatives should also be included and presented in the EIS for LX. In particular, the MXP without LX alternative should be further evaluated in the EIS.

3.3 Major Route Alternatives and Minor Route Alternatives (Pages 3-6 – 3-10)
3.3.1 Major Route Alternatives
3.3.1.1 Alternative 1, and 3.3.1.2 Alternative 2 (Pages 3-8 – 3-10)

FA2-19 **Recommendations:** We recommend that the FEIS include maps that depict the route alternatives, including the proposed alternative, in relation to the resources impacted. This will help the reader better understand the impacts and why the proposed/preferred alternative was chosen.

3.4 Above-ground Facility Alternatives (Pages 3-17 – 3-18)

Recommendations:

FA2-15 Columbia Gas indicated that additional compression at the Crawford CS could be necessary. This determination, including the amount of any necessary additional compression, is currently unknown and would be based on final engineering designs.

FA2-16 The proposed route would require 160.7 miles of new pipeline. As identified in section 3.2.1.2 of the EIS, the T- and SM-80 expansion system alternative would be 148.5 miles longer than the proposed route, would result in 20 percent more permanent impacts on forest land, cross the Wayne National Forest multiple times, and affect more residential/populated lands than the proposed route. These factors alone are sufficient to conclude that the system alternative is not environmentally preferable, and we do not find that further evaluation or additional detail about this alternative is necessary.

FA2-17 The final EIS considers viable alternatives to the LX and RXE Projects. The Mountaineer Xpress Pipeline Project is not a viable alternative to the proposed Projects because it does not meet the purpose and need of the proposed Projects as it has its own separate and distinct purpose and need, including delivery and receipt points.

FA2-18 The alternatives presented in the MXP resource report 10 alternative analysis are alternatives to meet the MXP Project purpose and need, and not alternatives for the LX Project. Each project has distinct and separate purposes and need. Also see the response to comment FA2-17.

FA2-19 The general locations of major route alternatives are depicted in figure 3.3.1-1, and tables 3.3.1-1 and 3.3.1-2 provide details comparing resource impacts. We find the information and analysis in the final EIS sufficient to understand and compare the alternatives.

FA2 – U.S. Environmental Protection Agency
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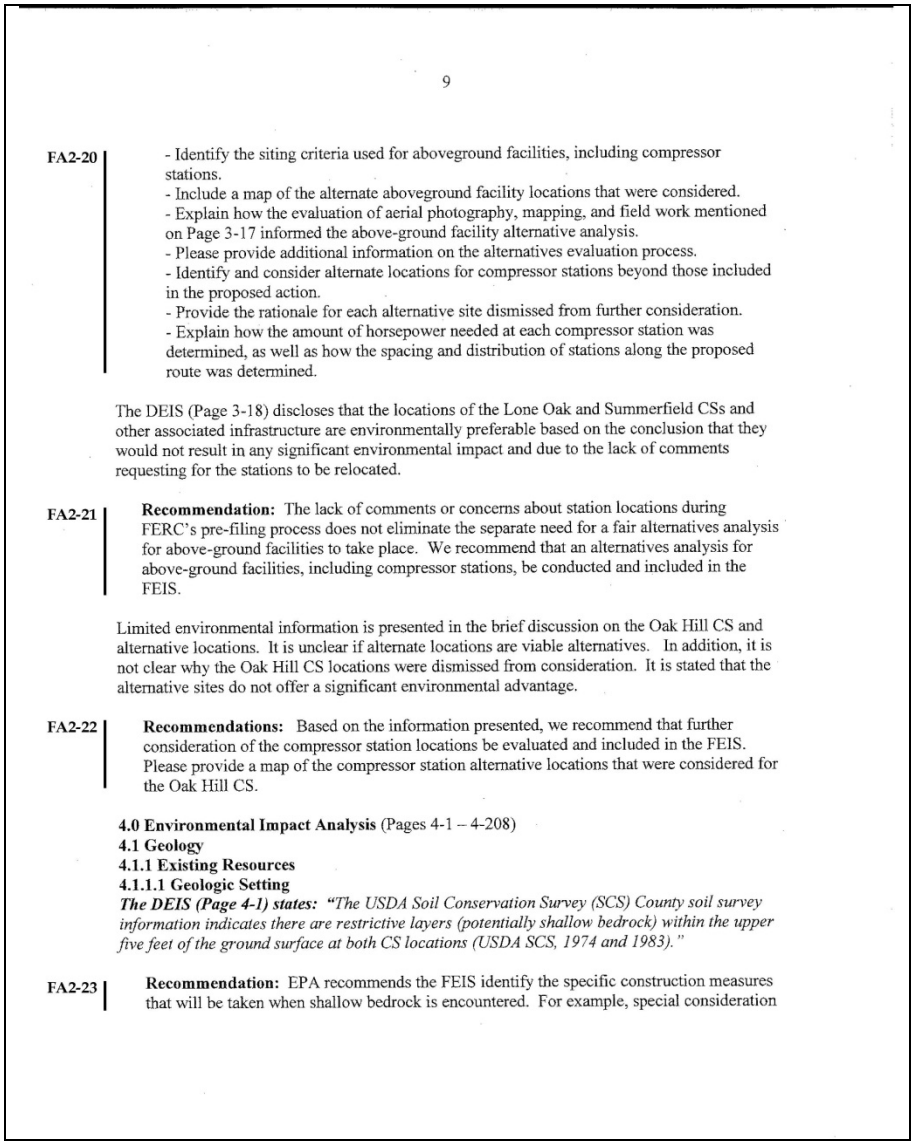

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FA2-20 - Identify the siting criteria used for aboveground facilities, including compressor stations.
- Include a map of the alternate aboveground facility locations that were considered.
- Explain how the evaluation of aerial photography, mapping, and field work mentioned on Page 3-17 informed the above-ground facility alternative analysis.
- Please provide additional information on the alternatives evaluation process.
- Identify and consider alternate locations for compressor stations beyond those included in the proposed action.
- Provide the rationale for each alternative site dismissed from further consideration.
- Explain how the amount of horsepower needed at each compressor station was determined, as well as how the spacing and distribution of stations along the proposed route was determined.

The DEIS (Page 3-18) discloses that the locations of the Lone Oak and Summerfield CSs and other associated infrastructure are environmentally preferable based on the conclusion that they would not result in any significant environmental impact and due to the lack of comments requesting for the stations to be relocated.

FA2-21 **Recommendation:** The lack of comments or concerns about station locations during FERC's pre-filing process does not eliminate the separate need for a fair alternatives analysis for above-ground facilities to take place. We recommend that an alternatives analysis for above-ground facilities, including compressor stations, be conducted and included in the FEIS.

Limited environmental information is presented in the brief discussion on the Oak Hill CS and alternative locations. It is unclear if alternate locations are viable alternatives. In addition, it is not clear why the Oak Hill CS locations were dismissed from consideration. It is stated that the alternative sites do not offer a significant environmental advantage.

FA2-22 **Recommendations:** Based on the information presented, we recommend that further consideration of the compressor station locations be evaluated and included in the FEIS. Please provide a map of the compressor station alternative locations that were considered for the Oak Hill CS.

4.0 Environmental Impact Analysis (Pages 4-1 – 4-208)
4.1 Geology
4.1.1 Existing Resources
4.1.1.1 Geologic Setting
The DEIS (Page 4-1) states: *"The USDA Soil Conservation Survey (SCS) County soil survey information indicates there are restrictive layers (potentially shallow bedrock) within the upper five feet of the ground surface at both CS locations (USDA SCS, 1974 and 1983)."*

FA2-23 **Recommendation:** EPA recommends the FEIS identify the specific construction measures that will be taken when shallow bedrock is encountered. For example, special consideration

FA2-20 We find the information and analysis in the final EIS sufficient to understand and compare the alternatives.

FA2-21 We disagree. The Council on Environmental Quality's (CEQ) regulations for implementing NEPA require the evaluation of reasonable alternatives. Section 3 of the EIS discusses a wide range of reasonable alternatives for the Projects, including the no-action alternative, system alternatives, major and minor pipeline routing alternatives, and aboveground facility siting alternatives. Reasonable alternatives are identified to avoid or reduce impacts, or to address stakeholder concerns. The EIS includes sufficient justification explaining that for many of the aboveground facilities no significant impacts are identified. This is further reinforced by a lack of concern regarding the impacts from the proposed locations or requests for alternative locations from stakeholders during the scoping process and EIS comment process (including from EPA). We do not find identification and evaluation of other alternatives, simply for the sake of having other alternatives in our NEPA document to be necessary or appropriate. Therefore, the aboveground facility alternatives analysis is limited to the Oak Hill Compressor Station.

FA2-22 See the response to comment FA22-21

FA2-23 In areas of shallow bedrock where use of conventional excavation methods are not feasible, blasting and other rock removal techniques may be required. Blasting and rock removal is addressed in Section 4.1.2.2 of the final EIS. Additional detail regarding construction methods that would be used in shallow bedrock areas associated with the RXE project has been added to Section 4.1.2.2 of the final EIS. Blasting and rock removal activities would be done in accordance with local, state and federal regulations, including erosion and sediment control and storm water management requirements.

FA2 – U.S. Environmental Protection Agency
(cont'd)

should be given when discharging water or rerouting runoff due to the reduction of infiltration by this type of bedrock.

4.1.1.2 Mineral Resources (Page 4-3)
There is no description or evidence in the body of the DEIS that document the conclusions on mining and impacts stated in the report. It will help the reader better understand the conclusions if there were graphs and descriptions of how close the mines (past, present and future) are or will be located to the above ground facilities (e.g., compressor stations) and the pipelines of the Projects.

FA2-24 **Recommendation:** EPA recommends the FEIS provide a short description of the types of mines in the LX and RXE project areas that addresses how: 1) construction of the two Projects will affect the mines in close proximity, and 2) how the mines in close proximity will be affected by project construction.

4.1.1.3 Geologic Hazards (Page 4-5 – 4-9)
Seismicity (Pages 4-5 – 4-6)
The DEIS does not describe how certain seismic quakes will impact the Projects.

FA2-25 **Recommendation:** We recommend the FEIS: 1) discuss the hazardous scale for earthquakes, 2) identify the scale number that will impact the pipeline and/or above ground facilities, 3) identify the earthquakes (within the scale of impact) that have occurred in the last two decades in the Projects' area, and 4) identify the pipelines in the area that have been impacted by earthquakes.

Landslides (Pages 4-6 – 4-8)
The DEIS does not disclose the amount of acres or linear feet the Projects intersect with areas identified on the USGS Landslide Overview Maps.

FA2-26 **Recommendation:** EPA recommends the FEIS disclose the amount of acres and linear feet (or miles, if applicable) of the proposed Projects that are located within the areas identified by the USGS Landslide Overview Maps. Include a map in the FEIS that depicts the location of the proposed Projects in relation to the steep slopes in the landslide hazard areas, and identify the specific mitigation for each landslide area.

4.1.2 General Impacts and Mitigation (Pages 4-9 – 4-12)
4.1.2.2 Blasting and Rock Removal (Page 4-11)
The DEIS briefly discusses mitigation measures and operating procedures of potential blasting for the project. A better level of detail into the blasting plan for the Projects is warranted.

FA2-27 **Recommendation:** We recommend the Projects' blasting plan be included in an FEIS appendix. We recommend the blasting plan provide maps, give details regarding potential locations for blasting, and identify all the safety measures that will be undertaken.

4.2 Soils (Pages 4-13 – 4-20)
4.2.1.1 Erosion (Page 4-13)

FA2-24 Section 4.1.1.2 of the final EIS provides a short description of the mines in close proximity to the LX and RXE project areas, and Appendix I provides more detailed description and location information. In addition, the Longwall Mining Plan is provided in Appendix J and provides further discussion of impacts and mitigations. Section 4.1.1.2 of the final EIS has been updated to include additional discussion of potential impacts related to mining activities.

FA2-25 Section 4.1.1.3 of the final EIS addresses seismic hazards, the peak ground accelerations associated with damage to buildings and other structures, the USGS-mapped seismic hazards for the project areas, and a summary of earthquakes that have occurred in the project areas. Our analysis concluded that no adverse impacts are anticipated to the LX and RXE projects from seismic activity. Section 4.1.1.3 of the final EIS has been updated to include additional support for this conclusion.

FA2-26 Section 4.1.1.3 of the final EIS was revised to include the mileage (for pipeline facilities) and acreage (for aboveground facilities) of the proposed Projects that are located within areas identified as high landslide susceptibility based on the USGS Landslide Overview Maps. In addition, a mapping has been included in the final EIS in section 4.1.1.3 to depict the location of the proposed Projects in relation to steep slopes in areas of high landslide susceptibility.
Consideration of landslide hazards in project siting, as well as avoidance and mitigation measures are discussed in Section 4.1.1.3 of the final EIS.

FA2-27 The EIS is a summary document intended to disclose the potential impacts of a proposed action. The document incorporates by reference all of the material filed in support of the application for a Certificate of Public Convenience and Necessity (Certificate) for the Project. Section 2.3.2.8 of the draft EIS (footnote 15) provides information for accessing Columbia Gas' Blasting Plan posted in the Project Docket (CP15-514). The Blasting Plan establishes implementation procedures and safety measures that Columbia would adhere in the event that blasting is required. While blasting may be required for Project construction, it would only be used as a last resort where hard bedrock is encountered that is not easily removed by conventional excavation methods. As such, specific blasting locations have not been designated. However, appendix G of the EIS provides detailed information regarding the locations of shallow bedrock crossed by the Project.

The DEIS (page 4-13) states: *"The majority of lands within each project areas has low or moderate erosion potential."* However, the DEIS does not provide supporting documentation to support this statement.

FA2-28 **Recommendation:** EPA recommends the FEIS include additional information to support the above statement. Suggested information would include map overlays of the project and the Natural Resources Conservation Service (NRCS) maps, field surveys, and maps showing where steep slopes are in the project area.

4.2.1.5 Prime Farmland

FA2-29 **Recommendation:** We recommend this section of the FEIS mention if state agricultural agency information was included in calculating the number of historic farms or farms of statewide importance. Also, present the number of historic farms or farms of statewide importance affected by the project for each state (by county).

4.2.1.6 Contaminated Soils (Page 4-15)
The DEIS (Page 4-15) states: *"Areas of contamination, including polychlorinated biphenyl (PCB), hydrocarbon, mercury, and heavy metals, were previously identified within the Ceredo CS, Crawford CS, Benton CS, and Sugar Grove Office Area (partially located within the LX Project area near LEX milepost 128.3 in Fairfield County, Ohio). Columbia Gas performed a comprehensive site-wide assessment and soil remediation to remove or contain the sources of contamination at the Benton CS and the Sugar Grove Office Area in 2002, as well as at the Ceredo CS (May through October 2012) and the Crawford CS (February through September 2012). Although response actions have been conducted to remove PCB contamination at these compressor station sites, some sources of PCBs have been encapsulated and left in-situ in accordance with the Toxic Substances Control Act (TSCA) of 1976."*

FA2-30 **Recommendations:** Actions by the Projects' proponents concerning PCBs should be included in the appendix of the FEIS. This should include a discussion/description of what the Projects' proponents have done to clean-up PCB's and provide the details of any remedy. Correspondence with regulatory agencies regarding these remediations should also be included. For the existing compressor stations that would be upgraded as part of the proposed Project, the FEIS should explain how the proposed upgrades will or won't impact the in-situ portions of PCBs.

Additionally, the DEIS (Page 4-14) states: *"In addition to the leaking underground storage tanks, an existing source of contamination was identified as the Rhall Transportation site. This source is located 0.8 mile from MP 0.8 on the BM-111 Loop, and was evaluated in 2009 for the presence of volatile organic compounds, semi-volatile organic compounds, metals and other contaminants (WVDEP, 2014; Ohio Department of Commerce, 2014, PADEP, 2015; EPA, 2015; EPA, 2014). Although no remediation activities have been completed at this site, it is also not located within the LX Project area."*

FA2-31 **Recommendation:** EPA recommends the FEIS provide information (or citation) that confirms the LX Project will not be affected by the contaminated Rhall Transportation

FA2-27 (cont'd) If blasting is required, site-specific blasting plans would be developed and reviewed by an engineer and would be conducted according to local requirements. For these reasons, we believe the information and analysis in the draft EIS and the revised analysis in the final EIS is appropriate.

FA2-28 As stated in Section 4.2.1.1 of the draft EIS, erosion potential of soils within the LX and RXE Project areas were identified based on NRCS designations of land capability class and subclass. The EIS is a summary document intended to disclose the potential impacts of a proposed action. The document incorporates by reference all of the material filed in support of the application for a Certificate of Public Convenience and Necessity (Certificate) for the Project. Additional detail, including identification of is included in the application materials posted in the Project Docket (CP15-514). A footnote was added to Section 4.2.1.1 of the final EIS providing details for accessing this information. Therefore, we believe the information and analysis in the draft EIS and the revised analysis in the final EIS is appropriate.

FA2-29 The state SHPO's were contacted for the database information related to historic farms. . We have revised the text in section 4.10.1.1 and 4.10.2.1 to include the number of historic farms for each state (by county). Additionally, further information can be found on this subject in the docket within Resource Report 4, and Resource Report 7.

FA2-30 Additional discussion regarding PCB remediation and risk management related to the proposed Projects is provided in section 4.2.1.6 of the final EIS. A footnote was also added to Section 4.2.1.6 of the final EIS providing details for accessing additional information included in Resource Report 12 and posted in the Project Docket (CP15-514).

FA2-31 Section 4.2.1.6 was revised to provide additional information regarding the Rahall Transportation site conditions and associated impacts.

FA2-31 site. Provide a better description of type/s and location/s of contamination at the site, identify whether the contamination is downgradient of the proposed Project, and identify what the current actions for removal of the contamination are. Correspondence with regulatory agencies regarding these remediations should also be included.

4.3 Water Resources
4.3.1.5 Contaminated Groundwater (Pages 4-26 – 4-27)
DEIS (Page 4-26) discloses there is one remaining leaking underground storage tank (LUST) site within the project area located within the workspace of Pipe Yard 36.

FA2-32 **Recommendation:** We recommend the FEIS describe this LUST site in more detail. Identify the mile post number closest to the LUST site, the state and county it is located in, and if any communication with the state environmental agencies or the landowner has been made.

4.3.2 Surface Water Resources (Pages 4-29 – 4-45)
4.3.2.1 Existing Surface Water Resources
The DEIS (Page 4-29) refers the reader to Appendix K-1 to garner information regarding the 1,083 waterbodies that would be crossed by the LX Project.

FA2-33 **Recommendations:** We recommend the FEIS include a discussion in Section 4.3.2.1 of the key information in Appendix K regarding the existing conditions of surface water in the Projects area. Also identify the specific measures that will be taken to protect surface water quality and quantity during project construction and operation. Identify whether or not a stream compensation plan is proposed for stream impacts that cannot be avoided or further minimized by using construction stream crossing best management practices (BMPs).

The DEIS is not clear if LX or RXE would require stream relocations.

FA2-34 **Recommendations**: We recommend the FEIS specifically identify whether there will be any stream relocations associated with construction of LX or RXE. If applicable, identify any areas that may no longer receive a stream's waters, discuss the consequences to resources in those areas and identify proposed mitigation, if applicable.

4.3.2 Surface Water Resources (Pages 4-29 – 4-45)
4.3.2.2 Public Watersheds (Page 4-33)
DEIS Section 4.3.2.2 addresses public water supplies, not watersheds.

FA2-35 **Recommendations:** We recommend Section 4.3.2.2 be re-titled to better identify the subject of discussion (i.e., public water supply). Add a section titled: "Watersheds" and provide figures/maps that clearly depict the major watersheds and the 8-digit hydrologic unit code (HUC) watershed and the proposed locations for the components of the LX and RXE Projects.

Table 4.3.3-1 Watersheds Crossed by the LX Project (Pages 4-30 – 4-31)

FA2-32 Pipe Yard 36 is an aboveground pipeline facility located in Muskingum County, Ohio. This pipe yard is located offline, and the nearest Project milepost is 100.3. This additional location information has been added to Section 4.3.1.5 of the final EIS. As stated in the draft EIS, project-related activities in this area would be limited to staging and storage of equipment, and no ground disturbance is planned. Therefore, we believe the information and analysis in the draft EIS and the revised analysis in the final EIS is sufficient.

FA2-33 Section 4.3.2 of the draft EIS discusses existing surface water resources and conditions, including identification of project-associated watersheds, the flow regimes of waterbodies crossed by the projects, public watersheds, waterbody water quality and use classifications, identification of sensitive waterbodies and waterbodies that support fisheries of special concern. As stated in Section 4.3.2.1 of the draft EIS, Appendix K-1 lists the 1,083 waterbodies that would be crossed by the LX Project and identifies the MP location, state water quality classification, fisheries classification, FERC classification, flow regime, approximate waterbody width, pipeline crossing length, and proposed method of crossing for each waterbody crossing. Project-related impacts and mitigation measures that would be taken to protect surface water quality and quantity during project construction and operation are discussed in Section 4.3.2.7 and 4.3.2.8 of the draft EIS. Therefore, we believe the information and analysis in the draft EIS and the revised analysis in the final EIS is sufficient.

FA2-34 Section 4.3.2.7 of the draft EIS was revised to clarify permanent waterbody impacts and stream relocations that would be associated with the Project. Approximately 63 feet of one minor, intermittent waterbody would be permanently filled as a result of construction and operation of the proposed Lone Oak CS. In addition, approximately 100 feet of one minor, ephemeral waterbody would be permanently relocated to accommodate a new storm water management pond within the existing Ceredo CS.

FA2-35 Section 4.3.2.2 of the draft EIS has been retitled in the final EIS to more accurately reflect the information discussed in this section. Discussion of project-associated watersheds is discussed in Section 4.3.2.1 of the draft EIS, including HUC codes and facility locations by milepost within each watershed. Therefore, we believe the information and analysis in the draft EIS and the revised analysis in the final EIS is sufficient.

FA2 – U.S. Environmental Protection Agency
(cont'd)

Table 4.3.2-2 Waterbodies Affected by the RXE Project (Page 4-32)

FA2-36 **Recommendation:** Watershed information for RXE is not included in either of the above tables. EPA recommends either Table 4.3.3-1 be re-titled and include watershed information for the RXE project, or Table 4.3.2-2 be re-titled and include RXE watershed information as well as the waterbodies information.

In addition, it appears that the DEIS does not include the source of the waterbody identification numbers (IDs) listed in Table 4.3.2-2. We were unsuccessful on locating/matching the stream waterbody IDs used by KY DEP or the USGS against the IDs used in the DEIS in order to attest stream classification.

FA2-37 **Recommendation:** We recommend the FEIS identify the source of the stream identification numbers in Table 4.3.2-2. Also, consider including the stream ID source information as a footnote in Table 4.3.2-2.

4.3.2.4 Sensitive Waterbodies
Flood Hazard Zones (Pages 4-38 – 4-39)
Table 4.3.2-5 – Areas Within the 100-year Floodplain Crossed by the LX Project (Page 4-39)

FA2-38 **Recommendations:** In order to get a better understanding of the amount and location of flood areas that the LX and RXE Projects will be located in, we recommend Table 4.3.2-5 be modified to include the number of acres within each designated area/segment as identified in the table by beginning and ending mile post numbers (MPs).

The increase of impervious area during construction and operation of the project will increase flooding potentially impacting areas surrounding the project.

FA2-39 **Recommendation:** EPA recommends the FEIS discuss how LX and RXE will reduce the potential for flooding areas surrounding the projects.

DEIS (Page 4-38) ***states:*** ***"****The Grayson CS associated with the RXE Project occurs within the 100-year floodplain, and the Means CS does not. Columbia Gas' and Columbia Gulf's ECSs outline measures to protect from flooding during construction, and all structures would be constructed in accordance with federal and state building codes."*

FA2-40 **Recommendation:** The DEIS is not clear if flood proofing measures, such as elevation or dry flood-proofing, were considered for the Grayson compressor station's long term operation. We recommend the FEIS identify whether such measures are being considered. FEMA offers excellent resources regarding flood mitigation at: http://www.fema.gov.

4.3.2.6 Hydrostatic Testing (Pages 4-40 – 4-42)
"Columbia Gas proposes to withdraw approximately 42 million gallons of test water from four local surface waters for pipeline facilities and approximately 1 million gallons of test water from municipal and possible existing water sources for aboveground facilities, as depicted in table 4.3.2-6 and table 4.3.2-7. The RXE Project would use municipal sources for water withdrawals.

FA2-36 Watershed information for the RXE Project is discussed in the text of Section 4.3.2.1. This information was also added to table 4.3.2-1 in the final EIS.

FA2-37 The waterbody IDs shown on table 4.3.2-2 in the draft EIS were based on the field designations presented in the Wetland and Waterbody Delineation Report submitted for the RXE project and available in the Project Docket (CP15-539). This source was added to the table in the final EIS.

FA2-38 Section 4.3.2.4 of the final EIS has been revised to discuss the extent of project facilities within flood zones.

FA2-39 The increase in impervious surface in flood zones associated with installation of each aboveground facility would be minor and not expected to adversely impact the function of floodplain or increase flooding. Additionally, project-related facilities would be constructed in accordance with federal, state and local building codes and permitting requirements, including compliance with local floodplain ordinances and management of construction storm water discharges. Section 4.3.2.4 of the final EIS was revised to include this information.

FA2-40 Comment noted. Project facilities would be designed and constructed in accordance with federal, state and local requirements, including compliance with floodplain construction standards.

Columbia Gas and Columbia Gulf would be required to obtain permits from the municipalities for water use prior to withdrawing the water. These permits would confirm that the municipalities have required capacity to supply Columbia Gas with hydrostatic test waters." (Page 4-40)

FA2-41 **Recommendation:** We recommend the FEIS mention why hydrostatic testing is the preferred method of testing pressure and why other, non-resource intensive methods are not being proposed, such as pneumatic pressure testing.

The DEIS does not disclose whether the pipes need to be cleaned prior to (pre-cleaning) hydrostatic testing.

FA2-42 **Recommendation:** We recommend the FEIS identify whether pre-cleaning will take place and what it entails. How much water does it use? Is this in addition to the amount of water used for the actual hydrostatic test? What chemicals, if any, are used in the pre-cleaning process?

FA2-43 **Recommendation:** We recommend that the Final EIS explain what happens inside the pipe after hydrostatic test water has been discharged. Is the pipe dried? If so, are any chemicals used in the pipe drying process? How will pre-cleaning and hydrostatic test waters be treated, if necessary, prior to discharge?

Table 4.3.2-6 Proposed Hydrostatic Test Water Source and Discharge Locations for Pipeline Facilities (Page 4-41)

Table 4.3.2-7 Proposed Hydrostatic Test Water Source and Discharge Locations for Above-ground Facilities (Page 4-42)

FA2-44 **Recommendations:** We recommend *Table 4.3.2-6* and *Table 4.3.2-7* include additional categories to identify: 1) daily water flow amounts for each water intake, 2) where water will be recycled from one segment to another, and 3) the amount of water that will be recycled in each segment. Include the water source and discharge locations for the Grayson and Means Compressor Stations hydrostatic test. Also, in the footnotes to *Table 4.3.2-7* explain what is meant by *"Various"* when used under the column headings titled: *"Source"* and *"On-Site Discharge Location (MP)."*

The DEIS does not provide evidence confirming that the water use capacity requirements can be met by the municipalities during hydrostatic testing activities.

FA2-45 **Recommendation:** Where project proponents propose to use municipal sources of water, we recommend the FEIS provide documentation that each municipality identified as potential water providers has the capacity to furnish the amounts proposed.

The DEIS (Page 4-45) states: *"As per recommendations from WVDEP, water withdrawn from the Ohio River would either discharge back into the Ohio River or undergo treatment with a*

FA2-41 Section 2.3.1.7 of the final EIS was revised to include an expanded discussion of hydrostatic testing methods, as well as the rationale for hydrostatic testing versus other methods.

FA2-42 Section 2.3.1.7 of the final EIS was revised to include an expanded discussion of hydrostatic testing methods. The amount of water disclosed in the FEIS related to hydrostatic testing encompasses all water requirements for these activities.

FA2-43 Section 2.3.1.7 of the final EIS was revised to include an expanded discussion of hydrostatic testing methods. Testing requirements related to hydrostatic test water discharge are determined based on permitting requirements, and hydrostatic test water discharges would be in accordance with applicable federal, state, and local permits.

FA2-44 Specific details related to daily water intake flows, volumes of water recycled and pipeline segments where water would be recycled would be based on final design. These details would be reviewed by state permitting agencies. Therefore, we believe the information and analysis provided in the final EIS is sufficient. The final EIS includes revised table 4.3.2-7 which include additional source and discharge location information and terminology clarifications.

FA2-45 Columbia Gas provided in its comments on the draft EIS a response to recommendation 15 identifying that sufficient supply exists in the project area for hydrostatic test water supplies. All hydrostatic test water withdrawals and discharges would occur in compliance with appropriate permits.

WVDEP-recommended biocide prior to discharge. Excluding potential WVDEP-recommended biocides, additives would not be added to the hydrostatic test water."

FA2-46 **Recommendation:** EPA recommends the FEIS explain the type and concentrations of biocides that may be used in hydrostatic testing water discharge.

The DEIS does not address the specific requirements for the disposal of test water associated with the various components of the proposed Projects.

FA2-47 **Recommendation:** We recommend the FEIS address specific requirements for the disposal of all test waters.

FA2-48 **Recommendation:** EPA also recommends the FEIS identify all BMPs that will be used for: 1) water withdrawal in hydrostatic testing to prevent the entrainment of fish and other aquatic organisms, and 2) to dissipate waters after testing to prevent/minimize erosion and sediment movement.

4.3.2.7 General Impacts and Mitigation (Pages 4-42 – 4-45)
Section 4.3.2.7 of the DEIS identifies BMPs proposed by Columbia Gas, under stream bank erosion, turbidity and sedimentation; it is not clear if these practices also apply to Columbia Gulf's RXE Project.

FA2-49 **Recommendation:** EPA recommends the FEIS identify if RXE will be covered by the Columbia Gas practices or any other BMPs. If not, the FEIS should discuss why these practices do not pertain to RXE and identify those practices that pertain to RXE.

4.4 Wetlands
4.4.2 Wetland Construction Procedures
Section 4.4.2 (Page 4-47) states: *"A total of 301wetlands would be affected by the LX Project, described in appendix L. In Ohio, the LX Project, including aboveground facilities, access roads, and contractor yards, would cross 257 wetlands, including 20 forested, 21 scrub-shrub, and 216 emergent wetlands. In West Virginia, the LX Project would cross 32 wetlands, including 6 forested, 1 scrub-shrub, and 32 emergent wetlands. The LX Project would cross five emergent wetlands in Pennsylvania. In the RXE Project area, Columbia Gulf delineated one emergent wetland within the 64-acre survey area at the Means CS site . . . no wetlands were delineated at the Grayson CS site."*

FA2-50 **Recommendation:** The above DEIS text identifies the total number of wetland crossing in West Virginia as 32; however, the number of crossings of the various types of wetlands in West Virginia add up to 39. We recommend the FEIS clarify this discrepancy.

4.4.3 General Impacts and Mitigation
Section 4.4.3 (Page 4-48) discloses that construction of LX would affect a total of 15.2 acres of wetlands. This includes about 1.4 acres of forested wetlands, 0.8 acre of scrub-shrub wetlands, and 12.9 acres of emergent wetlands. No wetland impacts are expected for the RXE Project.

FA2-46 See the response to comment FA2-03.

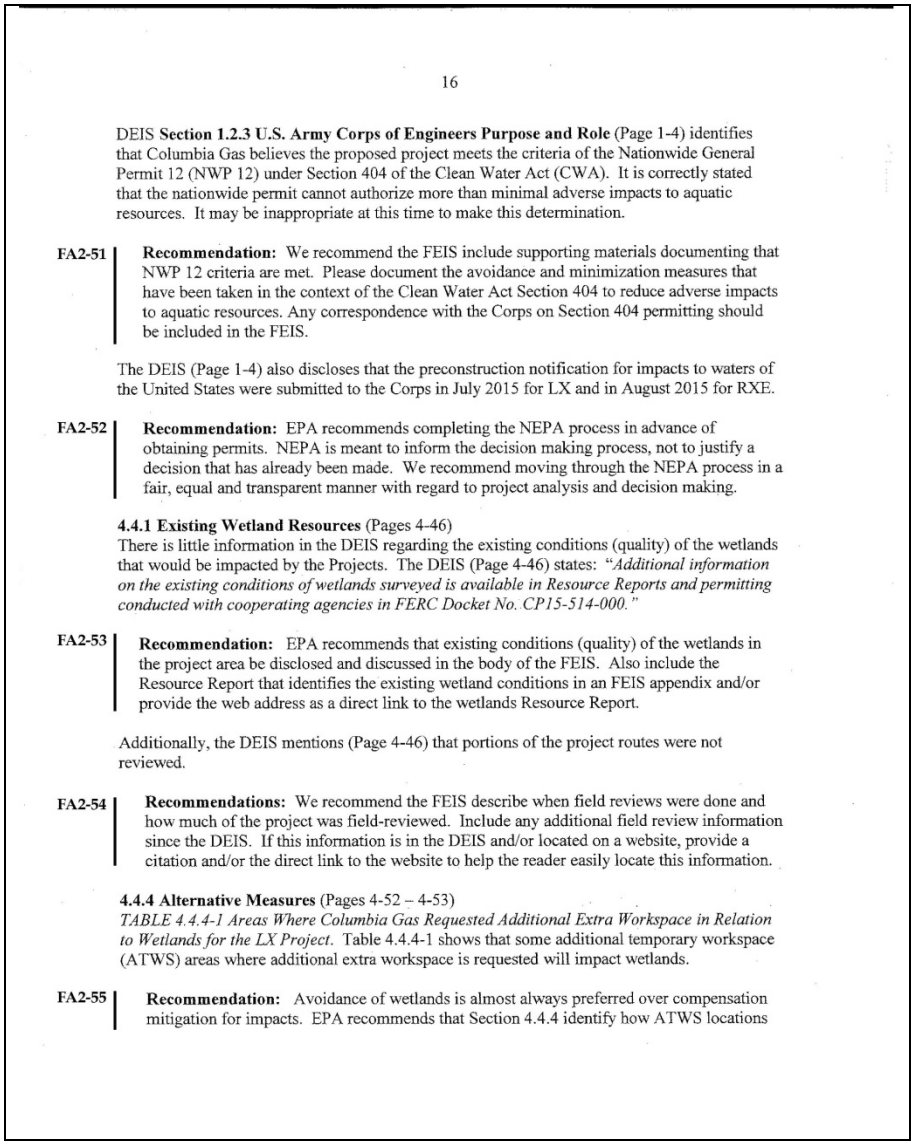
FA2-47 Table 1.5-1 identifies the permits applicable to hydrostatic test water withdrawals and discharges. The specific requirements for hydrostatic test water discharge will be determined by each applicable permitting agency. Columbia Gas and Columbia Gulf have committed to adhere to applicable federal, state and local permitting requirements. Therefore, we believe the information and analysis in the final EIS is sufficient.

FA2-48 Sections 4.3.2.7 was revised in the final EIS to include additional discussion of BMPs.

FA2-49 Sections 4.3.2.7 was revised in the final EIS to include discussion of the RXE project related to stream bank erosion and turbidity and sedimentation impact mitigation.

FA2-50 Section 4.4.2 of the final EIS has been revised to resolve this discrepancy. A total of 39 wetlands would be impacted in West Virginia, including 32 PEM, 1 PSS, and 6 PFO wetland areas.

FA2 – U.S. Environmental Protection Agency
(cont'd)



16

DEIS **Section 1.2.3 U.S. Army Corps of Engineers Purpose and Role** (Page 1-4) identifies that Columbia Gas believes the proposed project meets the criteria of the Nationwide General Permit 12 (NWP 12) under Section 404 of the Clean Water Act (CWA). It is correctly stated that the nationwide permit cannot authorize more than minimal adverse impacts to aquatic resources. It may be inappropriate at this time to make this determination.

FA2-51 **Recommendation:** We recommend the FEIS include supporting materials documenting that NWP 12 criteria are met. Please document the avoidance and minimization measures that have been taken in the context of the Clean Water Act Section 404 to reduce adverse impacts to aquatic resources. Any correspondence with the Corps on Section 404 permitting should be included in the FEIS.

The DEIS (Page 1-4) also discloses that the preconstruction notification for impacts to waters of the United States were submitted to the Corps in July 2015 for LX and in August 2015 for RXE.

FA2-52 **Recommendation:** EPA recommends completing the NEPA process in advance of obtaining permits. NEPA is meant to inform the decision making process, not to justify a decision that has already been made. We recommend moving through the NEPA process in a fair, equal and transparent manner with regard to project analysis and decision making.

4.4.1 Existing Wetland Resources (Pages 4-46)
There is little information in the DEIS regarding the existing conditions (quality) of the wetlands that would be impacted by the Projects. The DEIS (Page 4-46) states: "*Additional information on the existing conditions of wetlands surveyed is available in Resource Reports and permitting conducted with cooperating agencies in FERC Docket No. CP15-514-000.*"

FA2-53 **Recommendation:** EPA recommends that existing conditions (quality) of the wetlands in the project area be disclosed and discussed in the body of the FEIS. Also include the Resource Report that identifies the existing wetland conditions in an FEIS appendix and/or provide the web address as a direct link to the wetlands Resource Report.

Additionally, the DEIS mentions (Page 4-46) that portions of the project routes were not reviewed.

FA2-54 **Recommendations:** We recommend the FEIS describe when field reviews were done and how much of the project was field-reviewed. Include any additional field review information since the DEIS. If this information is in the DEIS and/or located on a website, provide a citation and/or the direct link to the website to help the reader easily locate this information.

4.4.4 Alternative Measures (Pages 4-52 – 4-53)
TABLE 4.4.4-1 Areas Where Columbia Gas Requested Additional Extra Workspace in Relation to Wetlands for the LX Project. Table 4.4.4-1 shows that some additional temporary workspace (ATWS) areas where additional extra workspace is requested will impact wetlands.

FA2-55 **Recommendation:** Avoidance of wetlands is almost always preferred over compensation mitigation for impacts. EPA recommends that Section 4.4.4 identify how ATWS locations

FA2-51 Permit applications filed with U.S. Army Corps of Engineers (COE), NW 12 is under the purview of COE. Section 5.2, condition 9 requires the applicants to document that they have received all applicable authorizations required under federal law (or evidence of waiver thereof). The EIS is a summary document intended to disclose the potential impacts of a proposed action and specific avoidance and minimization measures for construction of the projects are presented in the ECS and are included by reference. As such, we believe that the EIS discussion of and impacts and mitigations associated with the Section 404 and USACE NWP-12 permitting is sufficient for the purpose of the EIS under NEPA.

FA2-52 Comment noted. The FERC has not issued any approvals or authorizations for the proposed Project to-date. As recommended, we are moving through the NEPA process in a fair, equal and transparent manner as part of our decision making process. The FERC has not, and will not, issue any permit or final decision on the proposed project prior to completing the NEPA process. Further, the FERC does not have authority over other federal, state and local permitting authorities and processes or the timing of associated permit issuance.

FA2-53 The EIS is a summary document intended to disclose the potential impacts of a proposed action. The document incorporates by reference all of the material filed in support of the application for a Certificate of Public Convenience and Necessity (Certificate) for the Project. The level of detail provided in the final EIS related to existing wetland conditions is sufficient for the purpose of the final EIS under NEPA. However, a footnote was added to Table 4.4.3-1 of the final EIS providing details for accessing the appropriate resource report in the project docket.

FA2-54 Section 4.4.1 was revised in the final EIS to include updated information regarding completed surveys. In addition, a footnote was added in this discussion providing details for accessing more detailed information in the project docket.

FA2-55 The FERC's Plan and Procedures advocate avoidance through the requirement for 50-foot workspace setbacks from wetland areas. Any exceptions to this requirement have to be justified and approved by the FERC. Table 4.4.4-1 provides a summary of those areas where the Plan and Procedures setbacks and avoidance cannot be accommodated because of safety reasons and there is no other appropriate alternative.

FA2-55 | were chosen to first avoid wetland impacts and then minimize those impacts that cannot be avoided for the ATWS locations in Table 4.4.4-1 that will impact wetlands.

4.4.5 Compensatory Mitigation (Page 4-53)
DEIS Chapter 5 states that prior to construction, Columbia Gas shall provide its final wetland compensation plan. EPA is interested in reviewing this plan before it is finalized.

FA2-56 | **Recommendation**: EPA recommends the FEIS include the proposed wetland compensation mitigation plan for the LX and RXE Projects. Provide an update on the status of plan reviews and approvals by the Corps and the state permitting agency.

4.5 Vegetation
4.5.4 Interior Forest Habitat (Pages 4-57 4-59)
The DEIS (Page 4-57) states: *"The LX Project would affect 1,380.6 acres of upland forests and 1.1 acres of wetland forest during construction. . . . The acres of impacted interior forest blocks were calculated; we determined that approximately 1,142.9 acres of interior forest block habitat would be impacted by the proposed LX Project."*

FA2-57 | **Recommendation:** We recommend Section 4.5.4 reference the wildlife section(s) describing interior forest species and list potential species that would be affected by the reduction of forest acres. Also, identify if there are any endangered species habitat that would be impacted by the reduction of interior forests.

In addition to providing valuable wildlife habitat and protecting water quality and quantity in the watershed, forests also have a role in carbon capture/sequestration to help ameliorate global warming/climate change.

FA2-58 | **Recommendation:** We recommend the FEIS identify and discuss the role forests play in carbon capture/sequestration to help ameliorate global warming/climate change. Please estimate how much carbon capture will be lost due to the removal of forest for construction/operation of LX/RXE. Identify any compensatory mitigation the Project Proponents intend to undertake for the loss of forest due to their proposal.

4.5.5 Noxious Weeds and Other Invasive Plant Species (Page 4-59)

FA2-59 | **Recommendation:** We recommend the FEIS include the project proponents Invasive Species Management Plans for LX and RXE Projects.

4.5.6 General Impacts and Mitigation (Page 4-59)

FA2-60 | **Recommendation:** We recommend the FEIS identify in section 4.5.6 the length of time it takes for a mature forest to develop. Also mention how long the project will be monitored for successful regrowth of forests to pre-construction conditions.

FA2-56 Comment noted. EPA should contact COE and applicable state agency's to request a review of the Compensatory Mitigation Plan prior to finalization and to obtain an update on the status of project permitting. Columbia Gas is developing compensatory mitigation plans in consultation with the agencies as a requirement of their permitting efforts.

FA2-57 Section 4.5.4 has been revised to discuss impacts on wildlife that prefer forested habitat. Section 4.7 discusses impacts on special status species by each species, rather than by general habitat preferences.

FA2-58 We received comments requesting that we identify the impacts of forest clearing on carbon sequestration and climate change. Currently there are no federal or state regulations regarding carbon sequestration. According to the EPA, carbon sequestration is the process through which plant life removes CO_2 from the atmosphere and stores it in biomass. The Projects would impact about 1,381.1 acres of forested land, primarily throughout Ohio, of which about 865.4 acres (63 percent) would be allowed to revert back to forest. While there would be a slight long-term effect of reduced carbon sequestration due to removal of trees from the permanent right-of-way, temporary right-of-way would be allowed to revert back to pre-existing conditions. Young, fast-growing trees in particular will remove significantly larger amounts of carbon dioxide from the atmosphere than mature canopy. The young vegetation of the restored temporary right-of-way would continue to perform the carbon sequestration process. The carbon sequestration ability of the permanent right-of-way would be reduced; however, this amount represents about 0.006 percent of Ohio's forest and carbon sequestration ability. Therefore, we do not believe that the impact of the Project would have significant impacts on Ohio's carbon sequestration, or would significantly exacerbate ongoing climate change.

FA2-59 Invasive Species management Plans will be developed as part of the final wetland compensation management plan. Consultations are ongoing with the state and federal agencies as described in Section 4.4.5. Additionally, section 4.5.5 provides information on minimization of invasive species in the construction corridor based on implementation of the ECS and reiterates that an Invasive Species Management Plan is being developed in consultation with appropriate agencies. As such, the information presented in the final EIS related to invasive species is sufficient for the public and decision makers to assess the potential impacts associated with the Project.

FA2 – U.S. Environmental Protection Agency (cont'd)

FA2-55 were chosen to first avoid wetland impacts and then minimize those impacts that cannot be avoided for the ATWS locations in Table 4.4.4-1 that will impact wetlands.

4.4.5 Compensatory Mitigation (Page 4-53)
DEIS Chapter 5 states that prior to construction, Columbia Gas shall provide its final wetland compensation plan. EPA is interested in reviewing this plan before it is finalized.

FA2-56 **Recommendation**: EPA recommends the FEIS include the proposed wetland compensation mitigation plan for the LX and RXE Projects. Provide an update on the status of plan reviews and approvals by the Corps and the state permitting agency.

4.5 Vegetation
4.5.4 Interior Forest Habitat (Pages 4-57 4-59)
The DEIS (Page 4-57) states: *"The LX Project would affect 1,380.6 acres of upland forests and 1.1 acres of wetland forest during construction. . . . The acres of impacted interior forest blocks were calculated; we determined that approximately 1,142.9 acres of interior forest block habitat would be impacted by the proposed LX Project."*

FA2-57 **Recommendation:** We recommend Section 4.5.4 reference the wildlife section(s) describing interior forest species and list potential species that would be affected by the reduction of forest acres. Also, identify if there are any endangered species habitat that would be impacted by the reduction of interior forests.

In addition to providing valuable wildlife habitat and protecting water quality and quantity in the watershed, forests also have a role in carbon capture/sequestration to help ameliorate global warming/climate change.

FA2-58 **Recommendation:** We recommend the FEIS identify and discuss the role forests play in carbon capture/sequestration to help ameliorate global warming/climate change. Please estimate how much carbon capture will be lost due to the removal of forest for construction/operation of LX/RXE. Identify any compensatory mitigation the Project Proponents intend to undertake for the loss of forest due to their proposal.

4.5.5 Noxious Weeds and Other Invasive Plant Species (Page 4-59)

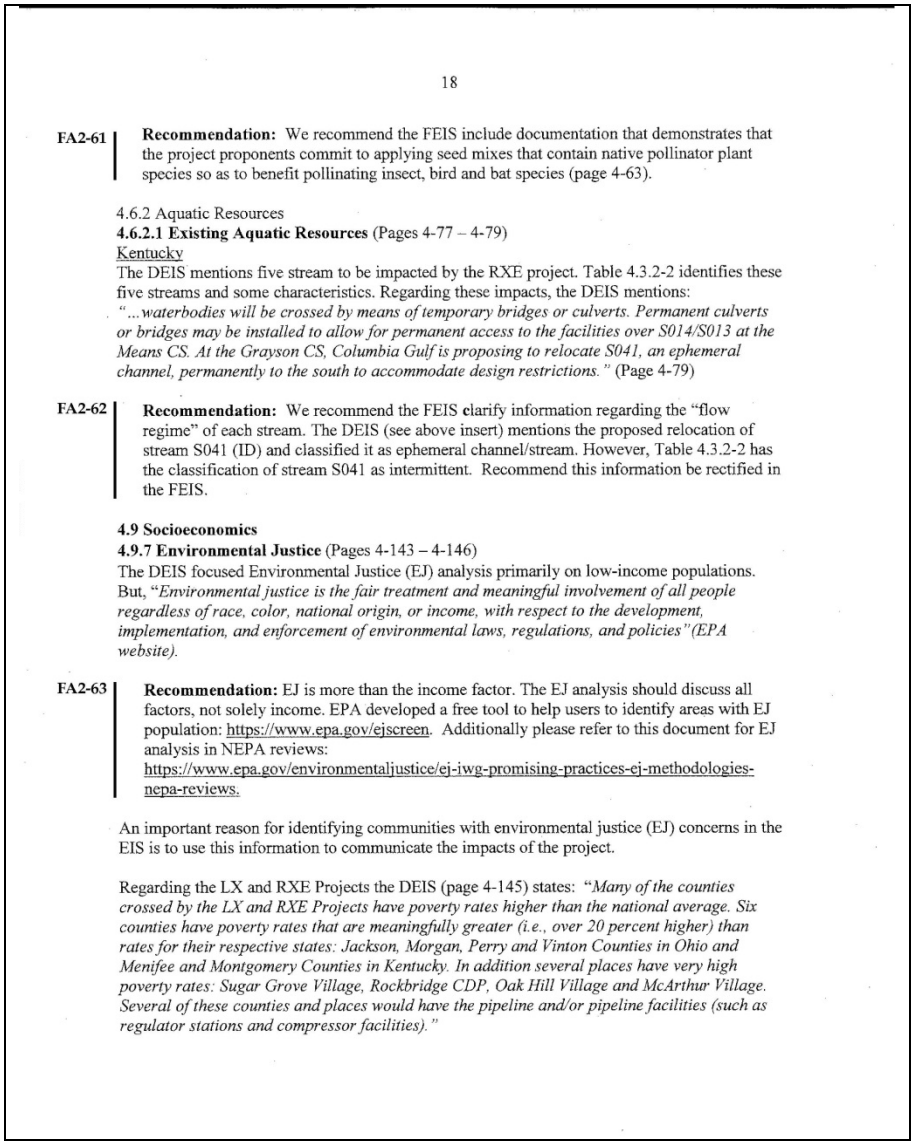
FA2-59 **Recommendation:** We recommend the FEIS include the project proponents Invasive Species Management Plans for LX and RXE Projects.

4.5.6 General Impacts and Mitigation (Page 4-59)

FA2-60 **Recommendation:** We recommend the FEIS identify in section 4.5.6 the length of time it takes for a mature forest to develop. Also mention how long the project will be monitored for successful regrowth of forests to pre-construction conditions.

FA2-60 Section 4.5.6 of the final EIS includes additional information timelines associated with forest regeneration. As described in the ECS, Environmental Inspectors would be assigned to the project to monitor the upland areas for a minimum of two growing seasons. If unsuccessful, restoration efforts would continue until the area is adequately restored. Wetland restoration areas would be monitored for a minimum of three years. If unsuccessful, restoration efforts would continue until the area is adequately restored.

FA2 – U.S. Environmental Protection Agency (cont'd)



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FA2-61 **Recommendation:** We recommend the FEIS include documentation that demonstrates that the project proponents commit to applying seed mixes that contain native pollinator plant species so as to benefit pollinating insect, bird and bat species (page 4-63).

4.6.2 Aquatic Resources
4.6.2.1 Existing Aquatic Resources (Pages 4-77 – 4-79)
Kentucky
The DEIS mentions five stream to be impacted by the RXE project. Table 4.3.2-2 identifies these five streams and some characteristics. Regarding these impacts, the DEIS mentions:
"...waterbodies will be crossed by means of temporary bridges or culverts. Permanent culverts or bridges may be installed to allow for permanent access to the facilities over S014/S013 at the Means CS. At the Grayson CS, Columbia Gulf is proposing to relocate S041, an ephemeral channel, permanently to the south to accommodate design restrictions." (Page 4-79)

FA2-62 **Recommendation:** We recommend the FEIS clarify information regarding the "flow regime" of each stream. The DEIS (see above insert) mentions the proposed relocation of stream S041 (ID) and classified it as ephemeral channel/stream. However, Table 4.3.2-2 has the classification of stream S041 as intermittent. Recommend this information be rectified in the FEIS.

4.9 Socioeconomics
4.9.7 Environmental Justice (Pages 4-143 – 4-146)
The DEIS focused Environmental Justice (EJ) analysis primarily on low-income populations. But, "*Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies"(EPA website).*

FA2-63 **Recommendation:** EJ is more than the income factor. The EJ analysis should discuss all factors, not solely income. EPA developed a free tool to help users to identify areas with EJ population: https://www.epa.gov/ejscreen. Additionally please refer to this document for EJ analysis in NEPA reviews: https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews.

An important reason for identifying communities with environmental justice (EJ) concerns in the EIS is to use this information to communicate the impacts of the project.

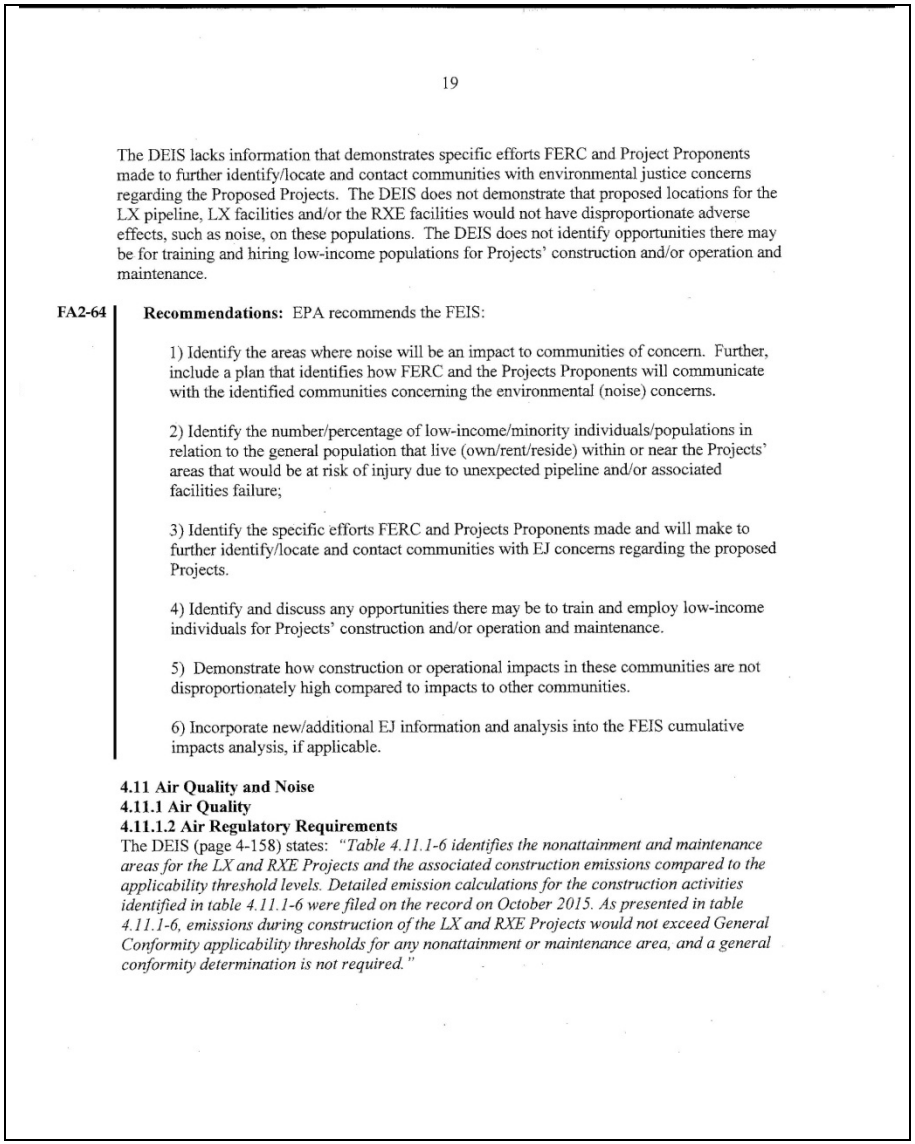
Regarding the LX and RXE Projects the DEIS (page 4-145) states: "*Many of the counties crossed by the LX and RXE Projects have poverty rates higher than the national average. Six counties have poverty rates that are meaningfully greater (i.e., over 20 percent higher) than rates for their respective states: Jackson, Morgan, Perry and Vinton Counties in Ohio and Menifee and Montgomery Counties in Kentucky. In addition several places have very high poverty rates: Sugar Grove Village, Rockbridge CDP, Oak Hill Village and McArthur Village. Several of these counties and places would have the pipeline and/or pipeline facilities (such as regulator stations and compressor facilities).*"

FA2-61 We included a recommendation in the draft EIS requiring Columbia Gas to provide a revised ECS with provisions for use of native pollinator plant species seed mixes.

FA2-62 Table 4.3.2-2 was revised in the final EIS to indicate the correct the flow regime of stream S041 (ephemeral).

FA2-63 The Environmental Justice (EJ) analysis presented in section 4.9.7 of the final EIS was updated with information from EPA's online Environmental Justice screening and mapping tool "EJSCREEN". Since the Leach XPress Project would be primarily an underground, linear structure and construction activities would be temporary; FERC staff utilized the EJSCREEN tool for the permanent aboveground Compressor Stations to evaluate the potential for EJ populations.

FA2 – U.S. Environmental Protection Agency
(cont'd)



19

The DEIS lacks information that demonstrates specific efforts FERC and Project Proponents made to further identify/locate and contact communities with environmental justice concerns regarding the Proposed Projects. The DEIS does not demonstrate that proposed locations for the LX pipeline, LX facilities and/or the RXE facilities would not have disproportionate adverse effects, such as noise, on these populations. The DEIS does not identify opportunities there may be for training and hiring low-income populations for Projects' construction and/or operation and maintenance.

FA2-64 **Recommendations:** EPA recommends the FEIS:

1) Identify the areas where noise will be an impact to communities of concern. Further, include a plan that identifies how FERC and the Projects Proponents will communicate with the identified communities concerning the environmental (noise) concerns.

2) Identify the number/percentage of low-income/minority individuals/populations in relation to the general population that live (own/rent/reside) within or near the Projects' areas that would be at risk of injury due to unexpected pipeline and/or associated facilities failure;

3) Identify the specific efforts FERC and Projects Proponents made and will make to further identify/locate and contact communities with EJ concerns regarding the proposed Projects.

4) Identify and discuss any opportunities there may be to train and employ low-income individuals for Projects' construction and/or operation and maintenance.

5) Demonstrate how construction or operational impacts in these communities are not disproportionately high compared to impacts to other communities.

6) Incorporate new/additional EJ information and analysis into the FEIS cumulative impacts analysis, if applicable.

4.11 Air Quality and Noise
4.11.1 Air Quality
4.11.1.2 Air Regulatory Requirements
The DEIS (page 4-158) states: *"Table 4.11.1-6 identifies the nonattainment and maintenance areas for the LX and RXE Projects and the associated construction emissions compared to the applicability threshold levels. Detailed emission calculations for the construction activities identified in table 4.11.1-6 were filed on the record on October 2015. As presented in table 4.11.1-6, emissions during construction of the LX and RXE Projects would not exceed General Conformity applicability thresholds for any nonattainment or maintenance area, and a general conformity determination is not required."*

FAS-64 Following the public participation activities, which included Open Houses, Scoping Meetings, publicly available FERC Docket, and distribution of the draft EIS at municipal offices, public libraries, as well as all affected landowners, FERC has not received information that indicates there are EJ communities or concerns.

1. Noise measurements and projections from construction and operation of the Project, including Compressor Stations, are presented in Section 4.11.2 of the EIS. Noise concerns will be addressed and communicated to the public in the publicly available final EIS.

2. Based on the Environmental Justice analysis, there are no low-income or minority populations that would be disproportionately affected by the proposed Projects.

3. Following the public participation activities, which included Open Houses, Scoping Meetings, publicly available FERC Docket, and distribution of the draft EIS at municipal offices, public libraries, as well as all affected landowners, FERC has not received information that indicates there are EJ communities or concerns.

4. FERC does not train or employ individuals for proposed energy projects. The Project Applicant is responsible for construction, operation, and maintenance contracts.

5. See Comment Response FA2-63. No minority populations or disproportionate effects to low-income populations were identified.

6. Section 4.9.7 was revised to include additional data and analysis regarding Environmental Justice.

FA2 – U.S. Environmental Protection Agency (cont'd)

FA2-65 **Recommendation:** We recommend the FEIS provide a direct link to the detailed emission calculations in the file on record for the construction activities identified in *Table 4.11.1-6 - Comparison of Construction Emissions to General Conformity De Minimis Thresholds.*

Greenhouse Gas Emissions

The Draft EIS (Pages 4-154 through 4-164) includes a helpful discussion of the greenhouse gas (GHG) emissions associated with construction of the LX and RXE Projects, and annual emissions from the operation of the compressor stations, but did not include estimates of the GHG emissions associated with the production, leakage, and combustion of the natural gas transported by this proposal. Because of the causal relationship between this project and the emissions, it is appropriate and consistent with NEPA and CEQ regulations to consider and disclose the emissions levels in NEPA analyses.

FA2-66 **Recommendations:** We recommend that the FEIS include estimates of emissions from production, leakage, and combustion of the natural gas transported by the proposal.

In the DEIS, Table 4.11.1-8 (Page 4-164), FERC includes comparisons of project-level greenhouse gas emissions to State-wide emissions. We do not recommend comparing GHG emissions from a proposed action to global emissions, total state, or U.S. emissions, as these comparisons obscure rather than illuminate consideration of GHG emissions under NEPA.

FA2-67 **Recommendation:** We recommend that FERC remove comparisons of the proposed project's estimated emissions to aggregate emissions.

Methane Leakage

The DEIS does not contain estimates of methane leakage from the proposed expansion. EPA has compiled useful information on technologies and practices that can help reduce methane emissions from natural gas systems, including specific information regarding emission reduction options for natural gas transmission operations. This information may be found at http://www3.epa.gov/gasstar/mehtaneemissions/index.html.

FA2-68 **Recommendations:** We recommend that FERC estimate expected GHG emissions from leakage and consider potential BMPs to reduce leakage of methane associated with operation of the expansion facilities.

The DEIS does not describe measures to avoid, reduce, or compensate for GHG emissions from operation of the proposed pipeline expansions.

FA2-69 **Recommendation**: EPA recommends that the FEIS describe measures to reduce GHG emissions associated with the proposal including reasonable alternatives and other practicable mitigation opportunities, and disclose the estimated GHG reductions. For example, the FEIS could include consideration of more efficient compressor stations or purchase of renewable energy to power the stations. The EPA further recommends that the FEIS and Record of Decision (ROD) commit to implementation of reasonable mitigation measures that would reduce project-related GHG emissions. (Also see additional comments under **4.13.5.11 Climate Change.**)

FA2-65 A footnote was added to table 4.11.1-6 of the final EIS providing details for accessing the detailed emission calculations.

FA2-66 We disagree. In the EIS and throughout other past Commission decisions, we have determined that the upstream production and downstream combustion of natural gas are not casually connected. Section 4.13.4 of the EIS notes that the demand for energy and the proposed projects are a result of, rather than a precursor to, development in the region. However, the construction and operating emissions presented throughout section 4.11.1 of the EIS does include the greenhouse gas emissions associated with the project facilities, including leakage.

FA2-67 We disagree. The CEQ's draft guidance on addressing GHGs and climate change in NEPA notes that comparing with global GHG emission levels in developing conclusions on climate change impacts is not useful. However, CEQ does recommend providing a frame of reference. While section 4.11.1.4 of the EIS compares project construction and operation emissions with state GHG emissions (instead of global or country-wide emissions), the EIS does not dismiss climate change impacts based on this comparison. Instead the EIS includes a discussion on climate change impacts in section 4.13.5.11, identifying that the project would contribute GHG emissions the climate change impacts occurring in the project region. This section also notes the Projects' consistency with goals identified in the USGCRP report to increase the use of natural gas in the Midwest to reduce GHG emissions.

FA2-68 See the response to comment FA2-66. Section 4.11.1.4 of the EIS has been updated to acknowledged Columbia Gas and Columbia Gulf's participation in the EPA's Natural Gas STAR Program.

FA2-69 Section 4.11.1.2 of the EIS identifies that each compressor station is subject to air permitting through applicable state agencies. These agencies maintain the authority to require further emission control measures through the air permitting process. Each station would combust pipeline-quality natural gas, significantly reducing emissions compared to other fossil fuels. Powering compressor stations using renewable energy often requires the construction of many miles of electric transmission lines, transferring one type of impact (climate change) to another (land use and natural resource impacts). See also response to comment FA2-68.

FA2 – U.S. Environmental Protection Agency (cont'd)

4.11.2 Noise (Pages 4-167 – 4-176)

Table 4.11.2-3 Calculated Operational Noise Levels for New and Existing Compressor Stations (DEIS Pages 4-171 and 4-172)

Compressor Stations
Some of the distances in the figures/maps used in the *Appendixes Q Noise Sensitive Areas (NSAs) Associated with the Projects* are different from those on Table 4.11.2-3. Specifically, Appendix Q-4 identifies NSA #1 as 400 feet from the Crawford Compressor Station and the table states that it is 250 feet. Additionally, the table shows that there is no potential increase above ambient noise levels. This does not seem correct considering how close the nearest NSA is to the station.

FA2-70 **Recommendation:** We recommend FERC review the NSA distance information on Table 4.11.2-3 and the information provided in Appendix Q, and rectify any discrepancies accordingly in the FEIS documentation. In addition, we recommend the FEIS Table 4.11.2-3 include corrected potential noise increases above ambient levels as applicable.

For the Oakhill Compressor Station, though Table 4.11.2-3 shows noise levels under the 55 dB threshold, there is an increase greater than 10 dB shown for NSA 1 and NSA 2.

FA2-71 **Recommendation:** We recommend that the increase in noise levels greater than 10 dB shown for NSA 1 and NSA 2 be recognized in the text of the DEIS. In addition, we suggest that some public outreach be done to communicate with the public regarding this increase and potential mitigation.

Blowdown Events – Compressor Stations and Pipelines
The DEIS (Page 4-173) states: *"In addition to the operational noise discussed above, blowdown events would also generate noise impacts. The duration of a blowdown depends on factors such as the extent of the maintenance activity and the gas pressure, and would generally last between 20 minutes and 2 hours."*

FA2-72 **Recommendations:** In the description for blowdown events, we recommend the FEIS explain the frequency of maintenance activities that cause the blowdown events. Also, provide the expected frequency (number of times per/day, month and/or years) that unplanned pipeline blowdown events typically occur.

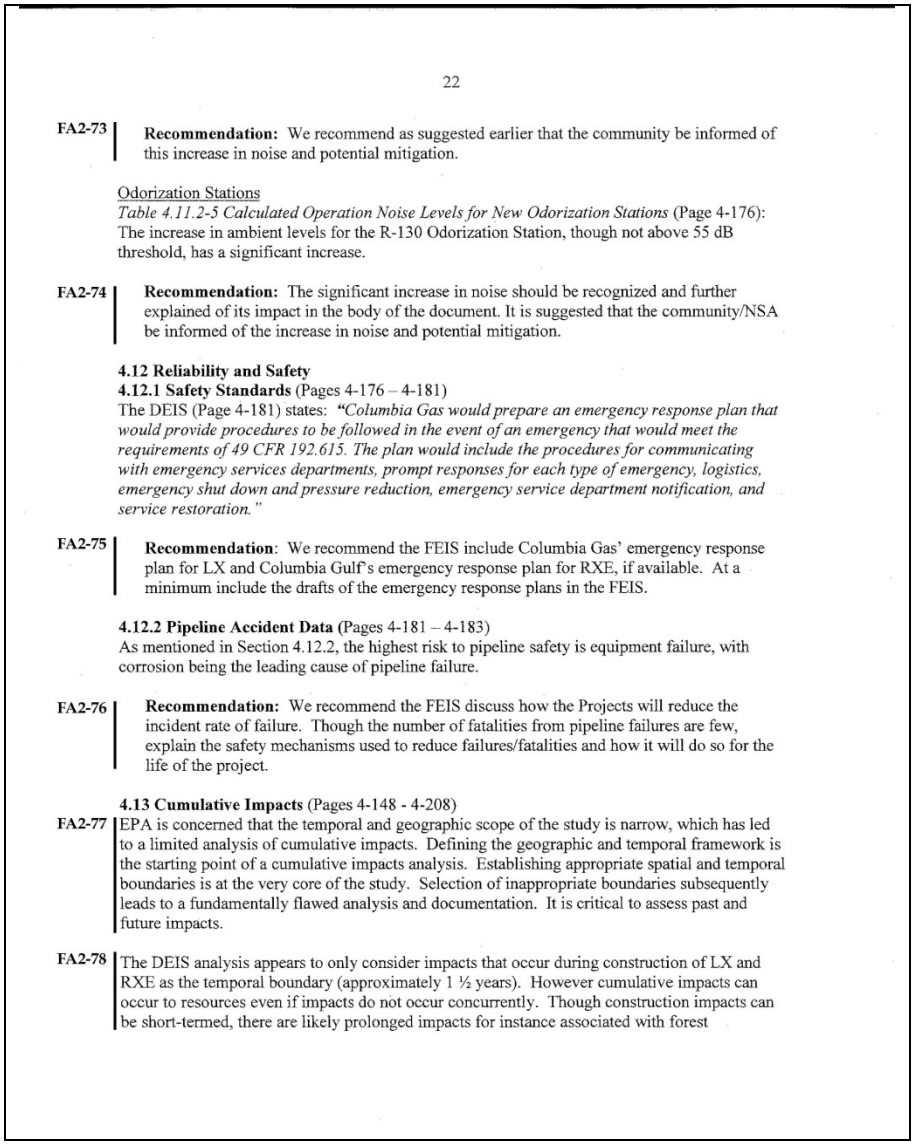
Regulator Stations
Table 4.11.2-4 – Calculated Operation Noise Levels for New and Existing Regulator Stations (Page 4-174)
Table 4.11.2-4 shows the increase in ambient levels are not above 55 dB for the McArthur Regulator Station; however, it does show an increase greater than 10 dB for NSA 1 above ambient noise levels.

FA2-70 Updated NSA figures are provided in Appendix Q of the final EIS. For the Crawford CS, the existing compressor equipment is the dominant noise source at the NSAs. Noise addition is performed on a logarithmic scale. The work proposed for the Crawford CS includes minor piping modifications and regulator facilities. These modifications would add minor amounts of noise. Therefore, table 4.11.2-3 and related text accurately identifies no noise increases above ambient levels indicated for the Crawford CS.

FA2-71 The text of the EIS states that operation of the Oak Hill Compressor Station would result in perceptible increases in noise levels. The EIS also summarizes the acoustical mitigation measures that would be implemented for each compressor station. All landowners within a 0.5 miles radius of the compressor station were included on the environmental mailing list, received the Notice of Intent announcing scoping, and received copies of the draft EIS. Although the noise increase may be noticeable, projected noise levels are significantly below our 55 decibel day-night sound level criterion at maximum load, and would not be significant.

FA2-72 The EIS clearly notes that unplanned pipeline blowdowns only occur in emergency situations. It is unreasonable to predict the frequency of non-standard operating conditions, particularly emergency, unplanned blowdown events. The EIS does provide the average duration of an individual blowdown and the maximum estimated noise at the NSAs.

FA2 – U.S. Environmental Protection Agency (cont'd)



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FA2-73 **Recommendation:** We recommend as suggested earlier that the community be informed of this increase in noise and potential mitigation.

Odorization Stations
Table 4.11.2-5 Calculated Operation Noise Levels for New Odorization Stations (Page 4-176): The increase in ambient levels for the R-130 Odorization Station, though not above 55 dB threshold, has a significant increase.

FA2-74 **Recommendation:** The significant increase in noise should be recognized and further explained of its impact in the body of the document. It is suggested that the community/NSA be informed of the increase in noise and potential mitigation.

4.12 Reliability and Safety
4.12.1 Safety Standards (Pages 4-176 – 4-181)
The DEIS (Page 4-181) states: *"Columbia Gas would prepare an emergency response plan that would provide procedures to be followed in the event of an emergency that would meet the requirements of 49 CFR 192.615. The plan would include the procedures for communicating with emergency services departments, prompt responses for each type of emergency, logistics, emergency shut down and pressure reduction, emergency service department notification, and service restoration."*

FA2-75 **Recommendation**: We recommend the FEIS include Columbia Gas' emergency response plan for LX and Columbia Gulf's emergency response plan for RXE, if available. At a minimum include the drafts of the emergency response plans in the FEIS.

4.12.2 Pipeline Accident Data (Pages 4-181 – 4-183)
As mentioned in Section 4.12.2, the highest risk to pipeline safety is equipment failure, with corrosion being the leading cause of pipeline failure.

FA2-76 **Recommendation:** We recommend the FEIS discuss how the Projects will reduce the incident rate of failure. Though the number of fatalities from pipeline failures are few, explain the safety mechanisms used to reduce failures/fatalities and how it will do so for the life of the project.

4.13 Cumulative Impacts (Pages 4-148 - 4-208)
FA2-77 EPA is concerned that the temporal and geographic scope of the study is narrow, which has led to a limited analysis of cumulative impacts. Defining the geographic and temporal framework is the starting point of a cumulative impacts analysis. Establishing appropriate spatial and temporal boundaries is at the very core of the study. Selection of inappropriate boundaries subsequently leads to a fundamentally flawed analysis and documentation. It is critical to assess past and future impacts.

FA2-78 The DEIS analysis appears to only consider impacts that occur during construction of LX and RXE as the temporal boundary (approximately 1 ½ years). However cumulative impacts can occur to resources even if impacts do not occur concurrently. Though construction impacts can be short-termed, there are likely prolonged impacts for instance associated with forest

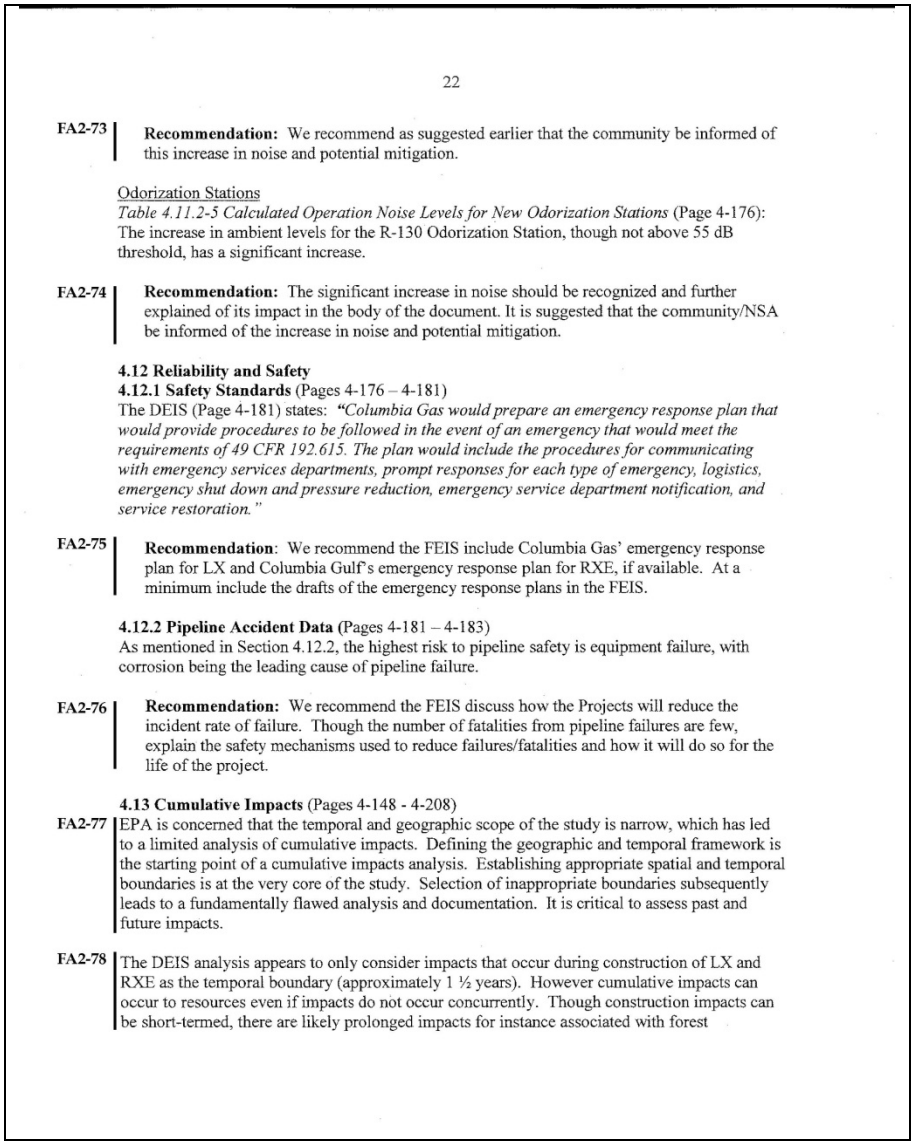
FA2-73 Section 4.11.2.3 of the EIS shows that operation of the McArthur Regulator Station would result in perceptible increases in noise levels. The EIS also summarizes the acoustical mitigation measures that would be implemented for each regulator station. All directly affected and abutting landowners for the regulator station were included on the environmental mailing list, received the Notice of Intent announcing scoping, and received copies of the draft EIS. Although the noise increase may be noticeable, projected noise levels at full load are significantly below our 55 decibel day-night sound level criterion, and would not be significant.

FA2-74 The EIS identifies various ranges in noise change and the resulting perception to the human ear. We disagree with EPA's assertion that a 10 decibel increase in noises equates to a significant increase, and instead we maintain the scientific basis that this increase is perceived as a doubling of noise (i.e., twice a loud). Alternatively, in section 4.11.2.1 the EIS notes that the 55 decibel day-night sound level criterion is used to assess noise impacts. While operation of the R-130 Odorization Station would result in noise levels that are perceived to be twice as loud as the existing (very quiet) levels, the noise contribution from the odorization station would be well below our criterion, and therefore not significant. Also, all directly affected and abutting landowners for the odorization station were included on the environmental mailing list, received the Notice of Intent announcing scoping, and received copies of the draft EIS.

FA2-75 Section 4.12.1 discloses that Columbia Gas would prepare an emergency response plan and the general topics that would be addressed in the plan, per DOT requirements. The DOT is responsible for ensuring compliance with its regulations. We do not have or maintain any copies in draft or final form of this plan. Commenters wishing to review this plan should contact the DOT.

FA2-76 Section 4.12.1 of the EIS thoroughly summarizes the numerous DOT pipeline safety standards that are required to be implemented to reduce the number of incidents on a pipeline system. These include different design requirements for various class locations, development of an integrity management program and inspection frequency, marking pipelines, and use of the "Call Before You Dig" and "One Call" programs. Section 4.12.2 of the EIS also states that the use of both an external protective coating and a cathodic protection system, required on all pipelines installed after July 1971, significantly reduces the corrosion rate compared to unprotected or partially protected pipe.

FA2 – U.S. Environmental Protection Agency (cont'd)



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FA2-78 The DEIS analysis appears to only consider impacts that occur during construction of LX and RXE as the temporal boundary (approximately 1 ½ years). However cumulative impacts can occur to resources even if impacts do not occur concurrently. Though construction impacts can be short-termed, there are likely prolonged impacts for instance associated with forest

FA2-77 The CEQ regulations define cumulative impacts as "the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." A cumulative impacts analysis may require an analysis of actions unrelated to the proposed project if they occur in the project area or region of influence of the project being analyzed. CEQ states that "it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful." Consistent with CEQ guidance, to determine the scope of the cumulative impact analysis in an EIS, Commission Staff establishes a project-specific region of influence to define the area affected by the proposed action in which existing and reasonably foreseeable future projects may also result in cumulative impacts. A project's region of influence varies depending on the resource being discussed. The project-specific regions of influence defined for the LX and RXE Projects cumulative impact assessment are described in section 4.13 of the final EIS.

Section 4.13 of the final EIS provides our assessment of potential cumulative impacts associated with the proposed Projects and other known past, present and reasonably foreseeable future projects within the defined project-specific regions of influence for cumulative effects.

FA2 – U.S. Environmental Protection Agency
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FA2-78 fragmentation, invasive species, etc. Even projects that do not overlap geographically can contribute to cumulative impacts to streams, wetlands, forests, habitat and other resources.

FA2-79 For example, as large forested blocks are bisected by LXP and RXE, the interior forest habitat for those blocks is decreased. The remaining blocks in combination with other actions, including other pipeline projects, are further reduced. The interior forest habitat is greatly reduced for wildlife and forest interior dwelling species. These types of long-term cumulative impacts on wildlife and habitat should be considered.

FA2-80 Cumulative impacts temporal boundaries are often set a few decades into the past and future to include appropriate trend and facility life expectancy. It is typical to use a baseline time frame of 30 to 50 years past, prior to sprawl and extensive highway networks. It is important to analyze the trends in resources, to identify if there have been repeated impacts or degradation of the resources. A thorough analysis of impacts could help guide the selection or placement of appropriate mitigation for LX impacts or highlight areas where additional avoidance and minimization may be warranted. EPA would be interested in discussing the selection of a more appropriate and inclusive boundary with FERC.

FA2-81 **Recommendations:** EPA recommends FERC consider expanding the cumulative impacts study beyond what is currently considered in the DEIS. Consider projects that do not necessarily overlap directly with LX and RXE construction boundaries. Include a map(s) to show the various spatial/geographic boundaries used for the cumulative impact assessment.

EPA is concerned about cumulative impacts to aquatic resources, groundwater, and water quality.

FA2-82 **Recommendations:** We recommend that the cumulative impact analysis of surface and groundwater be expanded, including cumulative impacts to water quality, headwater streams, high quality and/or sensitive aquatic resources. Aquatic resources have the potential to be cumulatively impacted by many factors, including waterbody crossings, change in recharge patterns, clearing, blasting, and water withdraws for hydrostatic testing. It may be prudent to consider these impacts in combination with other past, present and reasonably foreseeable actions at the watershed scale.

FA2-83 We recommend that FERC's cumulative impact analysis present potential cumulative impacts regardless of the various prepared or required plans to be implemented by LX, any implementation of construction, restoration or mitigation plans from other actions, or permits or regulatory thresholds. While it may be appropriate to recognize or consider the relation to these, please keep in mind that this is not sufficient to determine potential effects of past, current and reasonably foreseeable future activities to resources or if/ how project impacts can be mitigated.

4.13.5.11 Climate Change (Pages 4-206 – 4-208)
DEIS (Pages 4-206 and 4-207), discusses the U.S. Global Change Research Program's (USGCRP) May 2014 report *Climate Change Impacts in the United States* and lists eleven observations of environmental impacts with a high or very high level of confidence that may be

FA2-78 The cumulative impact assessment was updated in table 4.13-1 of the final EIS to consider additional projects based on an expanded temporal boundary.

FA2-79 Section 4.13.5.3 of the final EIS addresses cumulative vegetation impacts, including forested habitats. We concluded that the LX Project would have significant impact on forest resources. In terms of cumulative impacts with other past, present, and reasonably foreseeable future projects, we concluded that cumulative impacts on forest resources could occur in areas where there is a concentration of proximal and overlapping activity in the region of influence. However, as we state in the final EIS, while cumulative impacts on forested areas would not be inconsequential, siting of pipeline projects within and adjacent to existing rights-of-way, where possible, along with implementation of best management practices, Columbia Gas' ECS and FERC's Plan and Procedures, adequately minimizes and mitigates impacts on forested lands to the extent possible. The overall impact of these projects with the proposed mitigation, and our recommendations made throughout this EIS, would reduce overall cumulative impacts to less than significant levels.

FA2-80 Table 4.13-1 of the final EIS was updated to include additional projects and developments.

FA2-81 See the response to comment FA2-77. We believe the information and analysis provided in the final EIS is sufficient.

FA2-82 Section 4.13.5.2 of the final EIS includes our assessment of cumulative impacts on water resources, including groundwater, waterbodies, and wetlands, including consideration of other past, present, and reasonably foreseeable future projects. We believe the information and analysis provided in the final EIS is sufficient.

FA2-83 Section 4.13 of the final EIS was updated to include additional projects and developments.

attributed to climate change in the Midwest region. One observation listed is: *"annual precipitation has increased by about 20 percent over the past century, particularly from increased high intensity rainfall events, and this trend is projected to continue."*

FA2-84 **Recommendation:** EPA recommends the FEIS discuss the Projects Proponents' and FERC's consideration of the Projects' susceptibility to impacts associated with climate change and identify mitigation measures. For example, discuss the risk of the Projects' pipelines being exposed due to increases in flooding, scouring, and/or upland erosion due to expected heavy precipitation events associated with climate change. (Also see our comments regarding Greenhouse Gas Emissions and Methane Leakage above under **4.11.1.2 Air Regulatory Requirements.)**

5.0 Conclusions and Recommendations

The DEIS Page 5-1) states: **"***The conclusions and recommendations presented in this section are those of FERC environmental staff. Our conclusions and recommendations were developed with input from the EPA, COE, FWS, OEPA, PADEP, PADCNR, WVDEP, WVDNR, and KYDEP as cooperating agencies."*

FA2-85 **Recommendation:** This chapter of the FEIS will need to be updated after consideration of additional input provided by the cooperating agencies/resources agencies and others since FERC's release of the DEIS for public and agency review and comment.

Additional EPA Recommendations:

FA2-86 • For those facilities that will be equipped with emergency generator(s). EPA wants to make you aware that there are two specific rules for new source engines. One of these rules would apply to generators at the facilities. In order to learn and comply with these rules please visit: http://www.epa.gov/region1/rice/.

FA2-87 • EPA has issued three final rules that together will curb emissions of methane, smog-forming volatile organic compounds (VOCs) and toxic air pollutants such as benzene from new, reconstructed and modified oil and **gas** sources, while providing greater certainty about Clean Air Act permitting requirements for the industry. To comply with these rules please go to: https://www3.epa.gov/airquality/oilandgas/actions.html

FA2-88 • EPA recommends that for new equipment utilize contract specifications requiring advanced pollution controls and clean fuels: http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf and
http://www.epa.gov/cleandiesel/technologies/index.htm
Implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:

  ✓ Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits; and

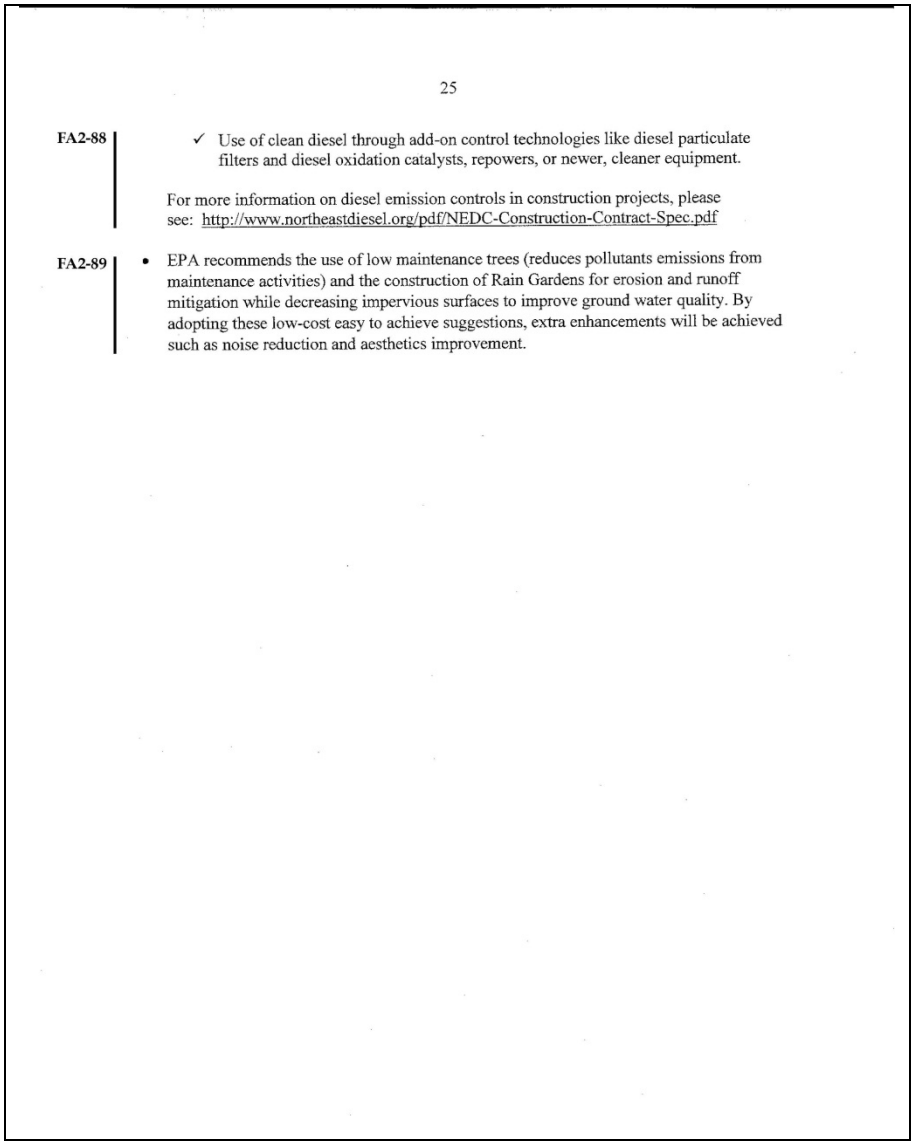
FA2-84 Buried natural gas pipelines across the United States are routinely exposed to heavy rainfall events and flooding. During operation of pipelines, pipeline operators conduct routine monitoring of the right-of-way to ensure the integrity of their pipelines, including checking for pipe exposure from scouring or erosion. Section 4.13.5.11 of the EIS has been updated to include this information.

FA2-85 Comment noted. Section 5.1 was updated in the final EIS to reflect our response to public comments received on the draft EIS and the revisions made throughout the final EIS.

FA2-86 Comment noted. Each state maintains an air permitting agency with the authority to enforce compliance with applicable regulations.

FA2-87 Comment noted. Each state maintains an air permitting agency with the authority to enforce compliance with applicable regulations.

FA2-88 Comment noted.



25

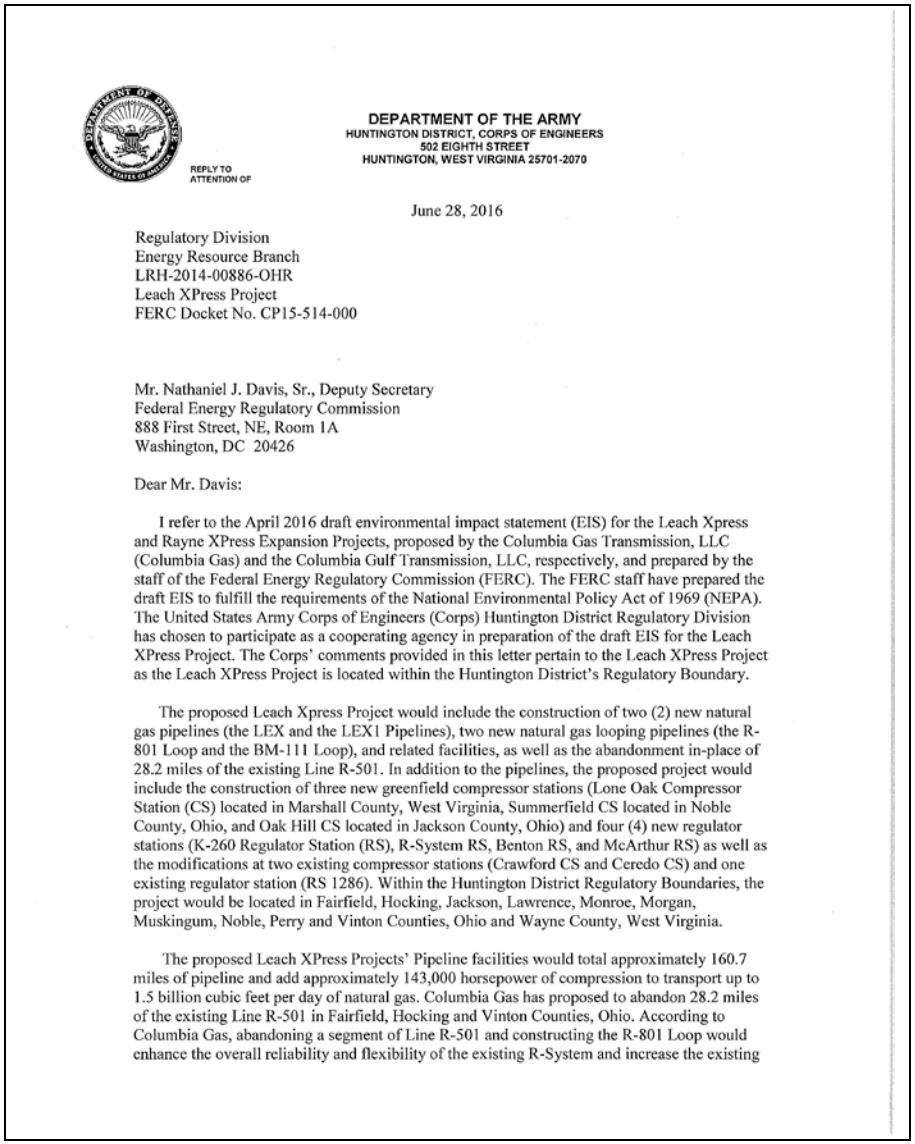
FA2-88 ✓ Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.

For more information on diesel emission controls in construction projects, please see: http://www.northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf

FA2-89 • EPA recommends the use of low maintenance trees (reduces pollutants emissions from maintenance activities) and the construction of Rain Gardens for erosion and runoff mitigation while decreasing impervious surfaces to improve ground water quality. By adopting these low-cost easy to achieve suggestions, extra enhancements will be achieved such as noise reduction and aesthetics improvement.

FA2-89 Comment noted.

FA3 – U.S. Army Corps of Engineers



DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO ATTENTION OF

June 28, 2016

Regulatory Division
Energy Resource Branch
LRH-2014-00886-OHR
Leach XPress Project
FERC Docket No. CP15-514-000

Mr. Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Dear Mr. Davis:

I refer to the April 2016 draft environmental impact statement (EIS) for the Leach Xpress and Rayne XPress Expansion Projects, proposed by the Columbia Gas Transmission, LLC (Columbia Gas) and the Columbia Gulf Transmission, LLC, respectively, and prepared by the staff of the Federal Energy Regulatory Commission (FERC). The FERC staff have prepared the draft EIS to fulfill the requirements of the National Environmental Policy Act of 1969 (NEPA). The United States Army Corps of Engineers (Corps) Huntington District Regulatory Division has chosen to participate as a cooperating agency in preparation of the draft EIS for the Leach XPress Project. The Corps' comments provided in this letter pertain to the Leach XPress Project as the Leach XPress Project is located within the Huntington District's Regulatory Boundary.

The proposed Leach Xpress Project would include the construction of two (2) new natural gas pipelines (the LEX and the LEX1 Pipelines), two new natural gas looping pipelines (the R-801 Loop and the BM-111 Loop), and related facilities, as well as the abandonment in-place of 28.2 miles of the existing Line R-501. In addition to the pipelines, the proposed project would include the construction of three new greenfield compressor stations (Lone Oak Compressor Station (CS) located in Marshall County, West Virginia, Summerfield CS located in Noble County, Ohio, and Oak Hill CS located in Jackson County, Ohio) and four (4) new regulator stations (K-260 Regulator Station (RS), R-System RS, Benton RS, and McArthur RS) as well as the modifications at two existing compressor stations (Crawford CS and Ceredo CS) and one existing regulator station (RS 1286). Within the Huntington District Regulatory Boundaries, the project would be located in Fairfield, Hocking, Jackson, Lawrence, Monroe, Morgan, Muskingum, Noble, Perry and Vinton Counties, Ohio and Wayne County, West Virginia.

The proposed Leach XPress Projects' Pipeline facilities would total approximately 160.7 miles of pipeline and add approximately 143,000 horsepower of compression to transport up to 1.5 billion cubic feet per day of natural gas. Columbia Gas has proposed to abandon 28.2 miles of the existing Line R-501 in Fairfield, Hocking and Vinton Counties, Ohio. According to Columbia Gas, abandoning a segment of Line R-501 and constructing the R-801 Loop would enhance the overall reliability and flexibility of the existing R-System and increase the existing

FA3 – U.S. Army Corps of Engineers
(cont'd)

system capacity. As stated in the draft EIS, the various replacement and upgrade projects along the existing R-System would allow Columbia Gas to modernize the system facilities, improve system integrity, and enhance service reliability and flexibility.

FA3-01 The Corps' authority to regulate waters of the United States is based, in part, on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires that a Department of the Army permit be obtained prior to the discharge of dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires that a Department of the Army permit be obtained for any work in, on, over or under a navigable water. The proposed Leach XPress Project would include the temporary discharge of dredge and/or fill material into waters of the United States and activities that are subject to the requirements of Section 10 and Section 404. Therefore, the comments provided in Enclosure 1 are in response to activities subject to the Corps' regulatory jurisdiction. In addition, the comments provided in Enclosure 1 are specific to the main body of the draft EIS as a review of all of the appendices could not be completed due to compatibility/formatting issues with the document.

Thank you for allowing the Corps to provide comments on the draft EIS document. If you have any questions concerning the above, please contact Ms. Audrey Richter at (304) 399-5257 or by email at Audrey.M.Richter@usace.army.mil.

Sincerely,

SPAGNA.TERESA.D.1229740519
Digitally signed by SPAGNA.TERESA.D.1229740519
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SPAGNA.TERESA.D.1229740519
Date: 2016.06.28 15:00:36 -04'00'

Teresa Spagna
Chief, North Branch

Enclosures:

cc (via email):
Mr. Juan Polit, FERC

FA3-01 Comment noted.

FA3 – U.S. Army Corps of Engineers
(cont'd)

Enclosure 1- Corps Comments on the draft EIS document

FA3-02 | 1) **Section 2.3.2.1 Wetland Crossings** - tree clearing and the associated stump removal and grading associated with construction activities should be minimized to the maximum extent practicable to reduce environmental effects to palustrine forested and palustrine scrub-shrub wetlands.

FA3-03 | 2) **Section 2.3.2.2 Waterbody Crossings** - Conventional open cut methods would be used for waterbody crossings. The pipeline trench would be cut in-stream and stream flow would be maintained at all times. Dam-and-Pump crossing methods and flume crossing methods, modifications of the conventional open-cut crossing method, would also be utilized for construction. The Corps requests that construction activities be performed during low flow conditions, to the greatest extent practicable, and sediment and erosions control measures must be implemented during construction activities and until the waterbody crossing is stabilized.

FA3-04 | 3) **Section 2.3.2.3 Horizontal Direction Drill Crossings**- A horizontal direction drill (HDD) crossing method would also be used to cross the Hocking River (a river subject to Section 10 up to River Mile 79.0), additional intermittent and perennial streams and various wetlands which are not listed in Table 2.3.2-1 titled *Proposed Horizontal Direction Drill Crossings Associated with the LX Project*.

FA3-05 | 4) **Section 4.3.2.1 Existing Surface Water Resources-Pipeline Facilities**- Revisions to the stream and wetland delineation for the Leach XPress project were required as a result of field investigations conducted on April 25 through April 27, 2016. The data provided in the draft EIS-Section 4.3.2.1 *Existing Surface Water Resources- Pipeline Facilities*, reflects survey data collected in 2014 and 2015; therefore, it is recommended that the information provided in the draft EIS should be revised to ensure it is consistent with the most up-to-date aquatic resource information. The FERC will be provided with a copy of the preliminary jurisdictional determination issued for the project by the Huntington District Regulatory Division.

FA3-06 | 5) **Section 4.3.2.3 Water Classifications- Ohio and West Virginia**: In-stream or in-water work restriction periods have been assigned for various streams in Ohio and West Virginia. In the State of Ohio, refer to the Ohio Environmental Protection Agency (OEPA) Ohio Administrative Code, Chapter 3745-1, and in the State of West Virginia refer to the West Virginia Department of Environmental Protection Water Quality Standards for stream designations and any applicable in-stream or in-water work exclusion periods. The aforementioned information is described in more detail in Section 4.6.2.1 E*xisting Aquatic Resources*; however, it is first briefly discussed in Section 4.3.2.3.

FA3-07 | 6) **Section 4.3.2.7 General Impacts and Mitigation-** In addition to the five (5) streams proposed to be permanently impacted by the discharge of dredged and/or fill material associated with the construction of new culverts or the replacement of existing culverts, one (1) wetland, Wetland WA8HO060, would be permanently affected by the discharge of dredged and/or fill material associated with the installation of a permanent culvert.

FA3-08 | 7) **Section 4.4.1.1 Wetland Types, Section 4.4.2 Wetland Construction Procedures, and Section 5.2 Conclusions of the Environmental Analysis-Wetlands** - As stated in number 4

FA3-02 Comment noted. The Projects' ECSs incorporate these best management practices.

FA3-03 Comment noted. The Projects' ECSs incorporate these best management practices.

FA3-04 Table 2.3.2-1 has been edited to include information on the Proposed Horizontal Directional Drill Crossing for the Hocking River.

FA3-05 Comment noted. Updates as available have been included in the final EIS.

FA3-06 Comment noted.

FA3-07 Section 4.4.3 in the final EIS has been revised to include 0.1 acre impact to wetlands related to the R-System RS tie-in.

FA3 – U.S. Army Corps of Engineers
(cont'd)

FA3-08 above, revisions to the stream and wetland delineation for the Leach XPress Project were required as a result of field investigations conducted on April 25 through April 27, 2016. The data provided in the draft EIS-Section 4.4.1.1 *Wetland Types,* Section 4.4.2 *Wetland Construction Procedures*, and Section 5.2 *Conclusions of the Environmental Analysis-Wetlands* reflects were collected in 2014 and 2015; therefore, it is recommended that the information provided in the draft EIS should be revised to ensure it is consistent with the most up-to-date aquatic resource information. The FERC will be provided with a copy of the preliminary jurisdictional determination issued for the project by the Huntington District Regulatory Division.

FA3-09 8) **Sections 4.4.3 General Impacts and Mitigation:** Table 4.4.3-1 titled *Summary of Wetland Resources Impacted by the LX Project Pipeline Facilities* does not clearly articulate the difference between the temporary and permanent discharge of dredged or fill material into waters of the United States for evaluation under Section 404. It is recommended that a footnote be added to Table 4.4.3-1 to state "construction and operational maintenance would not result in a loss of waters (i.e., streams or wetlands) as the proposed discharges of dredged or fill material into waters of the United States would be temporary in nature."

FA3-10 9) **Section 4.4.5 Compensatory Mitigation:** As indicated in Section 4.4.5, development of a compensatory mitigation plan is underway to address measures to reduce project footprint impacts on wetlands, including the development of invasive species management, restoration, monitoring, and potential compensation beyond the project's footprint. Compensatory mitigation must comply with the provisions provided in 33 CFR 332. Where certain functions or services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous (emergent) wetland in a permanently maintained utility right-of-way, mitigation may be required to reduce the adverse effect of the project to a minimal level.

FA3-11 10) **Section 4.7.2 Federally Listed Species and Species Proposed for Listing** and **Section 5.1 Conclusions and Recommendations-Special Status Species**-Portions of the project fall under the coverage of the United States Fish and Wildlife Service (USFWS) approved Multi-Species Habitat Conservation Plan (MSHCP) for Columbia Gas. However, concurrence from the USFWS has not been received for the non-MSHCP species with the potential to occur in the project corridor where additional consultation is required pursuant to Section 7 of the Endangered Species Act. Therefore, the Corps cannot issue provisional authorizations pending completion of Section 7 consultation under the Endangered Species Act.

FA3-12 11) **Section 4.10 Cultural Resources, Section 4.10.7 General Impacts and Mitigation** and **Section 5.1 Conclusions and Recommendations-Cultural Resources:** Compliance with Section 106 of the National Historic Preservation Act has not been completed for the proposed project. The Corps cannot issue provisional authorizations pending completion of Section 106 consultation under the National Historic Preservation Act.

FA3-13 12) **Appendix B Project Overview Maps** – It is recommended that additional location detail (i.e., county information) should be provided on the aforementioned maps to enable the public and agencies to easily locate any proposed project pipeline and its associated facilities.

FA3-08 Comment noted. Updates as available have been included in the final EIS.

FA3-09 Comment noted, a footnote has been added to the Final EIS to clarify wetland resources impacted.

FA3-10 Comment noted. We have recommended in section 4.4.5 that Columbia Gas provide its final wetland compensation plan with the Commission, prior to construction.

FA3-11 Section 4.7 of the final EIS has been revised to reflect current U.S. Fish and Wildlife Service clearances for threatened and endangered species associated with the proposed Projects. FERC staff would complete any necessary ESA Section 7 consultation with the FWS for the Indiana bat and Northern long eared bat on non-covered lands prior to authorizing Columbia Gas to commence construction of Project facilities.

FA3-12 Comment noted. Permit applications will be filed with COE. Section 5.2, Item 9 of the final EIS provides the following recommended mitigation measure: Prior to receiving written authorization from the Director of OEP to commence construction of their respective Project facilities, Columbia Gas and Columbia Gulf shall file documentation that they have received all applicable authorizations required under federal law (or evidence of waiver thereof). Commission staff will not allow construction to commence until Columbia Gas and Columbia Gulf receive all applicable federal permits and authorizations.

FA3-13 County names are shown on the Systems Alternatives Map (Figure 3.2.1-1) and Pipeline Alternatives Map (Figure 3.3.1-1) Detailed maps are also located in Resource Report 1, Appendix 1A.

COMPANIES AND ORGANIZATIONS
CO1 – Emens & Wolper Law Firm Co. LPA

CO-1

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Columbia Gas Transmission Leach XPress Pipeline	)	**Docket No. CP15-514-000**

COMMENTS/REQUEST ("REQUEST") FOR THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC") TO AMEND ITS DRAFT ENVIRONMENTAL IMPACT STATEMENT ("DEIS") PRIOR TO ISSUANCE OF A FINAL ENVIRONMENTAL IMPACT STATEMENT ("FEIS"), AND TO INCLUDED CERTAIN CONDITIONS IN A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY ("CPCN"), IF ISSUED TO LEACH XPRESS

Emens & Wolper Law Firm Co. LPA ("E&W"), on behalf of numerous landowners it represents who are directly affected by the above captioned proceeding ("Landowners") hereby requests that FERC (1) amend the Leach XPress DEIS issued February 19, 2016 as requested herein, and (2) if FERC decides to issue to the Leach XPress a Certificate of Public Convenience and Necessity ("CPCN") that the conditions described herein be satisfied prior to issuance or be included in the CPCN, as the context indicates.

Attached is a Memorandum in Support setting forth the reasons and bases for said amendments to the DEIS, and for certain conditions if the Leach XPress pipeline project receives a CPCN. E&W also appeared on behalf of its Landowner clients at the DEIS public hearing in Logan, Ohio on May 24, 2016 and voiced comments and requests on the DEIS.

[1]

CO1 – Emens & Wolper Law Firm Co. LPA (cont'd)

A confidential and privileged list of Landowner clients has been previously provided to FERC. This list of clients has also been provided to Leach XPress representatives, and is continuously being updated. E&W filed a Motion to Intervene as a representative of its then current and future landowner clients, dated July 9, 2015.

Respectively submitted,

/s/ J. Richard Emens
J. Richard Emens
Craig J. Wilson
Emens & Wolper Law Firm Co., LPA
One Easton Oval, Suite 550
Columbus, Ohio 43219
Telephone: 614-414-0888
Fax: (614) 414-0898
Email: demens@emenswolperlaw.com
cwilson@emenswolperlaw.com
Counsel for Landowners

[2]

CO-2

CO1 – Emens & Wolper Law Firm Co. LPA (cont'd)

MEMORANDUM IN SUPPORT OF REQUEST FOR FERC TO AMEND ITS DEIS PRIOR TO ISSUANCE OF A FEIS, AND TO INCLUDED CERTAIN CONDITIONS IN A CPCN, IF ISSUED TO LEACH XPRESS

I. COMMENTS AND REQUESTS

CO-01-01

1. Page ES-1 (second paragraph under the heading of "Proposed Action") of the DEIS recites "According to Columbia Gas, the proposed pipeline was developed in response to market demand for the transportation of stranded natural gas supplies from the existing production region to areas of higher demand and premium markets." The DEIS does not provide backup for this statement, and especially no basis for use of the term "stranded." In fact, DEIS pages 4-186 through 4-191 list numerous nearby pipelines while ignoring a number of others (e.g Rockies Express, Texas Eastern OPEN, Blue Grass Express, etc.). There appears to be a serious question of whether all of the currently proposed FERC natural gas pipelines in Ohio (e.g. Rover Pipeline, Nexus, Columbia Leach XPress) are necessary. We request any reference to "stranded" gas be deleted from the DEIS and not included in the FEIS.

CO-01-02

2. Page ES-9 (second paragraph under the heading of "Socioeconomics") of the DEIS recites "Based on our experience, we are not aware of instances where an interstate natural gas pipeline has resulted in impacts on property values." Who is the "our" in this sentence? The Commisioners? The FERC staff? The outside contractors hired by FERC to assist with the DEIS (who also are employed by pipeline companies)? We request that the quoted sentence be deleted as it is included only to benefit the Leach XPress pipeline project which is inconsistent with FERC's stated activities – and is detrimental to landowners. We believed FERC staff member (and Rover Project Manager) Kevin

[3]

CO-01-01 As stated in the Alternatives Considered section of the Executive summary, an analysis of system alternatives including an evaluation of whether existing pipelines could meet the projects objectives was conducted. The conclusion is that there is no available and suitably located capacity for existing pipeline systems to transport the required volumes of natural gas without further construction or expansion of facilities. There are also currently no existing systems with the capacity to transport the contracted load that connect the existing production region to the identified Project markets. Without a viable transmission source between the gas supply region and the intended market this resource will remain "stranded".

CO-01-02 Comment noted, see response to P3-05.

CO1 – Emens & Wolper Law Firm Co. LPA (cont'd)

CO-01-02 Bowman when he stated at the Rover DEIS hearing in Hamler, Ohio on March 21, 2016 "The FERC . . . is not an advocate for the Project." We assume the same principle applies to the Leach XPress project; if we are wrong in this assumption we would appreciate being so advised.

CO-01-03 **3.** Page 2-33, paragraph 2.5.3 provides "Columbia Gas and Columbia Gulf [("CGs")] have committed to funding a separate FERC third-party compliance monitoring program during the construction phase of each project." Our Landowner clients and we are appreciative of this funding (and wish other natural gas pipelines would do the same; hopefully the FERC staff will make that a condition of other Ohio FERC natural gas pipelines). We request that such funding continue following construction for a period of 5 years, and be coordinated with the 2-year and 3-year monitoring described in paragraph 2.5.5 on page 2-34, and that those monitoring periods be extended for the full 5-year period after construction is completed. Recent experience with other Ohio pipelines has shown that additional repair and remediation often needs to be done in the 5-year period after construction is completed.

CO-01-04 **4.** The three paragraphs on page 4-122 in paragraph 4.8.2 with the heading "Landownership and Easement Requirement" contain the following sentences:

(i) "Pipeline operators must obtain easements from existing landowners to construct and operate authorized facilities, or acquire the land on which the facilities would be located.";

(ii) "Compensation would be fully determined through negotiations between Columbia Gas or Columbia Gulf and the landowner."; and

[4]

CO-01-03 As stated in section 2.5.5 Columbia Gas and Columbia Gulf would conduct follow-up inspections of disturbed upland areas after the first and second growing seasons. Columbia Gas would submit quarterly reports to FERC for at least two years following construction that would document any identified problems that require remediation. In accordance with their ECP's Columbia Gas and Columbia Gulf would monitor the success of wetland vegetation annually for the first three years (or as required by permit) after construction or until wetland revegetation is successful. If revegetation is not successful, after three years Columbia Gas and Columbia Gulf are committed to working with a professional wetland ecologist to develop and implement a plan to actively revegetate with native wetland plant species. As stated in section 2.5.5, if it is determined that the success of any of the restoration activities is not adequate at the end of the respective timeframes, Columbia Gas and Columbia Gulf would be required to extend their post-construction monitoring programs.

CO-01-04 As stated in section 4.9.5 Columbia Gas has committed to mitigate for impacts by compensating landowners affected by the project. If the LX and RXE projects require permanent or temporary use of land affecting property owner income, normal practice is for local appraisers to review the placement of the pipeline and conduct appraisals on an individual property basis as a basis for compensation. The use of eminent domain is discussed in section 4.8.2.

CO1 – Emens & Wolper Law Firm Co. LPA (cont'd)

CO-01-04 **(iii)** "If an easement cannot be negotiated with a landowner and if the LX and RXE Projects are approved by the Commission, Columbia Gas and Columbia Gulf may use the right of eminent domain to acquire the property necessary to construct and operate its Projects."

It is too early to tell if the CGs will negotiate in good faith with landowners to provide adequate compensation for its takings of land from landowners. It is hoped the CGs will do so and not take the "cramdown" approach of another proposed Ohio FERC-pipeline which is "Either take the money and the easement terms we offer or we will sue and take your land by eminent domain."

CO-01-05 **5.** We applaud the FERC staff for the 33 recommendations of conditions, both pre-CPCN and post-CPCN and urge that compliance be required of all. We request that the concepts embodied in our paragraph I.3 above be included as conditions in a CPCN, if issued. We also repeat our requests that are set forth in our I.1 and I.2 above.

Emens & Wolper Law appreciates the opportunity to provide these comments and requests.

[5]

CO-01-05 Comment noted.

CO-5

CO1 – Emens & Wolper Law Firm Co. LPA (cont'd)

CERTIFICATE OF SERVICE

I hereby certify that I have served the document "COMMENTS/REQUEST ("REQUEST") FOR THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC") TO AMEND ITS DRAFT ENVIRONMENTAL IMPACT STATEMENT ("DEIS") PRIOR TO ISSUANCE OF A FINAL ENVIRONMENTAL IMPACT STATEMENT ("FEIS"), AND TO INCLUDED CERTAIN CONDITIONS IN A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY ("CPCN"), IF ISSUED TO LEACH XPRESS" under FERC docket CP15-513-000 upon each person designated on the official service list compiled by the Secretary in this preceding.

Dated this 10th day of June, 2016.

/s/ J. Richard Emens
J. Richard Emens
Craig J. Wilson
Emens & Wolper Law Firm Co., LPA
One Easton Oval, Suite 550
Columbus, Ohio 43219
Telephone: 614-414-0888
Fax: 614-414-0898
Email: demens@emenswolperlaw.com
cwilson@emenswolperlaw.com
Counsel for Landowners

[6]

CO-6

CO2 – Ohio Farm Bureau Federation

CO-7

OHIO FARM BUREAU

Forging a partnership between farmers and consumers.
•Working together for Ohio's farmers•

June 13, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 1st Street NE, Room 1A
Washington, DC 20426

Re: Docket Nos. CP15-514-000 and CP15-539-000

Dear Ms. Bose:

The Ohio Farm Bureau Federation ("OFBF" or "Farm Bureau") is pleased to provide comments on the Federal Energy Regulatory Commission ("FERC" or "Commission") draft Environmental Impact Statement ("EIS") on Docket Numbers CP15-514-000 and CP15-539-000 for the Columbia Gas Transmission, LLC ("Columbia Gas") Leach XPress and Columbia Gulf Transmission, LLC ("Columbia Gulf") Rayne XPress Expansion Projects ("Projects").

On September 26, 2014 and pursuant to procedures set forth in 18 C.F.R. §157.21 (2013), Columbia Gas and Columbia Gulf filed requests with FERC to initiate the Commission's pre-filing process for the Projects. On October 9, 2014 FERC granted these requests.

On June 8, 2015 and pursuant to procedures under Sections 7(b) and Section 7(c) of the Natural Gas Act ("NGA"), 15 USC §717f (2006) Columbia Gas filed an Application for a Certificate of Public Convenience and Necessity to construct, install, own, operate and maintain interstate pipeline facilities in Ohio, Pennsylvania and West Virginia. On July 29, 2015 and pursuant to procedures under Section 7(c) of the NGA, 15 USC §717f (2006) Columbia Gulf filed an Application for a Certificate of Public Convenience and Necessity to construct, install, own, operate and maintain interstate pipeline facilities in Kentucky. The Projects are projected to incorporate 160 miles of new pipeline construction and infrastructure upgrades in nine southeastern Ohio counties.

On January 13, 2015 the Commission staff gave notice that they would prepare an EIS on the Leach Xpress project, and on September 4, 2015 a notice was published on preparing and EIS for the Rayne Xpress project. The combined EIS will discuss how construction and operation of facilities planned by Columbia Transmission and Columbia Gulf would impact local communities. The EIS would focus on geology, soils, wetlands, water resources, air quality, wildlife, public safety, socioeconomic and cultural resources, as well as cumulative impacts. Local residents and community stakeholders were invited to provide written and/or verbal comments in conjunction with several FERC Scoping Meetings scheduled in September – October 2015.

On April 21, 2016 FERC staff issued a draft EIS for the Projects. The document details FERC's understanding and assessment of the potential environmental effects of construction and operation of the Projects in accordance of the National Environmental Policy Act ("NEPA"). The Commission held five public comment meetings along the projected pipeline route in West Virginia and Ohio in May 2016. Moreover, government agencies, stakeholder groups, impacted landowners and other interested parties were invited to send written comments on the draft EIS.

OFBF is a member organization whose mission is to forge partnerships between producers and consumers. The organization is proud of its extensive policy development process. Members and volunteer leaders in local communities identify concerns, create policies and initiate action plans to address them on local, state and national levels.

Next to labor, energy is the largest single cost input for many farm, small business and industrial operations. Consumers living in rural, suburban and urban neighborhoods are looking for opportunities

280 N. High Street • P.O. Box 182383 • Columbus, OH 43218-2383
Phone: 614.249.2400 • Fax: 614-249-2200 • Web site: www.ofbf.org

CO2 – Ohio Farm Bureau Federation (cont'd)

to control their energy costs, too. Farmers understand how effective development and installation of interstate pipeline infrastructure could benefit their local communities and neighbors.

Similarly, farmers have invested in forestry/woodlot improvement, pastureland enhancement, no-till cultivation, crop rotation, subsurface drainage and installation of USDA – NRCS approved conservation practices to protect natural resources and enhance agricultural production. Many farm families have witnessed how ineffective pipeline planning has impacted timber management, animal husbandry and/or crop production operations years after a pipeline project is completed. Farmland should be considered valuable local infrastructure, too.

OFBF and its member county Farm Bureaus feel that effective plans allowing for pipeline development while ensuring that impacted farms, rural residents and community facilities are made whole after a project is complete are vital. Farm Bureau has been involved with a variety of stakeholders working to address concerns relating to energy infrastructure development. Our activities include work with the following parties:

- **Landowners and Community Stakeholders:** Since September 2013 OFBF and its member county Farm Bureaus have sponsored over 230 *Energy Infrastructure Issues Briefings* where Columbia and other pipeline development projects were discussed. Information presented during these programs include:

  - Energy market trends showing how and why a variety of energy infrastructure development projects are impacting communities throughout Ohio.
  - Types of pipeline projects and how to identify which federal, state and/or local agencies have jurisdiction on their development.
  - How to participate and provide input in public and regulatory hearings.
  - How to work/communicate and record meeting results with pipeline company subcontractors and personnel.
  - Identifying, advocating and addressing individual landowner concerns and conditions that need to be protected and addressed as part easement/lease agreements.
  - Explaining how, when and under what conditions eminent domain provisions could be used.
  - Access to independent consultants, engineers and land improvement contractors to help with contract negotiations, repair/remediation strategies, economic and environmental assessments.
  - Identifying and retaining legal counsel to interpret legal documents, negotiate agreements and address concerns.

  Over 15,000 participants including farmers, rural residents, business leaders, government officials, utility representatives, energy developers and other stakeholders attended these local programs. Moreover, over 1700 phone calls requesting information and further assistance were addressed.

- **Energy Service Providers:** OFBF has worked with energy developer engineers, public policy representatives and outreach professionals to help them understand and appreciate the specific characteristics of Ohio farmland. Issues concerning land use, soil types, natural resource protection, drainage infrastructure, compaction damage, conservation practices and other issues concerning repair/remediation of farm ground were explored. OFBF referred representatives to the Ohio Department of Agriculture (ODA), Ohio Department of Natural Resources (ODNR), county Soil and Water Conservation Districts (SWCD) and Ohio State University Extension (OSUE) for additional research and technical support.

- **Land Improvement Contractors:** OFBF advocates the need for energy developers to explore and better appreciate effective repair/remediation strategies concerning pipeline construction on Ohio farmland. OFBF has referred developers to Mark Wilson with Land Stewards, LLC (LS) and to members of the Ohio Land Improvement Contractors Association (OLICA) for assistance.

CO2 – Ohio Farm Bureau Federation (cont'd)

It is our understanding that several interstate and intrastate pipeline developers have working relationships with Land Stewards, LLC. Accordingly, landowners impacted by a developer's construction activities can enlist LS services to create effective repair/remediation plans concerning their respective property. These services include both pre and post construction activities. We highly encourage Columbia Gas and Columbia Gulf to establish working relationships and these professional resources to help address any complex land repair/remediation issues that arise with landowners.

- **Legal Referrals:** OFBF and county Farm Bureaus have created an *Attorney Referral List* with over a dozen legal counsel that could be retained by farmers and their neighbors to address the myriad of contract negotiations and legal concerns associated with energy infrastructure development. OFBF works with several of these law firms to continue education/outreach and legal assistance initiatives. Another benefit of the list is creation of a network between Farm Bureau members and the legal community that is being used to address key issues impacting landowners in specific pipeline development projects, including Leach XPress and Rayne XPress.

- **Local Government:** OFBF and county Farm Bureaus are conducting issues briefings at the request of several county and township governments impacted by pipeline development, including the Columbia Gas and Columbia Gulf Projects. These programs go into more detail that the *Energy Infrastructure Issues Briefings* discussed above. They focus on helping local governments establish better dialogue with energy developers, and how local government can get better involved in the state and/or federal evaluation and approval process.

Farm Bureau's policy and outreach efforts give the organization a unique perspective concerning energy infrastructure development and the Projects. Accordingly, we ask that Commission staff consider the following points as they create the final EIS for the Projects:

CO-02-01
- **Identification and Treatment of Agricultural Ground/Farmland:** The United States Department of Agriculture (USDA) defines *Prime Farmland* as ground that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. When soil quality, growing season, water management and acceptable farming methods are taken into consideration, the ground can produce economically sustained high yields of crops. Along with ground used in Ohio to produce cash grains and forage, other ground used for forestry, pastureland, orchards, Christmas tree, vineyard and nursery practices should all have primary designation as agricultural or *Prime Farmland*, too.

  Similarly, another classification, *Open Land* could include areas that are primarily used in some type of agriculture. Standards should be revised to ensure that these open areas are properly classified when used in any type of farming practice detailed above.

CO-02-02
- **Time Associated with Mitigating Overall Construction Impact:** OFBF has concerns on references in the EIS stating that *most impacts on soil will be temporary and short term.* While there is considerable debate over the extent of time required for soil remediation, most experts agree that it will take years for repair and full restoration to be considered complete. FERC should require basic soil monitoring activities in at least the 7-10 year time frame, with provisions for extending the monitoring period if there is still production lag or impact.

CO-02-03
- **Sharing Future Maintenance Costs:** Many areas of Ohio have pipelines that have been in operation for close to a century. While farmers, businesses, residents and local governments are compensated for the *initial* impacts of pipeline installation, more needs to be done to address additional needs that will develop years and decades into the future.

  Farmers, businesses, homeowners and local governments will need to install drainage infrastructure upgrades and perform care, maintenance and upkeep in and around designated pipeline right of ways. Many of these new activities will involve excavation by hand or complex

CO-9

CO-02-01 The designation of prime farmland requires farmland to meet several strict criteria established by the U.S. Department of Agriculture (USDA). The additional areas mentioned fit in to the category of unique farmlands according to the definition of unique farmland also created by the USDA. Details about how areas of prime and unique farmlands were determined is discussed in section 4.2.1.5 of the final EIS.

CO-02-02 As stated in section 4.2.2.3, within agricultural lands crossed by the LX and RXE Projects, Columbia Gas and Columbia Gulf would negotiate with and reimburse landowners for any damages to their product or loss of yields as a result of the project construction activities. Columbia Gas and Columbia Gulf would continue to monitor and correct problems with topsoil replacement, soil compaction, rocks, drainage, and irrigation systems resulting from construction until restoration is determined successful. Restoration would be considered successful if the surface condition of the areas disturbed during construction, including the topsoil and the horizon of the upper subsoil, is similar to adjacent undisturbed lands, construction debris is removed, revegetation is successful, and proper drainage has been restored.

CO-02-03 As stated in section 4.2.2.3, within agricultural lands crossed by the LX and RXE Projects, Columbia Gas and Columbia Gulf would negotiate with and reimburse landowners for any damages to their product or loss of yields as a result of the project construction activities.

CO2 – Ohio Farm Bureau Federation (cont'd)

CO-02-03 construction techniques to ensure they can use their land and ensure pipeline integrity and safety. These procedures translate to extra costs not compensated in a traditional easement settlement.

If an effective pipeline easement agreement is considered a *partnership* between a landowner and an energy service provider, shouldn't both partners be responsible to pay a share of any costs ensuring that drainage facilities, land features, public roadbeds or community facilities *and* the pipeline are protected? A special pipeline maintenance fund should be created where farms, businesses, residents and local governments are compensated by the pipeline company for future activity that will need to take place in the decades to come.

CO-02-04 • **Drainage Infrastructure Repair:** OFBF appreciates the reference in EIS Section 4.2.2.1 for using the Ohio Department of Agriculture's *Ohio Pipeline Standard and Construction Specifications* as the guidelines for drainage infrastructure repair/remediation as a condition to any authorization issued by FERC. OFBF has worked with ODA, ODNR, the Ohio Federation of SWCDs, OLICA, OSUE and other interested parties on updating these standards on a continual basis since 1998. The most recent edition of the standards was published in December 2015.

OFBF supports FERC staff working with Columbia Gas and Columbia Gulf to create an *Agricultural Impacts Mitigation Plan* incorporating these standards. We suggest using the *Agricultural Impact Mitigation Plan – Ohio* referenced in Appendix G-3 of the draft EIS for the ET Rover Project, FERC Case Number CP15-93-000 as a framework.

Moreover, it should be clearly understood that an *Agricultural Impact Mitigation Plan* provides *basic* provisions that will be enacted unless the respective landowner exercises his/her right to negotiate provisions that *supersede* these general guidelines. When it comes to repair/remediation, the *Agricultural Impact Mitigation Plan* provides for the regulatory floor; not the ceiling.

CO-02-05 • **Impact Beyond the Right of Way:** Several areas of southeast Ohio rely on surface water and springs for home, livestock and crop irrigation. Other areas are systematically drained. Temporary interruption of stream flow or plugging drainage systems in any pipeline right of way could have a domino effect impacting farms, businesses and residents well beyond the construction area. Accordingly, the overall project will not only impact the initial area encompassing the right-of-way, but several thousand additional acres beyond this reach. Careful consideration needs to be given to these interrelationships prior to construction in rural communities.

CO-02-06 • **Inspector Authority:** Along with environmental inspectors, qualified agricultural inspectors should be hired and given *stop work authority* throughout the project. This authority will be used when conditions impacting soil integrity, compaction, drainage and other mitigation/repair procedures detailed in the plan are not being performed; potentially producing long term or permanent damage to soil, water supply and/or drainage systems.

CO-02-07 • **Community Dialogue and Outreach:** Energy development projects are advancing rapidly. The need for sharing environmental, economic, social and logistic concerns means that many community stakeholders will need to act at a pace faster than most regulatory agencies operate. Collaborative efforts involving government officials at the local, state and federal levels, energy service providers, utilities, economic development and environmental groups, social services and community stakeholders are vital.

Plans should further detail how the pipeline developer will support information, outreach and community service initiatives that address concerns and enhance potential benefits their project brings to local communities long term. These efforts should include promoting Columbia's *Complaint Resolution Process* where community stakeholders and project developers have clearly defined step-by-step procedures to ensure that issues are addressed.

CO-10

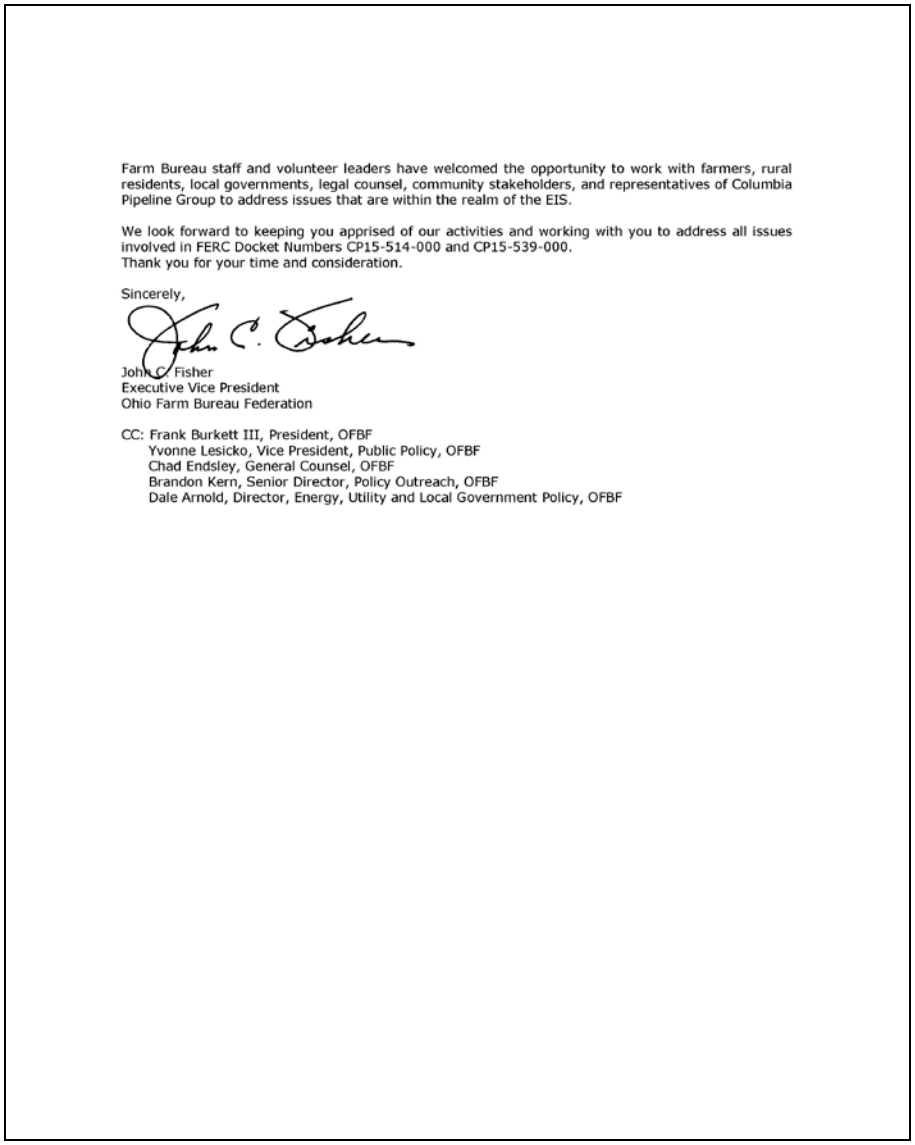
CO-02-03 (cont'd) Columbia Gas and Columbia Gulf would continue to monitor and correct problems with topsoil replacement, soil compaction, rocks, drainage, and irrigation systems resulting from construction until restoration is determined successful. Restoration would be considered successful if the surface condition of the areas disturbed during construction, including the topsoil and the horizon of the upper subsoil, is similar to adjacent undisturbed lands, construction debris is removed, revegetation is successful, and proper drainage has been restored. As stated in section 4.9.5 Columbia Gas has committed to mitigate for impacts by compensating landowners affected by the project. If the LX and RXE projects require permanent or temporary use of land affecting property owner income, normal practice is for local appraisers to review the placement of the pipeline and conduct appraisals on an individual property basis as a basis for compensation.

CO-02-04 Comment noted.

CO-02-05 Temporary construction impacts on groundwater and surface water flow to areas off-right-of-way would be minimized with adherence to the Projects' ECS, SPCC Plan, and the appropriate protective measures of the FERC Plan and Procedures. Disturbances to groundwater flow could result from localized excavations during construction would be shallow and temporary. Surface water flow would be maintained in waterbodies during construction and restored to pre-construction conditions during restoration.

CO-02-06 Section 2.5 of the final EIS describes the environmental inspection that would be conducted during construction of the Project, including a third-party Environmental Compliance Monitoring Program managed by the FERC staff. FERC believes that an EI coupled with the use of a third party Environmental Compliance Monitoring Program are adequate means for enforcing quality assurance, compliance with mitigation measures, applicable regulatory requirements, and project specific specifications established by Columbia Gas and Columbia Gulf during the construction phase.

CO2 – Ohio Farm Bureau Federation (cont'd)



Farm Bureau staff and volunteer leaders have welcomed the opportunity to work with farmers, rural residents, local governments, legal counsel, community stakeholders, and representatives of Columbia Pipeline Group to address issues that are within the realm of the EIS.

We look forward to keeping you apprised of our activities and working with you to address all issues involved in FERC Docket Numbers CP15-514-000 and CP15-539-000.
Thank you for your time and consideration.

Sincerely,

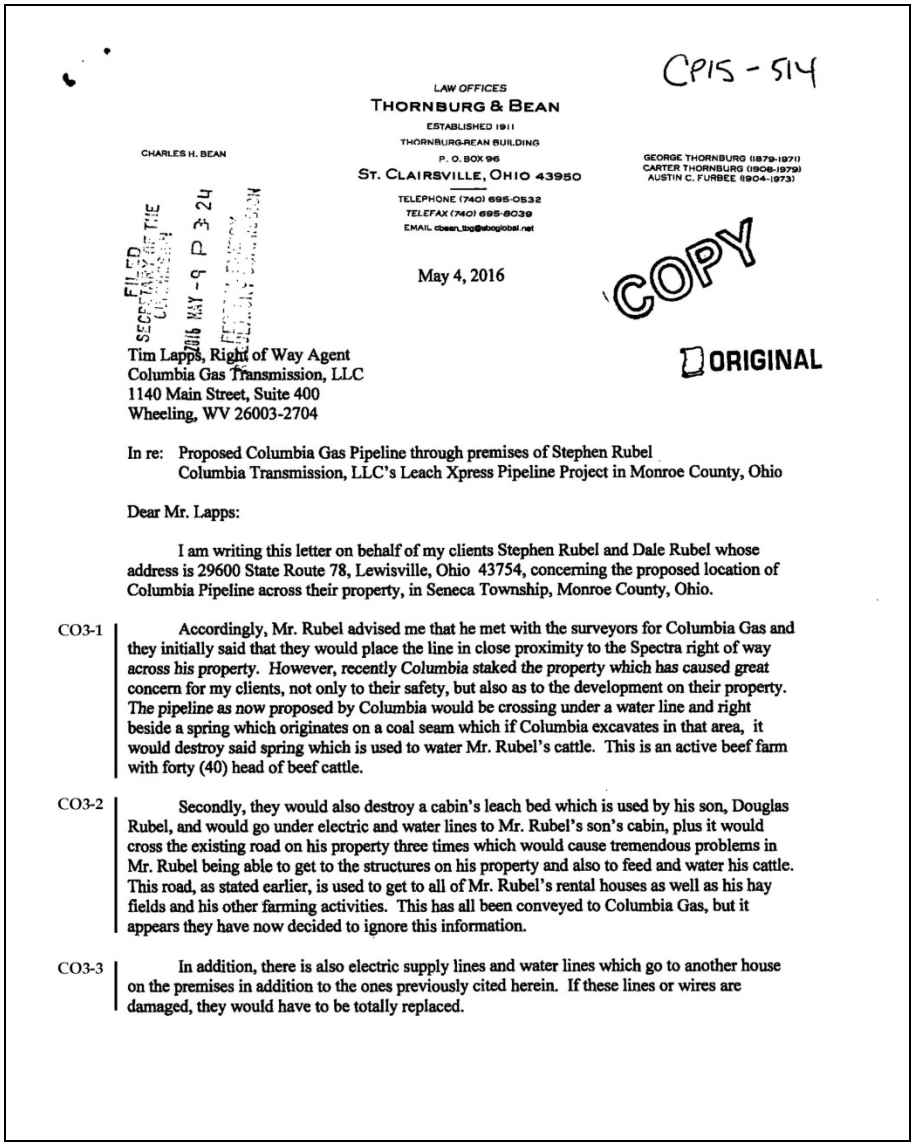
John C. Fisher
Executive Vice President
Ohio Farm Bureau Federation

CC: Frank Burkett III, President, OFBF
Yvonne Lesicko, Vice President, Public Policy, OFBF
Chad Endsley, General Counsel, OFBF
Brandon Kern, Senior Director, Policy Outreach, OFBF
Dale Arnold, Director, Energy, Utility and Local Government Policy, OFBF

CO-11

CO-02-07 Starting in November 2014, there have been numerous opportunities provided to the general public, local governments, and stakeholders to discuss environmental, economic, social, and logistical concerns. A detailed discussion of the public outreach opportunities can be found in Section 1.3 of the final EIS. Columbia Gas established a single point of contact to answer questions and provide information, established a website with information about the pipeline project (https://www.cpg.com/current-projects/leach-xpress-project), and sent periodic update newsletters. We agree that Columbia Gas' complaint resolution process and the FERC's Dispute Resolution Service Helpline, as discussed in section 4.8.3.1, would ensure that the community has a process for having concerns resolved.

CO3 – Thornburg & Bean



CP15 - 514

LAW OFFICES
THORNBURG & BEAN
ESTABLISHED 1911
THORNBURG-BEAN BUILDING
P. O. BOX 96
ST. CLAIRSVILLE, OHIO 43950
TELEPHONE (740) 695-0532
TELEFAX (740) 695-8039
EMAIL cbean_tbg@sbcglobal.net

CHARLES H. BEAN

GEORGE THORNBURG (1879-1971)
CARTER THORNBURG (1908-1979)
AUSTIN C. FURBEE (1904-1973)

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May 4, 2016

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ORIGINAL

Tim Lapps, Right of Way Agent
Columbia Gas Transmission, LLC
1140 Main Street, Suite 400
Wheeling, WV 26003-2704

In re: Proposed Columbia Gas Pipeline through premises of Stephen Rubel
Columbia Transmission, LLC's Leach Xpress Pipeline Project in Monroe County, Ohio

Dear Mr. Lapps:

I am writing this letter on behalf of my clients Stephen Rubel and Dale Rubel whose address is 29600 State Route 78, Lewisville, Ohio 43754, concerning the proposed location of Columbia Pipeline across their property, in Seneca Township, Monroe County, Ohio.

CO3-1 Accordingly, Mr. Rubel advised me that he met with the surveyors for Columbia Gas and they initially said that they would place the line in close proximity to the Spectra right of way across his property. However, recently Columbia staked the property which has caused great concern for my clients, not only to their safety, but also as to the development on their property. The pipeline as now proposed by Columbia would be crossing under a water line and right beside a spring which originates on a coal seam which if Columbia excavates in that area, it would destroy said spring which is used to water Mr. Rubel's cattle. This is an active beef farm with forty (40) head of beef cattle.

CO3-2 Secondly, they would also destroy a cabin's leach bed which is used by his son, Douglas Rubel, and would go under electric and water lines to Mr. Rubel's son's cabin, plus it would cross the existing road on his property three times which would cause tremendous problems in Mr. Rubel being able to get to the structures on his property and also to feed and water his cattle. This road, as stated earlier, is used to get to all of Mr. Rubel's rental houses as well as his hay fields and his other farming activities. This has all been conveyed to Columbia Gas, but it appears they have now decided to ignore this information.

CO3-3 In addition, there is also electric supply lines and water lines which go to another house on the premises in addition to the ones previously cited herein. If these lines or wires are damaged, they would have to be totally replaced.

CO-12

CO3-1 Section 3.3.3 addresses minor route variations as requested by various individuals and companies and table 3.3.3-1 addresses landowner negotiations. Table 4.3.1-3 identifies all springs within the LX Project area and the distance from the edge of the construction workspace.

CO3-2 Columbia Gas would be responsible for repairing or replacing any damaged septic systems, wells, or driveways. Columbia Gas would work with landowners to identify underground facilities prior to construction. Property restoration would take place following construction according to any agreements in place with the landowner. Section 4.9.4.1 addresses road crossings and utility crossings and road crossing techniques are discussed in section 2.3.2.6. Columbia Gas would obtain the proper permits and impacts at these crossing locations are anticipated to be temporary.

CO3-3 Section 4.9.4.1 addresses utility crossings. Columbia Gas would obtain the proper permits and impacts at these crossing locations are anticipated to be temporary. Additionally, Columbia Gas is required to participate in the "One-Call" program to identify any underground utilities. Columbia Gas would notify landowners if utility disruptions are anticipated.

CO3 – Thornburg & Bean (cont'd)

THORNBURG & BEAN

CO3-3 Further, by placing the pipeline in its presently proposed location, the corrosion protection for the pipeline would cause said electric lines to deteriorate.

Further, if said line is installed in its presently proposed location, it would be going through both 1 and 2 inch gas lines which go to structures on Mr. Rubel's property. All of this could be avoided simply by abiding by the FERC recommendation that they stay close to other existing pipelines, which in this case, would be the Spectra pipeline.

CO3-4 Further, by relocation of this line it would severely affect Mr. Rubel's pasture for his cattle and it would take several years for the grass to be re-established. Further, the cattle would not be able to get from side to side during construction to get water and this would also be a severe problem to Mr. Rubel's beef farming operation.

CO3-5 Further, due to the size of the proposed pipeline and all of the developments which are shown in the attached pictures, we would ask that there would be at least five (5) feet of cover from the top of said pipeline.

Your prompt reply and attention to this matter is requested.

Lastly, as stated earlier, I am also sending a copy of this letter to the Federal Energy Regulatory Commission so they will be aware of our concerns in this matter.

Thank you.

Very truly yours,

Charles H. Bean

CHARLES H. BEAN

CHB/hdw
Enclosures

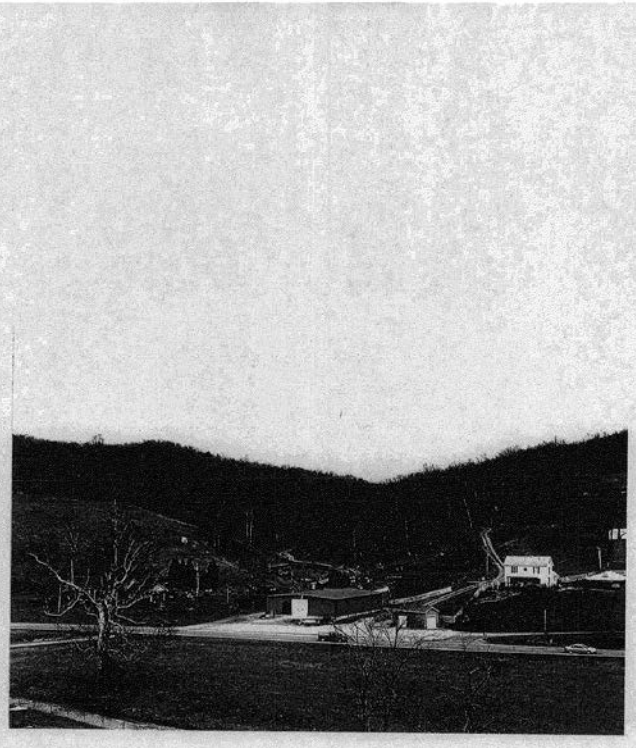
Cc w/ encl: Federal Energy Regulatory Commission
999 First Street, NE
Washington, D.C. 20426

Mr. and Mrs. Stephen Rubel
29600 State Route 78
Lewisville, OH 43754

CO3-4 Columbia Gas would promote revegetation of the ROW in accordance with their ECS. As described in Section 4.2.2.4, revegetation of residential and agricultural lands would be conducted in accordance with landowner requests as well as state and local recommendations. Comment CO3-2 addresses access to water for cattle.

CO3-5 Section 4.12.1 of the EIS explains that the DOT develops safety regulations to ensure safety in the design, construction, testing, operation and maintenance of pipeline facilities. These regulations include requirements for depth of cover. Class 1 locations must be installed with a minimum depth of cover of 30 inches in normal soil and 18 inches in consolidated rock. Class 2, 3, and 4 locations, as well as drainage ditches of public roads and railroad crossings, require a minimum cover of 36 inches in normal soil and 24 inches in consolidated rock.

CO3 – Thornburg & Bean
(cont'd)



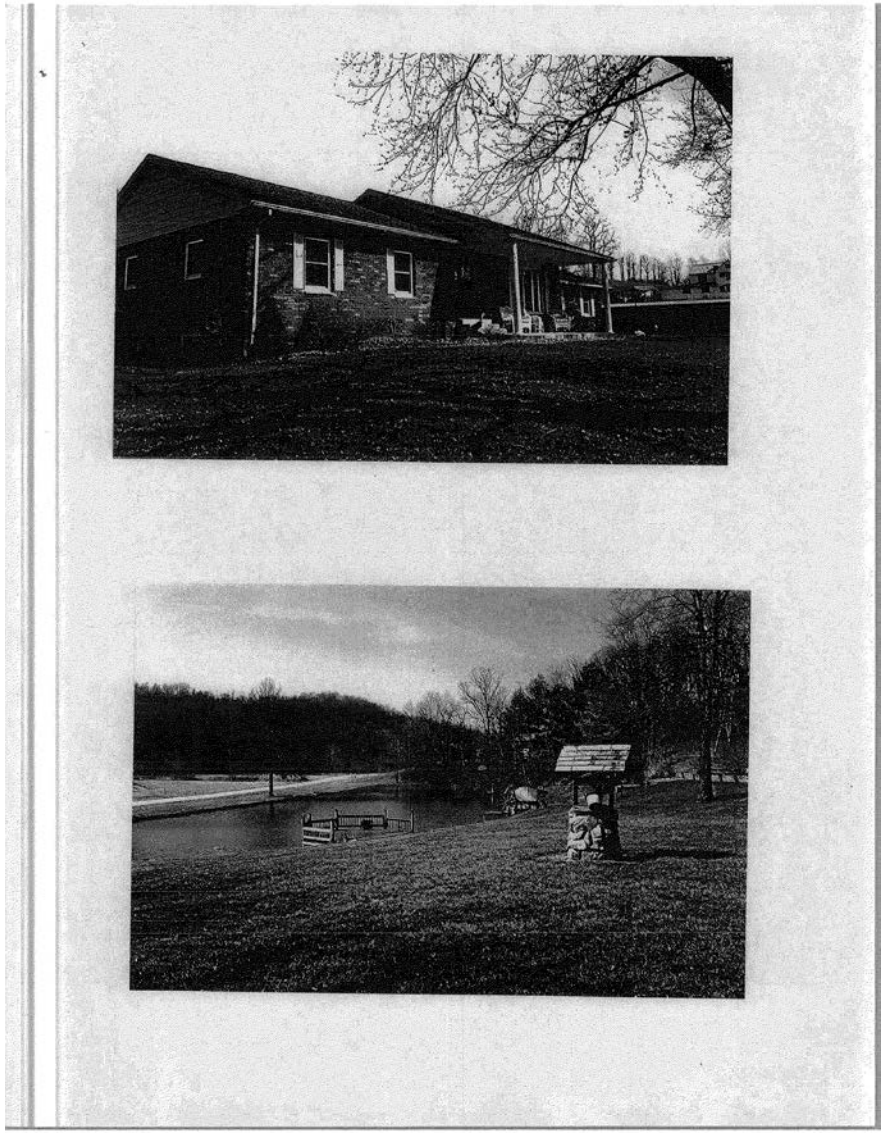
CO3 – Thornburg & Bean
(cont'd)

120 acre farm located at 29600 State Route 78, Lewisville Ohio
This property is located on State Route 78, 17 miles from Caldwell and 13 miles from Woodsfield.
Landowner has all mineral rights
Farm features
*4 homes
*4 additional living spaces
*6000 large working garage
*7,336 square feet of machine/hay storage
*4 camping locations
*4 ponds
*2 creeks run through the property
*2000 square foot covered entertainment area

The main house is 3,200 square feet ranch style home

3 bedroom
2.5 bath that have been newly remodeled
Newly remodeled kitchen
All new windows and doors
Finished basement
Main floor laundry
Forced air heat and air conditioning
2 gas burning fireplaces
Lots of storage
Newer roof
Two car attached garage 650 Square feet
Paved driveway
Professional landscaped yard featuring an 8' x 20' waterfall, gazebo, back concrete patio, outdoor bathroom
1 acre pond featuring a spring feed water wheel, 20 x 20 dock, fully stocked with catfish, bluegill, largemouth bass, and small mouth bass
Free gas
Spring feed water system

CO3 – Thornburg & Bean
(cont'd)



CO3 – Thornburg & Bean
(cont'd)

CO3 – Thornburg & Bean
(cont'd)

Chris' House

Built in 1930's with addition added on in 2000
3 bedroom
2 full bath
Newly remodeled kitchen
2 fireplaces
2 living room
Large dining room
Home office
Large laundry room
Cellar
Covered porch
2 car carport
To die for back patio that anyone would love to have at their house
Professional landscape flowerbeds
25' waterfall with koi pond
Paved Driveway

CO3 – Thornburg & Bean
(cont'd)

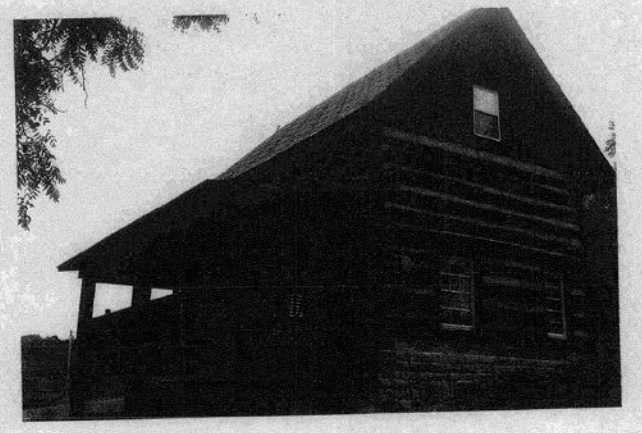
Barn House

Structure built in 2000 completed in 2014
2880 square foot
Currently being used as a rental income
5 bedroom
3 full bathrooms
3 living areas
Large kitchen/dining area
520 square foot covered porch
Walk out patio

CO3 – Thornburg & Bean
(cont'd)

Log Cabin

Built in the 1800's and relocated to farm in 2005
2200 square foot completely remodeled
Fully furnished currently used as a rental income
2 bedroom
2 full bath featuring claw foot bathtub and tiled shower
Large kitchen and living area
Finished basement
Washer and dryer
Porch
Walk out patio

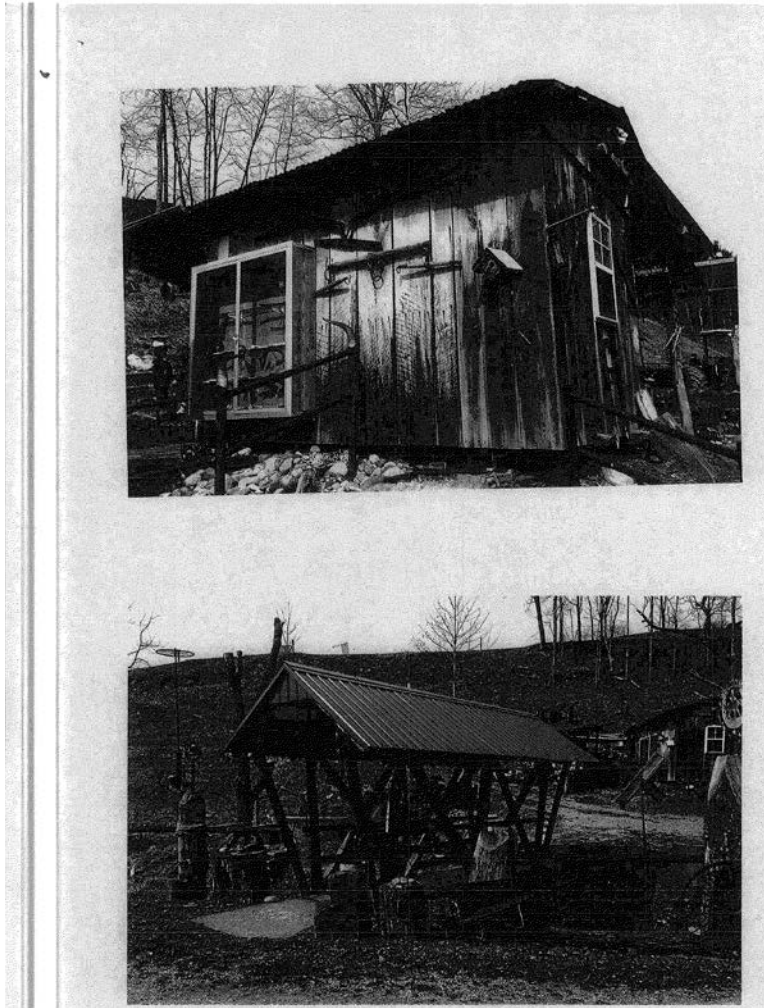


CO3 – Thornburg & Bean
(cont'd)

Arena

This is nestled behind the main house taking advantage of the cool evening breeze coming from the wooded area behind. It is the perfect place to host a small dinner gathering for a few or 150
This is used for family reunions, weddings, 4-H events, camping, church picnics, car shows
580 square foot covered outdoor kitchen
100 square foot bathroom with shower
1280 square foot covered setting area
225 square foot bunk house with King Size bed and loft with two twin beds
Shooting Range
1 acre Fenced in arena for horse riding

CO3 – Thornburg & Bean
(cont'd)



CO3 – Thornburg & Bean
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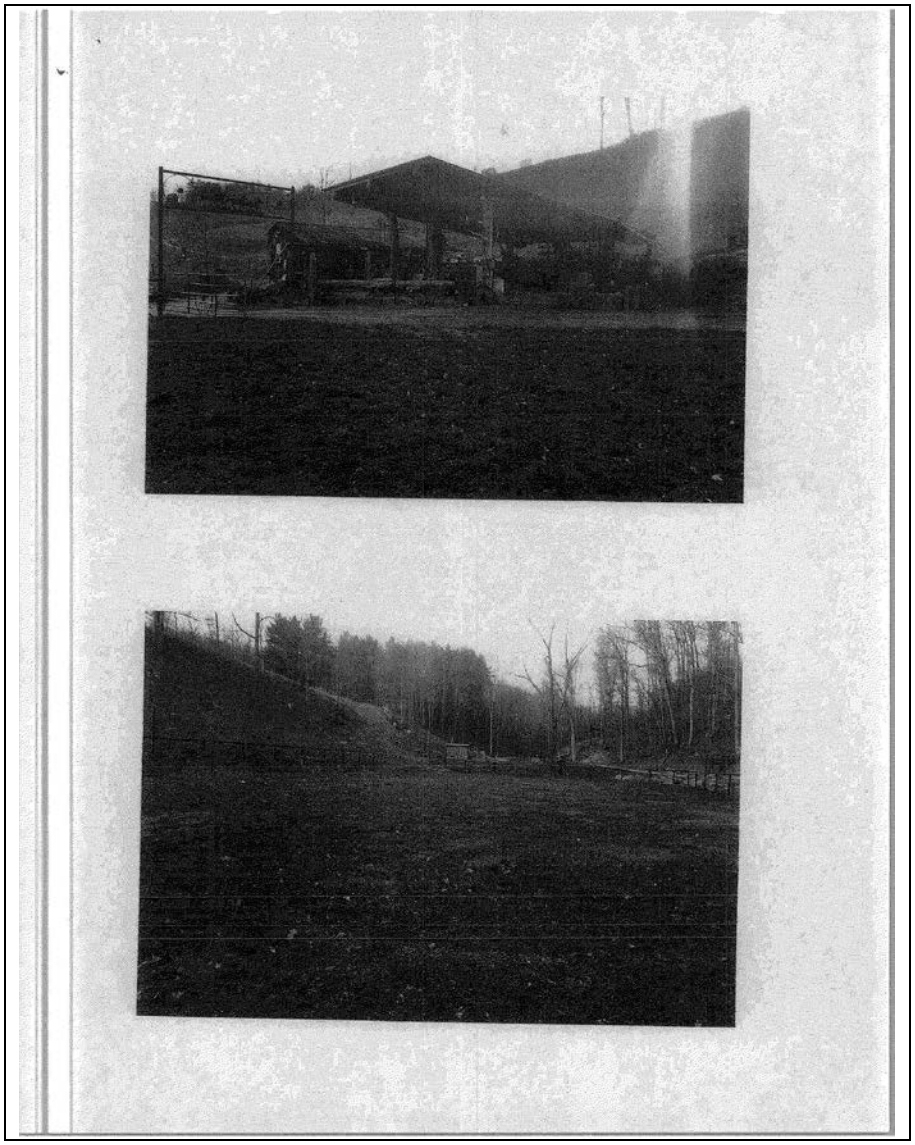


CO3 – Thornburg & Bean
(cont'd)

New Bunk House

580 Square foot new building
Breathtaking views
1 bedroom
1 bathroom
Full kitchen
Large living area
Washer and dryer
Little Cabin
600 square foot cabin
1 bedroom
1 bathroom
Kitchen and living area
Overlooks ¾ acre stocked pond
Remote setting

CO3 – Thornburg & Bean
(cont'd)

Bunk House

225 Square foot cabin with loft

Sleeps 4

Unique setting with stream running under cabin, just steps away from the outdoor kitchen area and arena

CO3 – Thornburg & Bean
(cont'd)

Bunk House

460 square foot cabin

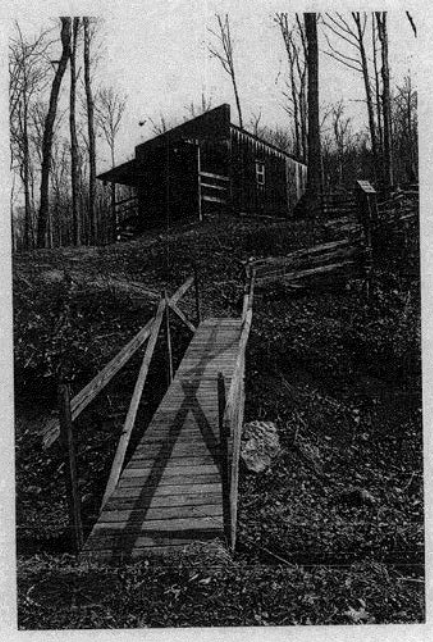
Overlooks stream and beautiful wooded area

Kitchenette

Full bath

Large porch

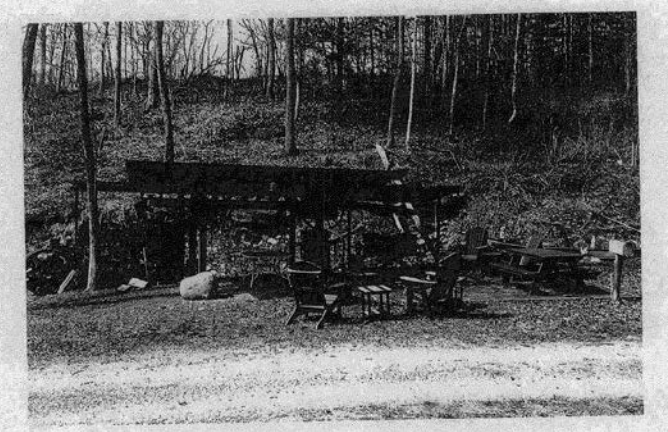
Fully furnished



CO3 – Thornburg & Bean
(cont'd)

Camping area

125 square foot covered pavilion
460 square foot bunk house with full bathroom and kitchenette sleeps 4
2 camper site with electric and water hook-up
Professional landscaping featuring 8' waterfall



CO3 – Thornburg & Bean
(cont'd)

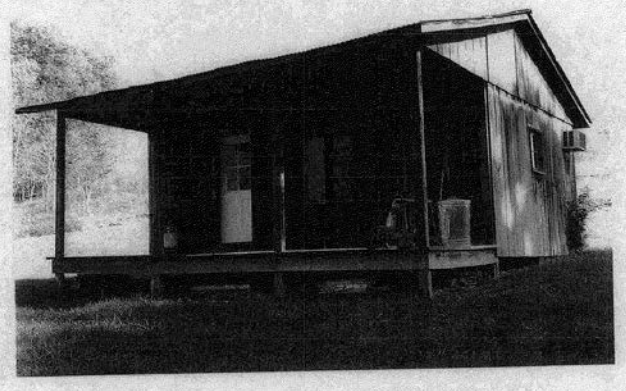
Campsite

2 Campsites
2 ½ acre ponds
Future cabin site

CO3 – Thornburg & Bean
(cont'd)

Little Cabin

600 square foot cabin
1 bedroom
1 bathroom
Kitchen and living area
Overlooks ¾ acre stocked pond
Remote setting



CO3 – Thornburg & Bean
(cont'd)

Maple Syrup

1 mile of line run to maple trees on farm
8' x 6' building used to hold sap and supplies needed to make syrup

CO3 – Thornburg & Bean
(cont'd)

Shop

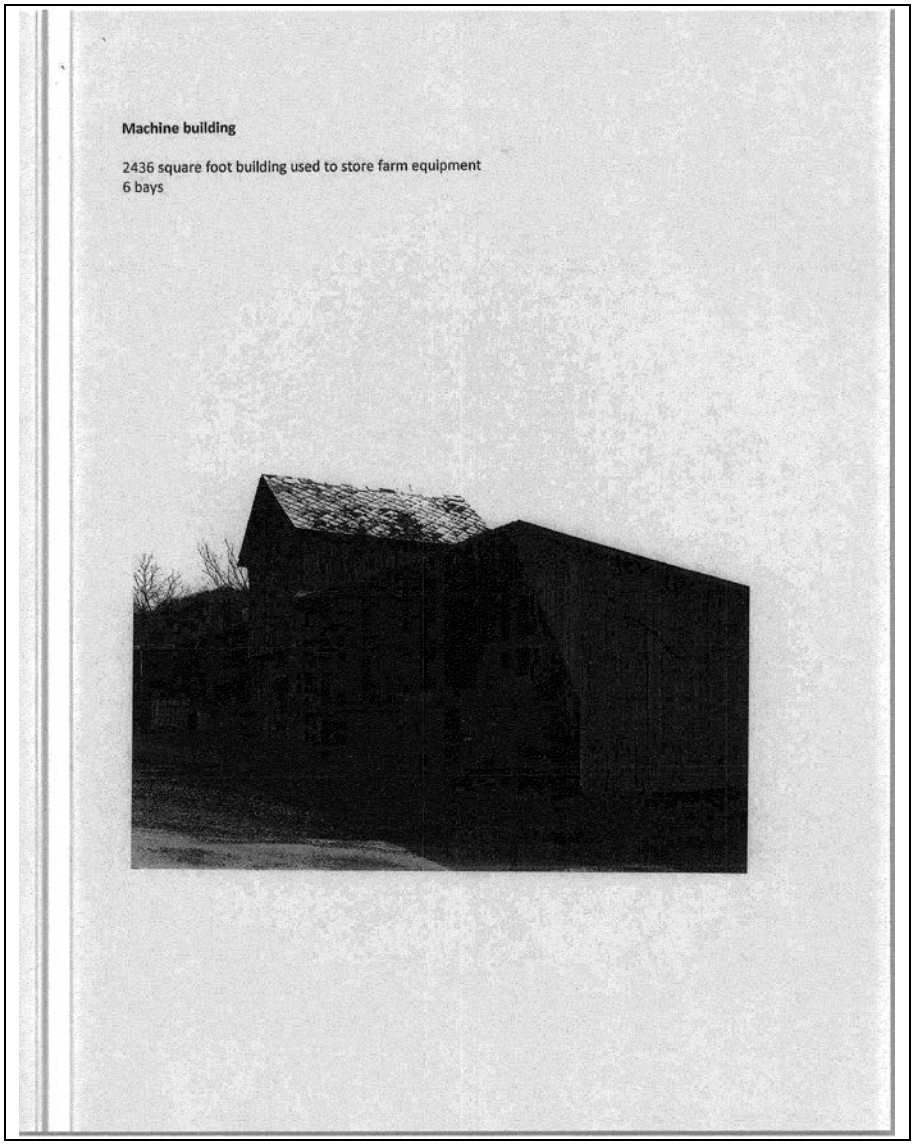
60' x 100' 6000 Square foot building
Concrete floor throughout
Two garage doors
Featuring a grease pit
Apartment with kitchen, bathroom and laundry facilities
Paved driveway

CO3 – Thornburg & Bean
(cont'd)

Covered Bridge

504 square foot covered bridge connecting an estimated 3 miles of well-established private roads used on the farm

CO3 – Thornburg & Bean
(cont'd)



Machine building

2436 square foot building used to store farm equipment
6 bays

CO3 – Thornburg & Bean
(cont'd)

Garden Shed

10x15 foot building

Located at main house

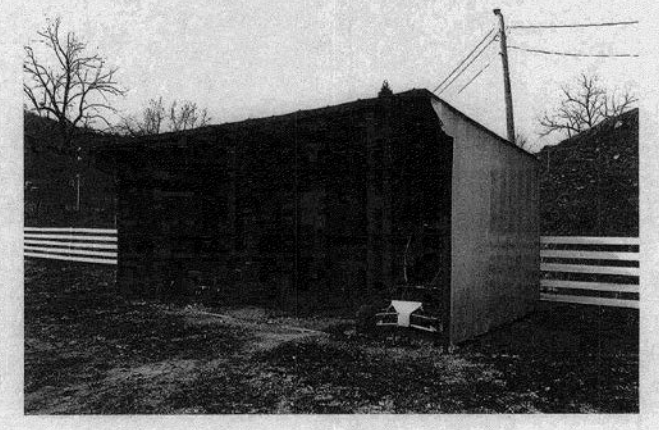
CO3 – Thornburg & Bean
(cont'd)

4 Storage buildings

8' x 20'

Located throughout farm area

Can be used for farm equipment, cattle shelter, etc...

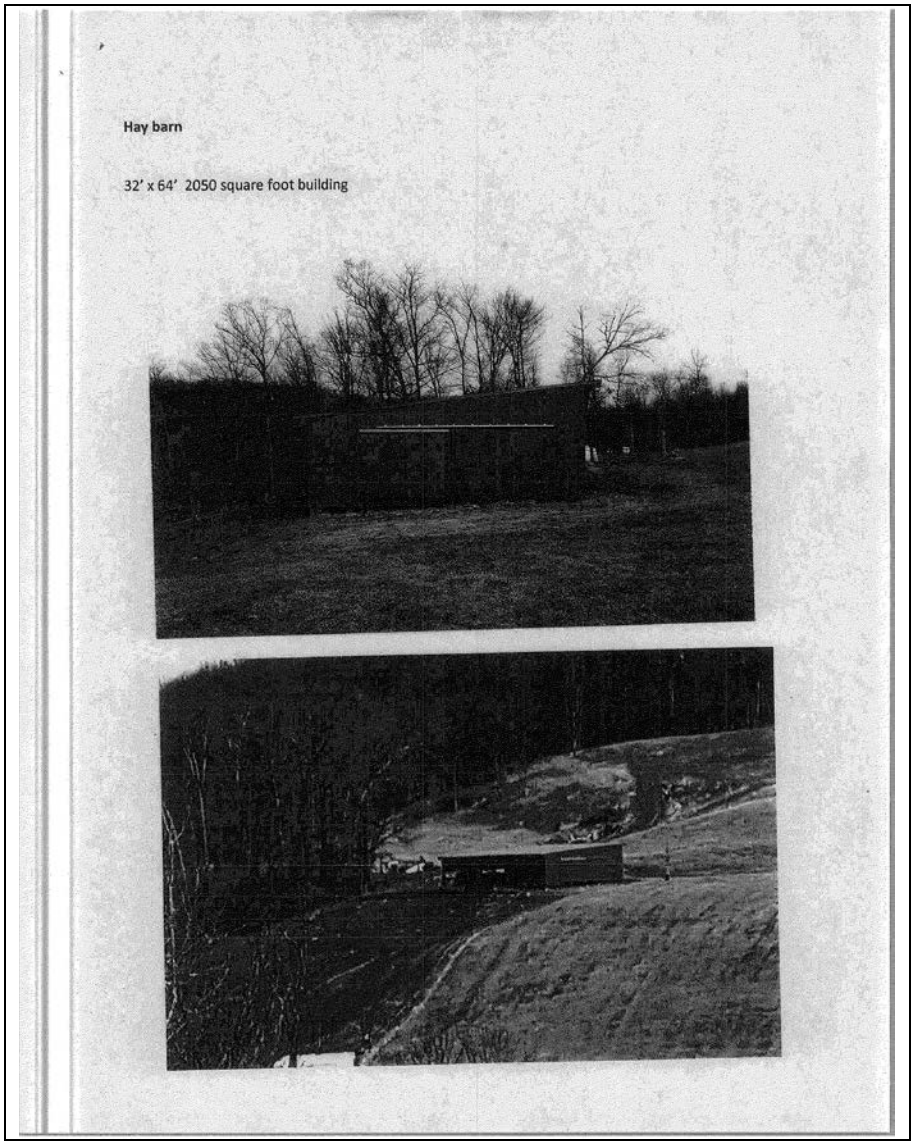


CO3 – Thornburg & Bean
(cont'd)

Machinery Building

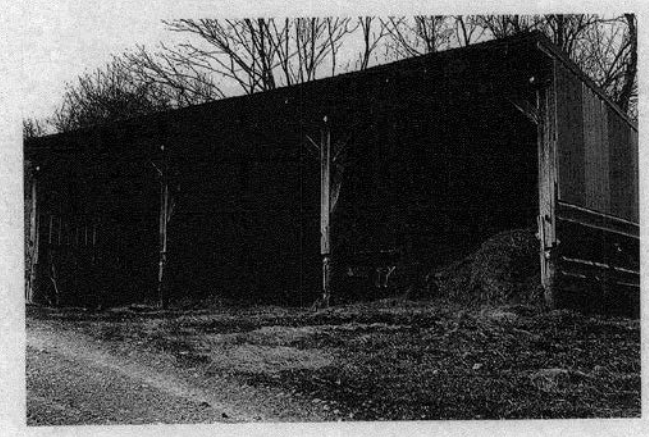
27' x 80' 2160 square foot building with 4 open bays and one enclosed bay used to old farm equipment

CO3 – Thornburg & Bean
(cont'd)



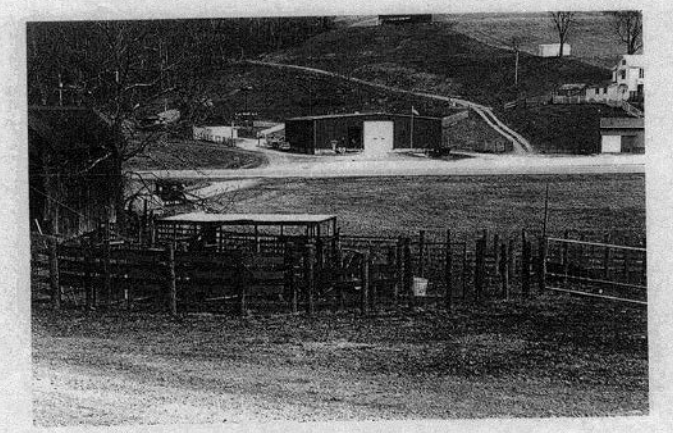
CO3 – Thornburg & Bean
(cont'd)

Hay barn
15' x 36' 540 Square foot building



CO3 – Thornburg & Bean
(cont'd)

Feed lot and cattle chute



CO3 – Thornburg & Bean
(cont'd)

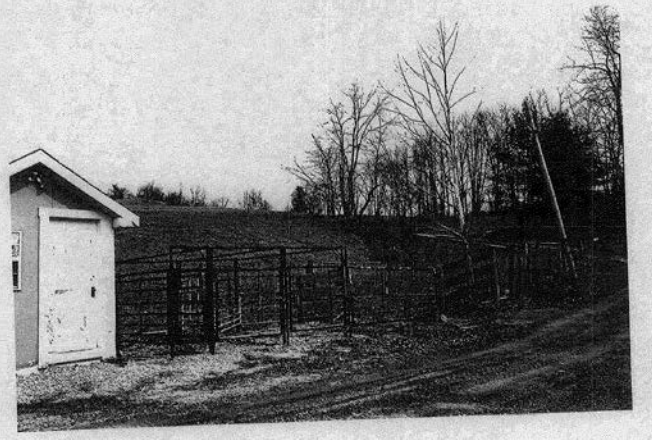
Feed Lot

2250 square foot stabilized lot
28' x 28' 784 square foot shelter for hay and cattle

CO3 – Thornburg & Bean
(cont'd)

Scale house and loading chute

8' x 12' 96 square foot building attached to cattle corral and loading chute



CO3 – Thornburg & Bean
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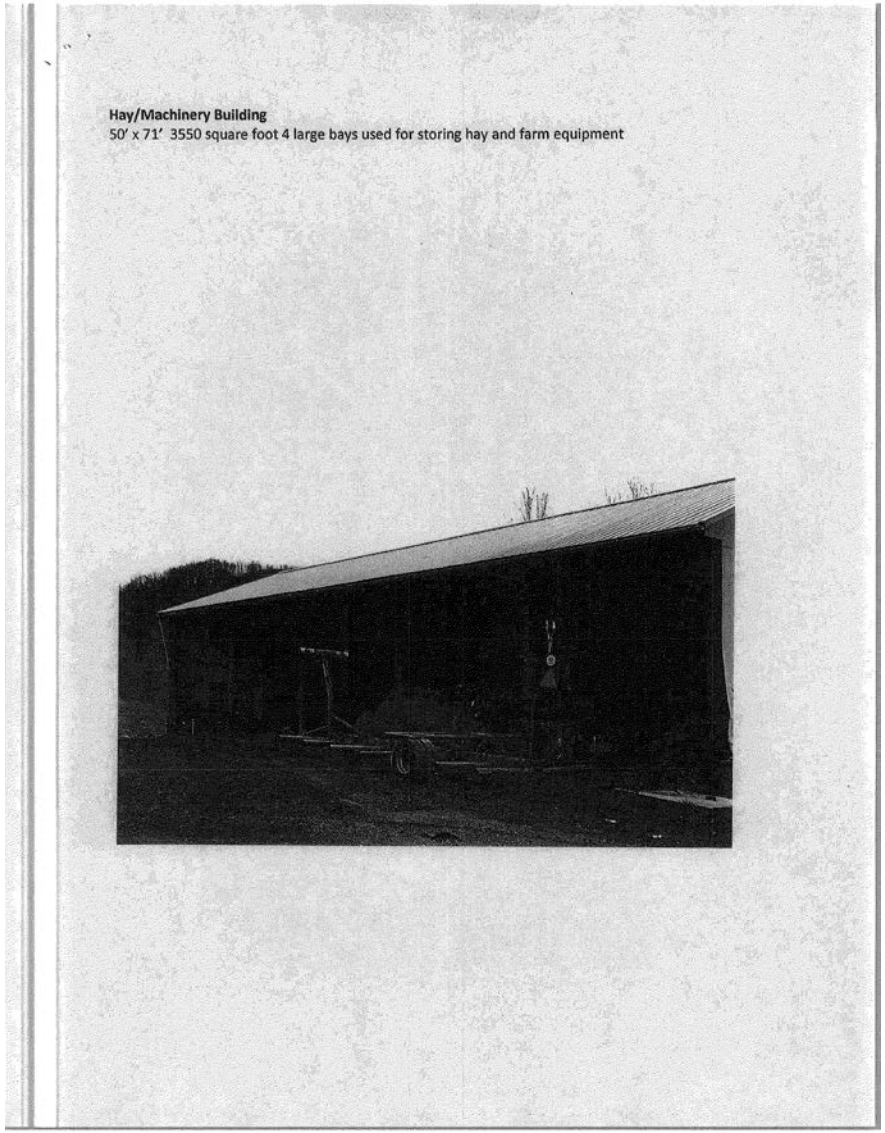


CO3 – Thornburg & Bean
(cont'd)

Tractor Building

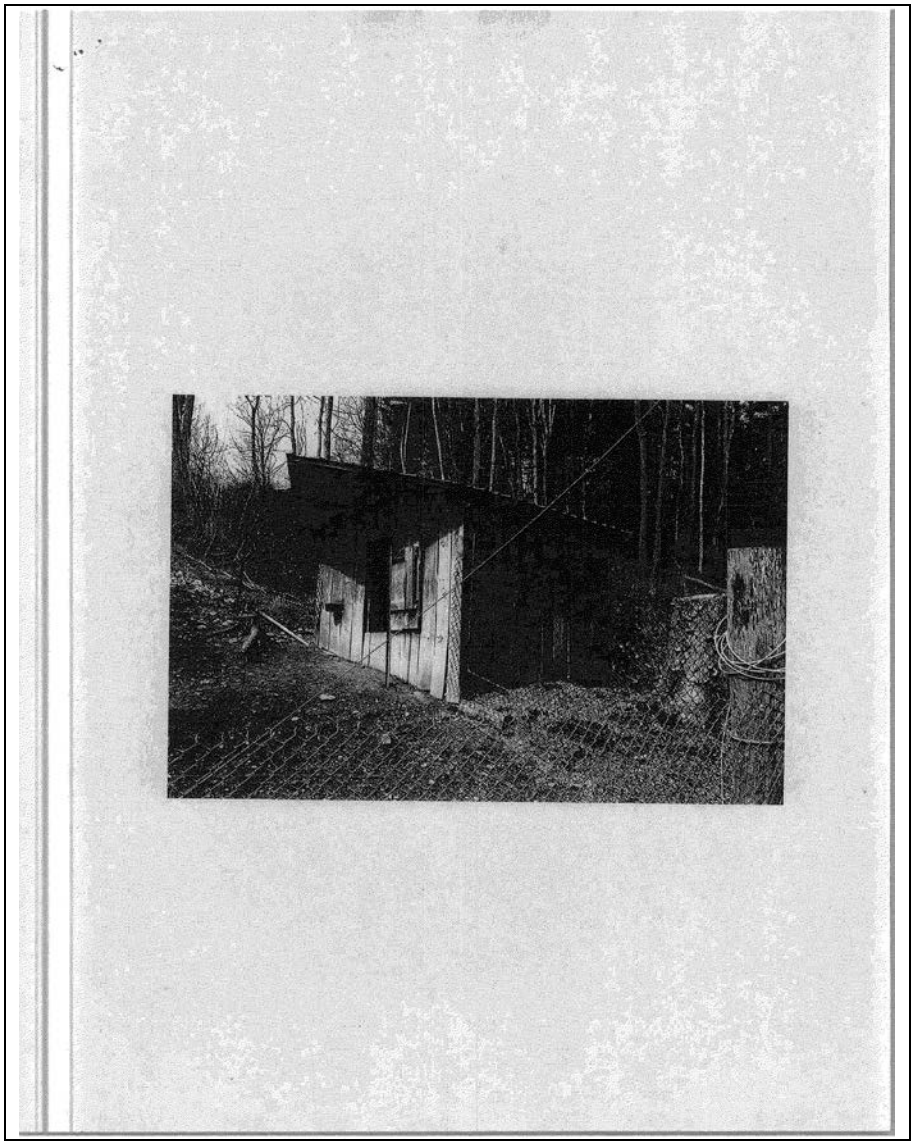
450 square foot garage
Sets on 1.25 acre stabilized gravel lot

CO3 – Thornburg & Bean
(cont'd)

Chicken coops

3 chicken coops in 1 acre fenced in area to house free range chickens

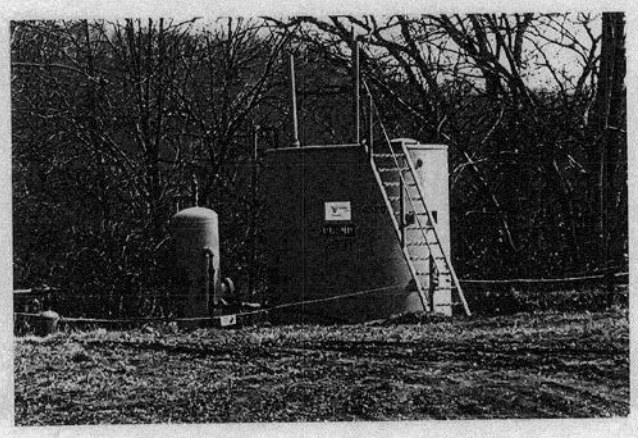
CO3 – Thornburg & Bean
(cont'd)



CO3 – Thornburg & Bean
(cont'd)

3 gas well

with 1/3 ownership
Produces gas for farm to cook, heat, and run stationary CNG compressor for 2 full size trucks, 1 car, 1 farm tractor, and lawn mower



CO3 – Thornburg & Bean
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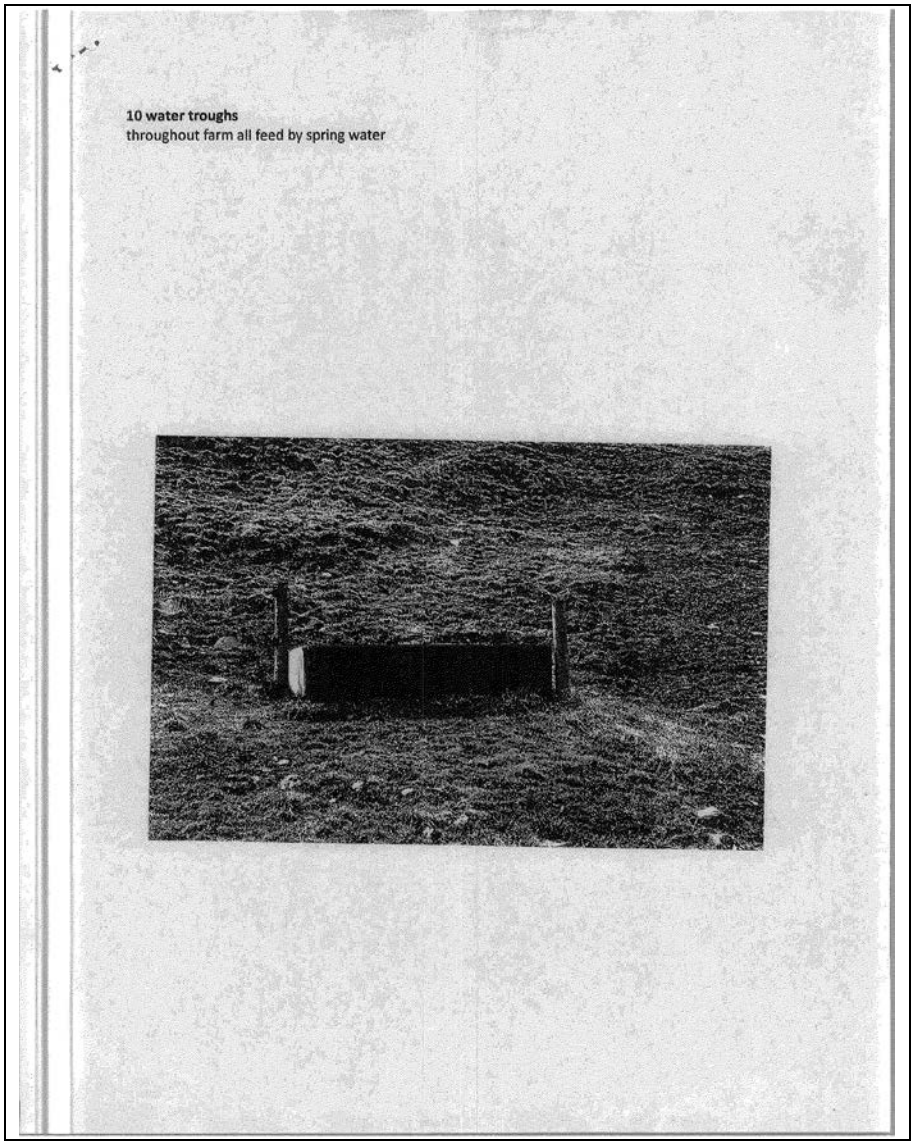


INDIVIDUALS

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus

PM-1

LAW OFFICES

RICHARD G. HERNDON (1915-2003)
R. CLARK MORTON
JUDITH A. HERNDON (1941-1980)
WILLIAM J. YAEGER, JR.†
ROBERT J. KRALL*†

*ALSO ADMITTED IN OHIO
†ALSO ADMITTED IN PA

HERNDON & MORTON
HERNDON & YAEGER

83 EDGINGTON LANE
WHEELING, WEST VIRGINIA 26003-1541

HOLLY S. PLANINSIC*†
BENJAMIN M. COX*†
ANDREW J. HARRIS
CHAD J. SHEPHERD

TELEPHONE (304) 242-2300
FAX (304) 243-0890

June 13, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Room 1A
Washington, DC 20426

RE: Columbia Gas Transmission, LLC
Leach Xpress Project – Comment to Draft Environmental Impact Statement
Docket No. CP15-514-000

Dear Ms. Bose:

Our firm represents Mike Bohonak and George Liotus, owners of a tract of real estate impacted by the Leach Xpress Pipeline Project (the "Project"), in Greene County, Pennsylvania. Our clients' property is located between Day Road and mile marker number 1 of the Project identified as:

Richhill Township, Greene County, Pennsylvania
Tax Map and Parcel No. 22-01-0106 (the "Property")

Groundwater/Water Springs

We have reviewed the Draft EIS that was prepared and filed for the Project and have identified issues relating to Columbia's water sources located on the Property.

IND01-01 *Appendix K-1 Waterbodies Crossed or Impacted by the Leach Xpress Project* (attached as Exhibit A) indicates that there is only one tributary located on our clients' property prior to mile post 1 that will be affected by the pipeline. However, in addition to the identified intermittent tributary (believed to be Feature ID SA8GR328), there is also a permanent spring that will be permanently impacted and potentially irreversibly damaged by the pipeline construction and easement. The attached Exhibit B shows the location of the permanent spring along with the intermittent spring believed to be Feature ID SA8GR328. The permanent spring is the only source of water available on the Property and services a potential home site. In a site visit with our clients and multiple Columbia representatives, the spring location was identified. Despite the identification and impact on the permanent spring, it appears that no environmental impact study was conducted for this water source.

IND01-01 Springs are identified in table 4.3.1-3 of the final EIS. The spring identified between LEX MP 0.2 and MP 0.7 identifies the spring. Impacts are discussed in section 4.3.1.6.

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)

IND01-02 In addition to the permanent spring that will be damaged, a permanent pond is also planned on the Property. The pond is shown on Exhibit B. The approximate path of the pipeline through the pond is shown on Exhibit C. The Property owners previously contracted with Dieffenbauch and Hritz, LLC to prepare engineering reports and other preliminary construction activity. Although construction of the pond has not commenced, it is planned in the near future. The location of the pond was previously disclosed to Columbia. The Draft EIS makes no mention of the permanent pond or the impact of the Project on the pond. Specifically, the water crossing of SA8GR328, which appears to be the approximate location of the pond, indicates that proposed crossing method is a dry open cut. While a dry open cut may be appropriate for an intermittent narrow water source of 6 feet, as indicated in the Draft EIS, the pond located on the Property is estimated to be approximately 50 feet across at the location of the pipeline. Using a dry open cut under these circumstances would create considerable potential water contamination and disturbance.

Land Use/Visual Resources

IND01-03 There are currently no structures on the Property within the proposed path of the Project. However, the foundation of the former homestead is located immediately next to the spring identified on attached Exhibit B which will be immediately and severely impacted by the Project. The landowners have future plans to develop the Property to rebuild a house upon the foundation that will be destroyed by this Project.

The Property has previously been exploited by Columbia to lay pipelines across the Property. Presently, a pipeline and right of way exists on the opposite side of the Property as reflected on Exhibit D attached hereto. That map also shows the numerous other pipelines underlying the surface of the Property. The landowners have, on multiple occasions over the past year, requested that Columbia install the proposed pipeline within or parallel to the existing pipeline to avoid any additional and unnecessary impact on the Property, vegetation, water, wildlife and human uses and development of the Property. This proposed alternative route is shown on Exhibit E.

The Property owners have submitted two alternative routes to Columbia. The first alternative route, shown on Exhibit E, calls for the pipeline to be installed parallel to the existing pipeline to minimize the overall impact on the Property. Columbia has refused this alternative route and refused to offer any reasonable explanation.

The Property owners also proposed a second alternative route, as shown on Exhibit F, which would modify the path of the pipeline to minimize the impact on the Property. This would result in a portion of the pipeline potentially being located on an adjacent landowner's property and the adjacent landowner has verbally consented to this

IND01-02 Comment noted. If the pond is installed prior to construction of the pipeline, construction procedures would be implemented for the current land use (i.e., open water) to minimize impacts to water quality or minor routing adjustments could be made to minimize impacts to the pond. Section 4.9.5 of the final EIS discusses easement negotiations. Columbia Gas has committed to mitigate for impacts by compensating landowners affected by the project.

IND01-03 Comment noted. Section 3.3.3 addresses minor route variations. Section 5.2, condition 12 requires Columbia Gas to continue to assess minor route variations in coordination with the landowner.

PM-2

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)

IND01-03 proposed alternate route. Although the impact of Proposed Alternate Route 2 would be greater than Proposed Alternate Route 1, it would still be less impactful than the current proposed route. In spite of these alternative routes, Columbia has refused to negotiate in good faith or offer any viable explanation for refusing to consider these alternative routes. Columbia has abused their discretion in selecting the pipeline location and the refusal to consider the alternative proposed routes is both arbitrary and capricious and not in good faith.

Socioeconomics

IND01-04 In the EIS report prepared by FERC, on page ES-9 it states "based on our experience, we are not aware of instances where an interstate natural gas pipeline has resulted in impacts on property values". While the truthfulness of this statement is highly suspect, our client's property value will be substantially diminished by the proposed Project. As noted above, our client's Property abuts Day Road and has approximately 200 feet of frontage on Day Road. The proposed pipeline and associated right of way would cut off approximately 100 feet of frontage to access the Property. In addition, the proposed pipeline path would also destroy the only remaining viable building site on the Property as a result of Columbia's other pipelines currently located on the Property. The direct financial impact on the Property of the proposed alternates on Exhibits E and F would be less substantial.

IND01-05 We have attempted to communicate with Columbia over the past year regarding the location of the pipeline and the proposed right of ways. Columbia has been largely nonresponsive to our requests and has failed to provide any reasonable explanation for their refusal to consider the alternative pathways. We recently met with Columbia representatives on April 26, 2016 to view the Property and walk the proposed pipeline path as well as the alternative pathways. During this meeting, we pointed out the proposed pond location and spring identified on the attached Exhibits to Columbia representatives. We also discussed our concerns with the location and the severe impact it would have on the Property, as outlined herein. Following our meeting, Columbia was unresponsive to additional requests and provided no reason for their refusal to consider the alternate paths other than their recent response that it is simply too late to consider any alternate pipeline locations. This ignores the fact that we have been discussing these alternative routes with Columbia for several months and also the fact that the Draft EIS indicates that Columbia is still in the process of refining the pipeline path.

IND01-06 Columbia's refusal to consider the alternate locations, as well as their plan to proceed with the proposed pipeline path, is both arbitrary, capricious and an abuse of their discretion. In addition, the proposed path fails to fully consider the environmental impact and the impact on the land use and value of the Property following the construction of the pipeline. As such, we request that the pipeline route be moved to the

IND01-04 Comment noted. Economic impacts associated with the Project, including property values are discussed in section 4.9.8 of the EIS.

IND01-05 Comment noted. See response to IND01-03.

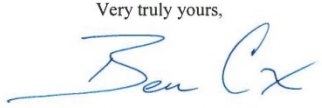
IND01-06 The spring in comment IND01-01 has been included in the final EIS evaluation. See responses to IND01-02 and IND01-04 above.

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)

IND01-06 path reflected on Exhibit E. If Columbia can provide justifiable reasons why the proposed pipeline path on Exhibit E is not viable then the landowners alternatively request that the pipeline be moved to the proposed path as reflected on Exhibit F. If Columbia can provide justifiable reasons why both paths are not viable, then the landowners request that additional environmental studies be conducted to consider the overall impact that the pipeline will have on the Property, considering the spring and pond that were not previously considered in the draft environmental report.

If you have any questions or need any additional information, please feel free to contact me or my associate, Chad Shepherd.

Very truly yours,



BENJAMIN M. COX

BMC/asd
Enclosure
cc: Mr. Michael Bohonak (w/ encl.)
Mr. George Liotus (c/o Zach Liotus) (w/ encl.)
Chad J. Shepherd, Esq. (w/o encl.)
HMHY#95296

PM-4

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)

EXHIBIT A

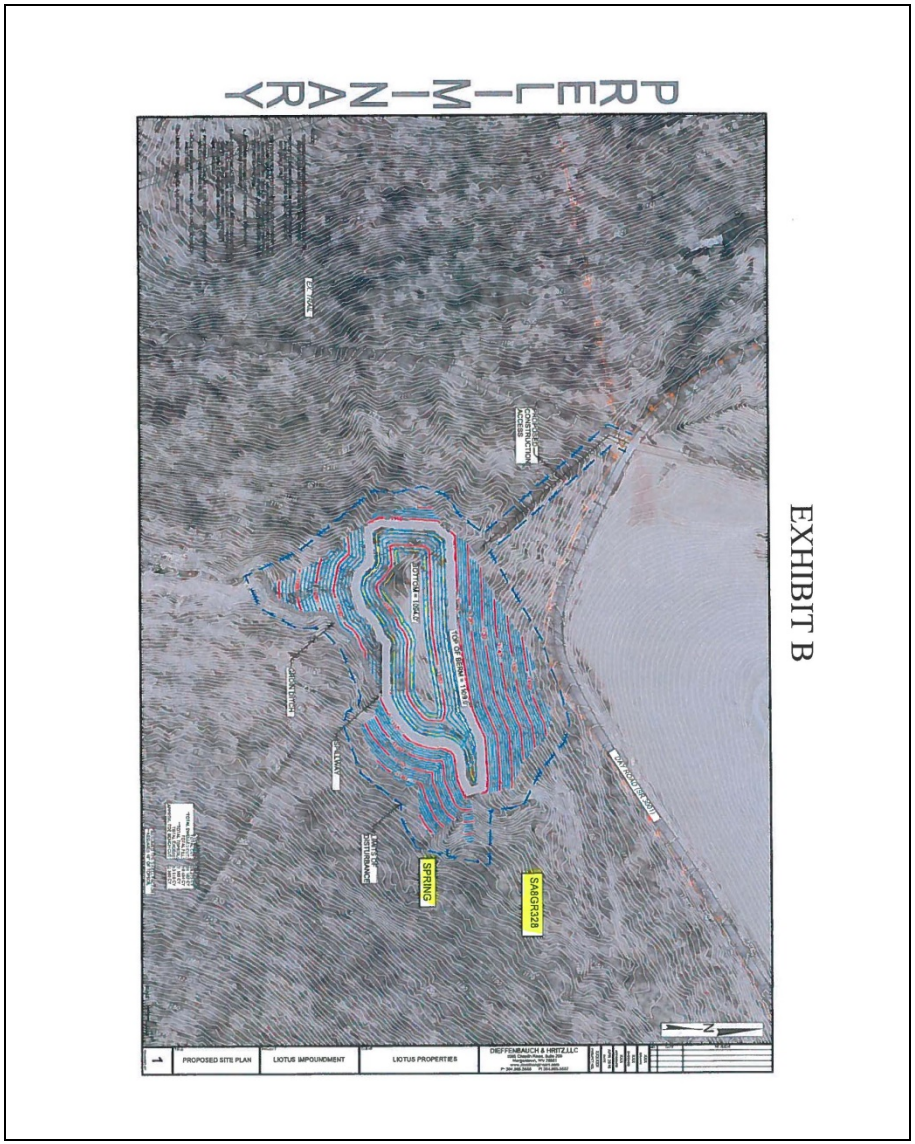
APPENDIX K-1
Waterbodies Crossed or Impacted by the Leach XPress Project

Milepost/ Facility	Feature ID	Waterbody Name	State Water Quality Classification [a,b]	Fisheries Classification	Flow Regime	FERC Classification	Waterbody Width (feet)	Pipeline Crossing Length (feet)	Proposed Crossing Method
Pipeline Facilities									
LEX									
Greene County, PA									
0.1	SA6GR330	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	1	0[c]	Workspace only
0.1	SA6GR330	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	1	0[c]	Workspace only
0.1	SA6GR329	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Intermittent	Minor	4	7	Dry open-cut
0.2	SA6GR331	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Intermittent	Minor	3	0[c]	Workspace only
0.2	SA6GR333	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Perennial	Minor	6	7	Dry open-cut
0.2	SA6GR336	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	3	0[c]	Workspace only
0.2	SA6GR336	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Intermediate	3	11	Dry open-cut
0.4	SA6GR359	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	2	0[c]	Workspace only
0.4	SA6GR333	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Perennial	Minor	6	0[c]	Workspace only
0.4	SA6GR355	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Intermittent	Minor	4	4	Dry open-cut
0.4	SA6GR353	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	2	0[c]	Workspace only
0.4	SA6GR353	Unnamed Tributary of Enlow Fork	WWF	Warmwater	Ephemeral	Minor	2	0[c]	Workspace only
0.7	SA6GR328	Unnamed Tributary of Dunkard Fork	WWF	Warmwater	Intermittent	Minor	6	6	Dry open-cut
1.3	SA6GR005	Unnamed Tributary of Dunkard Fork	WWF	Warmwater	Perennial	Intermediate	10	14	Dry open-cut
1.4	SA6GR003	Unnamed Tributary of Dunkard Fork	WWF	Warmwater	Intermittent	Minor	2	3	Dry open-cut
1.5	SA6GR002	Unnamed Tributary of Dunkard Fork	WWF	Warmwater	Ephemeral	Minor	2	2	Dry open-cut
1.8	SA6MR001	Dunkard Fork	WWF	Warmwater	Perennial	Intermediate	73	75	Dry open-cut
Marshall County, WV									

K-1-1

APPENDIX K – WATERBODIES CROSSED OR IMPACTED BY THE PROJECTS

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)



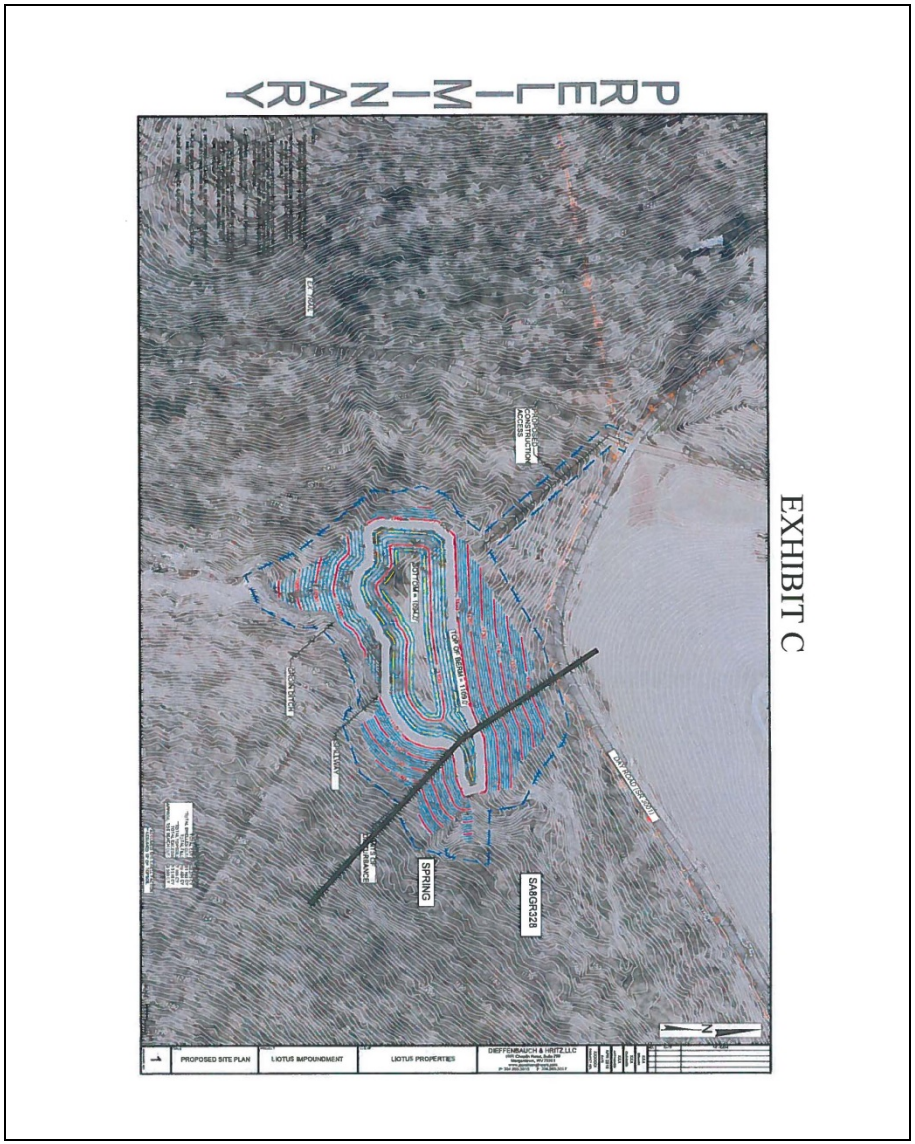
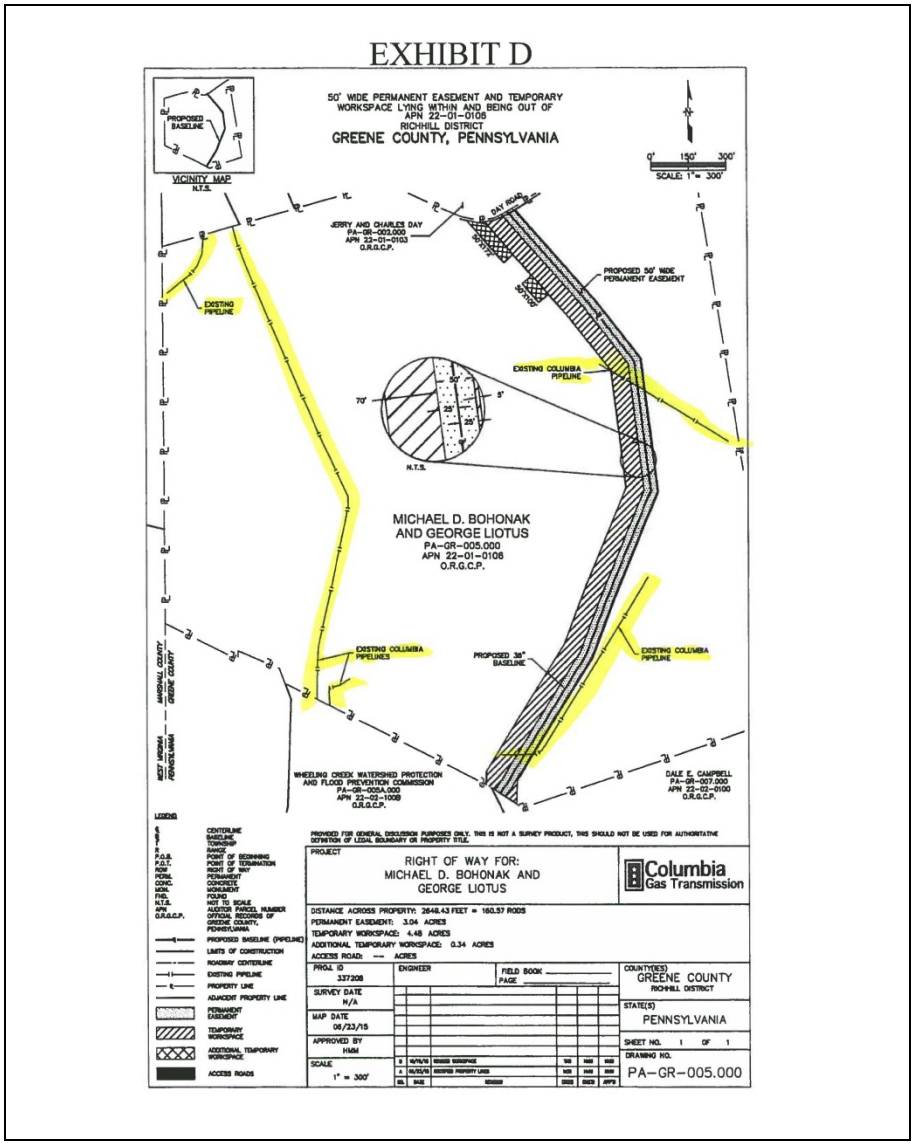


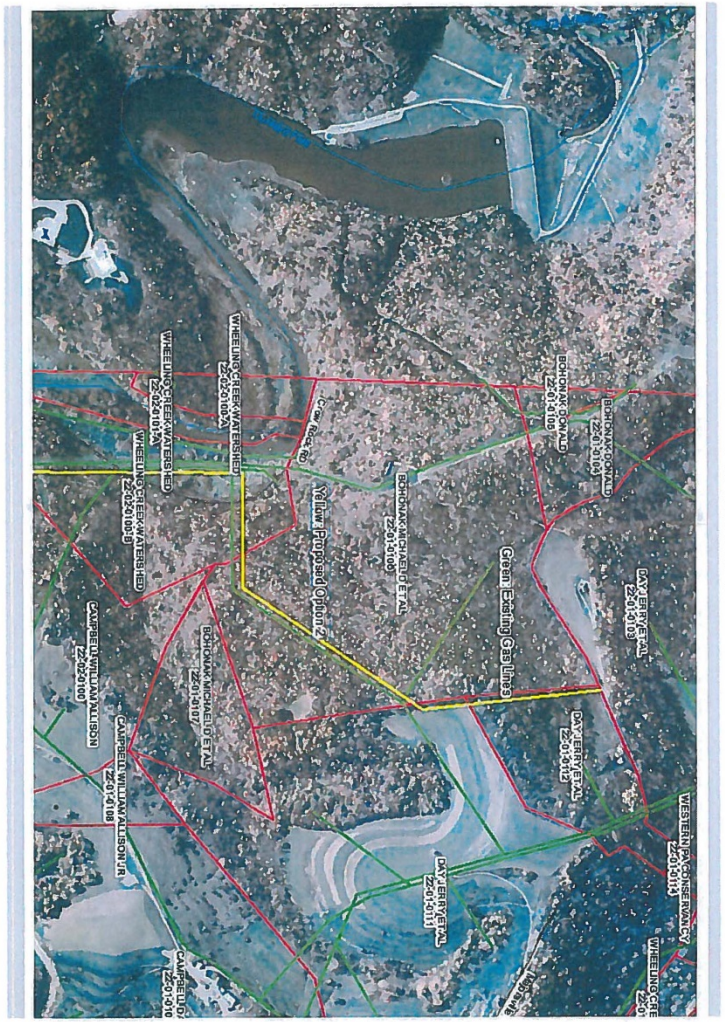
EXHIBIT C
PROPOSED SITE PLAN
LIOTUS IMPOUNDMENT
LIOTUS PROPERTIES
DIEFFENBAUCH & HRITZ LLC
SPRING
5A8GR328

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)



IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)

IND1 – Benjamin Cox on behalf of Mike Bohonak and George Liotus (cont'd)



IND2 – Devron West

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IND02-01 devron west, moundsville, WV.
I got my first and only offer dated Jan. 27 2016 and meet with a CG Landman shortly thereafter. On the second meeting in Feb. I ask them if they could move the line close to the edge of property because it is almost cutting my property in half and the best future house sites would be impacted. they came back and said it could not be moved after the application has been applied for. I wasn't contacted after for. Shortly after that I was on the ferc website and seen that they have rerouted the line many times. In a meeting in march told them about what I saw on the website and ask them if they could reroute it to miss the building sites. If CG would have contacted Me and the other land owners when they were laying out the right away they would have had less problems with us about the pipeline. they came on are property's without permission or even contacting us prior to surveying our property. As for the fair price that offered wasn't even one forth of to prices given for pipelines that is within a few hundred yards from the right away and crosses some of the pipelines. IT wasn't until after the meeting in May 19 2016 that I found out that some of neighbors and I wasn't on the mailing list. How I found out about the meeting was from the ferc website. In closing I would Like to Thank you for giving me the opportunity to let you having away of letting my voice be heard. I hope you come to the decision to not authorize their application until all landowners have agreed to all offers that they present.

IND02-01 Comment noted. See response to IND01-03.

IND2 – Devron West
(cont'd)

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Document Content(s)

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IND3 – Rose Zatezalo

ROSE P. ZATEZALO
18782 Squirrel Run Drive
Middleburg Heights, Ohio 44130
Phone No.: (440) 669-6838
E-mail: eagletnest@gmail.com

May 23, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, D.C. 20426

RE: Columbia Gas Transmission, LLC and Columbia Gulf Transmission, LLC
Leach Xpress Project
Response to Draft Environmental Impact Statement Docket No. CP15-514-000

Dear Ms. Bose:

I own three tracts of beautiful land in Center Township of Noble County, Ohio. All three parcels will be impacted by the construction and operation of the Leach XPress Project. The proposed Columbia Gas Transmission pipeline will cut through all three parcels:

OH-NO-090.000. MP 60.36-60.42. 342.16'
OH-NO-097.000. MP 60.52-60.70. 1053.37'
OH-NO-098.000. MP 60.70-60.76. 239.15'

I have read and reviewed the Draft EIS that was mailed to me in late April of 2016. Firstly, I found TWO ERRORS in this published book. Allow me to clear up the misconceptions.

IND03-01 Table 4.3.1-2 Water Wells Within 150' of the LX Project, on page 4-23, shows that there is a private well with domestic use at MP 60.7 in Noble County, at 25' from the proposed pipeline and at a distance of zero feet from the edge of the construction Workspace. The measurements coincide with Columbia Gas survey maps. This well is listed as INACTIVE on the Table. But it is an ACTIVE well and in use by me. THIS NEEDS TO BE CORRECTED! I had previously pointed this mistake out at the FERC Scoping Meeting in 2015. In accordance with Section

IND03-02 4.3.1.6 Groundwater... (page 4-28), I am requesting a pre and post construction testing of my active water supply well, near MP 60.7, and less than 3' from the Workspace.

IND03-03 Table 4.3.2-1 Watersheds Crossed by the LX Project (page 4-30) shows MP 59.4-62.9 in Noble County as part of the Wills Watershed. My parcels include from MP 60.36 to 60.76, which is within this watershed. However, Appendix K-1 indicates there are no water bodies on my parcels, and Appendix L shows there are no wetlands on my parcels. But in Appendix K-2 (page K-2-1) at MP 58.1 there is shown the East Fork of Duck Creek, which I believe is a tributary

IND03-01 Comment noted. Table 4.3.1-2 has been updated to reflect the active well.

IND03-02 Section 4.3.1.6 states that Columbia Gas would conduct pre-and post-construction testing of water wells and springs found within 150 feet of the LX Project construction workspace, at the landowner's request.

IND03-03 Mile markers 60.36 to 60.76 as indicated by the landowner are within the boundaries of the Wills Watershed indicated to be between mile markers 59.4-62.9 in table 4.3.2-1 in the final EIS.

Appendix K-1 does indicate one waterbody identified as SA2N0135 as being located at mile marker 60.4 which would be within the mile markers 60.36 to 60.76 that the landowner indicates is her property. The other waterbodies mentioned at mile markers 58.1 and 60.3 are not within the boundaries of the landowner's property.

IND3 – Rose Zatezalo
(cont'd)

May 23, 2016
Page 2

IND03-03 through at least one of the lower sections of my parcels. Appendix L, Wetlands Crossed or Impacted by the Leach XPress Project (page L-4) shows at MP 60.3, in the Workspace, there are two wetland types listed: PSS (Palustrine Scrub Shrub) and PEM (Palustrine Emergent). MP 60.3 is part of my parcels, and Appendix K-1 (page K-1-19) lists unnamed tributaries of South Fork at MP 60.3 as Ephemeral with a FERC classification as Minor 3'W x 4'L and at MP 60.4 as intermittent with Intermediate classification at 1'W x 12'L. Both show a Wet Open-Cut Proposed Crossing Method. Additionally, on the Noble County website's GIS mapping, (www.geospatialpartnership.org/nobleparcel/index.php) the map showing my parcels, indicates that the South Fork of Buffalo Creek runs through my lower eastern parcel, along T.R. 146. SO I CONCLUDE THAT MY PARCELS ARE IN A WATERSHED AND THAT THERE ARE WATERBODIES AND WETLANDS ON MY PARCELS. Please correct the Draft EIS accordingly.

Secondly, I would like to respond to several issues of concern to me, regarding the Draft EIS and Columbia Gas Transmission Pipeline.

SAFETY ISSUES

IND03-04 Appendix A, the Distribution List, has no contact phone numbers or addresses.
I would like to have emergency contact numbers and names for Columbia Gas, FERC and any other entity that would be needed if any questionable or negative events happen during or after the pipeline construction. This is especially necessary because Noble County only has a Volunteer Fire Department and limited Emergency Medical Specialists available. If something should happen after normal business hours, how can I notify someone to get immediate help with
IND03-05 a problem? Who is the EI, the Environmental Inspector for the Leach XPress? Am I to use the FERC Dispute Resolution Service Hotline, 877-337-2237, listed in the EIC, for emergencies?

IND03-06 BLASTING PLAN & SPILL PLAN

As referenced in EIS (ES- 4, 5, 11 &13) Columbia Gas will have a Blasting Plan and a Spill Plan. I would like to have a copy of each of those plans. In Section 2.6.2 Pipeline Facilities, it
IND03-07 notes that "markers would clearly indicate the presence of a pipeline and provide a telephone number and address ....in case of an emergency." Table 4.12.1-1 Class Locations Crossed by the LX Project shows MP 59.9-61 as Class 1, which includes my parcels. Does this mean that a minimum depth of soil will be 30" in normal soil and 18" in consolidated rock (page 4-178 & 179) for my parcels? According to the EIS, Class 1 means that my parcels are not considered HCA (High Consequence Area). If correct, are my parcels not considered high priority for safety due to fewer inhabitants? I request to be notified of the Blasting Plan and Schedule, to my primary residence, at 18782 Squirrel Run Drive, Middleburg Heights, Ohio 44130 in the same manner and time frame that FERC will be notified.

IND03-08 NOISE

According to the EIS, Class 1 appears to be a low priority for Noise Control, even though two of my parcels are at one of the highest elevations in Noble County, where noise will carry. The Summerfield Compressor Station noise may not reach my property due to the distance. I hope

IND03-04 In the event that an individual detects an emergency incident along the pipeline or at a compressor station, individuals should contact 911 or their local fire department and contact Columbia Gas or Columbia Gulf to report the incident. The phone numbers include: Columbia Gas Transmission at (800) 835-7191 and Columbia Gulf Transmission at (866) 485-3427. These phone numbers are also available at https://www.cpg.com/about-us/contact-us. Section 4.12.1 of the EIS also notes that Columbia Gas and Columbia Gulf must establish an Emergency Plan, in accordance with DOT regulations, that includes procedures for • making personnel, equipment, tools, and materials available at the scene of an emergency.

IND03-05 Consistent with FERC guidelines, Columbia Gas and Columbia Gulf would have their own Environmental Inspectors (EI) during construction of the Project. In addition to those EIs, FERC would oversee Third-party Compliance Monitors who would provide daily reports to the FERC staff on compliance issues. Additional details on the environmental inspection program and FERC monitoring is provided in section 2.5. See also the response to comment P1-04 for reporting an emergency.

IND03-06 Comment noted.

IND03-07 The current version of the blasting plan was included as appendix 6D to Resource Report 6 in the October 23, 2015 application (Accession No. 20151023-5090). The Blasting Plan can be viewed on the FERC website at http://www.ferc.gov. Using the "eLibrary" link, select "Advanced Search" from the eLibrary menu and enter 20151023-5090 Accession No. in the "Numbers: Accession Number" field. We have also recommended that CPG file a revised Blasting Plan prior to construction. This plan with also be available for public viewing through our eLibrary website.

IND3 – Rose Zatezalo
(cont'd)

IND03-08 the noise will not reach my parcels with my high elevation. But when the trees and other vegetation are removed, will the noise carry due to no absorption of noise by trees and other vegetation?

IND03-09 FOREST IMPACT

Section 4.5 Vegetation (pages ES-6&7) pointed out that "the greatest impact on vegetation would be on forested areas because of the time required for tree regrowth to pre-construction condition." In Noble County alone, 128.7 acres of Interior Forest will be impacted by the LXPress Project (Table 4.5.4-1 on page 4-58). All three of my parcels have exterior and interior forests which are in the permanent pipeline easements and workspace easements. In Section 4.5.4 Interior Forest Habitats (page 4-59), it was pointed out that 1,142.9 acres of Interior Forest Block Habitat would be impacted by the LX Project (page 4-57). Long-term impacts require more than 3 years to revegetation (4.5.6 General Impacts and Mitigation). I am extremely concerned because revegetation will not occur in my lifetime. During the rest of my lifetime I will be deprived of the beauty of the forests as they are today, in their natural state. I have been a naturalist my whole life and savor the beauty of my land with the spectacular view of the valley, the lush native plant material and the thriving wildlife, for not only myself but also for generations to come. What consideration are you giving to these impacts, and mitigation of the impacts in the Draft EIS?

EROSION, SILT CONTROL, RUN-OFF & LANDSLIDES

Since the elevation of two of my parcels is one of the highest in Noble County, I am concerned about the problems of Erosion, Silt Loss and Run-off of chemicals and other undesirable materials into the tributary of the creek at the lower sections of my parcels. Even though these issues are quite detailed in the Draft EIS, I hope that FERC and the other governmental agencies will look out for these details and protect our water areas and the creatures who inhabit them as the project is being constructed and afterwards. According to Section 4.1.1.3 Geologic Hazards, Landslides, (pages 4-6&7) Noble County has averaged 180-200 landslides annually. I anticipate an increase in these occurrences due to the pipeline construction and the high elevation of my parcels. I highly encourage the use of devices outlined in the EIS to minimize the risk of landslides during construction in areas with steep slopes, which include my parcels. Temporary ECDs during construction and permanent ECDs will be critically necessary to avoid and minimize erosion, silt loss, run-off and landslides now and in the future.

IND03-10 WILDLIFE

I am conscientiously and deeply concerned about the impact this change of forestry and elimination of forestry will have on the wildlife habitat, nesting, feeding, breeding and health. From large creatures like white tailed deer, to the midsize wildlife like foxes, bobcats, raccoons, eagles, hawks, herons, pheasants, wild turkeys and coyotes, to the smaller critters, like grouse, squirrels, chipmunks, blue jays, chickadees, bats, salamanders, snakes and much more, they all will be affected for quite some time. Just as the forest will take decades to recover, I worry that the wildlife will take as long or longer to adjust and recover. How will FERC resolve those impacts in the EIS?

IND03-08 There is no correlation between class location presented in section 4.12.1 of the EIS (safety) and noise (addressed in section 4.11.2). As explained in section 4.11.2.3, the Summerfield Compressor Station would contribute noise well below our 55 dBA L_{dn} criterion at all of the NSAs, which is the level established by EPA as protective of indoor and outdoor activity interference and is below the noise level of normal conversation.

IND03-09 Comment noted.

IND03-10 Section 4.6.1.4 of acknowledges and discusses the expected impacts to wildlife habitat. Most of the tree and vegetation clearing adjacent to this residence would occur within temporary right-of-way, which would undergo a successional reforestation with mostly native species in the period following construction. A variety of vegetational habitats, including herbaceous cover, early successional tree species and shrubs, and eventually understory and canopy-occupying tree species would colonize these former work areas.

IND3 – Rose Zatezalo
(cont'd)

IND03-11

WORKSPACE REQUEST

I would like to request that the Workspace area to the West of my residence at MP 60.7 be minimally impacted or changed as far as the vegetation is concerned. The existing vegetation adds to the privacy from Town Hill Road because it makes the residence less visible from the road. Also the vegetation acts as a natural noise buffer and wind break from the road for my residence. This area is extremely steep and has above ground electric wires across it and a storm water run-off pipe; both would have to be relocated if the trees and other vegetation were removed. I do not believe it would be a good location for workspace vehicles or equipment because of the steep grade and the tight spacing. Relocating the Workspace would not hamper the construction of the pipeline in any way.

PROPERTY VALUES

Section ES-9 states that "Based on our experience we are not aware of instances where an interstate natural gas pipeline has resulted in impacts on property values." In Section 4.9.5 Property Values (pages 4-141 to 143) FERC concludes that "impacts on property values,

IND03-12

especially with regard to pasture land would not be significant." In Section 4.9.6 Economy Tax, how could my property taxes potentially increase when my property value may potentially decrease? There are studies that have shown the contradiction. I was very pleased to read that "Columbia Gas would be responsible for paying any increased property tax resulting from the operation of the LX Project. The landowner would not bear responsibility for increased property taxes resulting from installation or operation of the pipeline." The payment of any increase in real property taxes has not been offered to me by Columbia in their submission of proposed right of way agreements to me. (pages 4-143). But I would like to know how this increase will be determined, how Columbia Gas will pay it and for what period of time will Columbia Gas be responsible?

PROXIMITY

IND03-13

In ES-13 and Table 3.3.3.1 the minor route variations Columbia Gas Transmission made for the workspace near my residence at MP 60.7, on Parcel #OH-NO-097.000, are referenced, Although I am pleased that Columbia Gas is not going to demolish or move my residence, as originally proposed, I am extremely concerned that the center of the pipeline will only be 30' from my residence and the workspace will only be 5' from my residence (Table 4.8.3-1 on page 4-124). I could toss a ball at the pipeline from my residence, it is that close! The proximity of the workspace and pipeline to my residence will necessitate pre-construction and post-production examination of my active water well, electric line, gas line and residence. Appendix O-24 shows my residence. As indicated on page 4-127 I have one of the 4 residences identified within 10' of the construction Workspace. FERC requests Columbia Gas file written documentation of an agreement with the landowners, of which I am one. Even though I have provided two separate agreements from my lawyer over a month ago, as of today, neither agreement has been even acknowledged or accepted. I was advised at the Draft EIS meeting on May 18, 2016, by Columbia that they can't relocate the workspace due to the need to store heavy machinery needed for construction. Since the storage will be very close to my cabin, I should be provided

IND03-11 Comment noted. FERC has modified environmental condition 12 to specify that Columbia Gas should continue to assess the route crossings of properties listed in table 3.3.3-1 toward incorporating a route crossing that avoids the landowners' stated concerns.

IND03-12 Comment noted. FERC has modified environmental condition 12 to specify that Columbia Gas should continue to assess the route crossings of properties listed in table 3.3.3-1 toward incorporating a route crossing that avoids the landowners' stated concerns.

IND03-13 We acknowledge your comment concerning potential disturbance to your active water well, electric line, gas line and locked-wire gated barbwire fence bordering Town Highway 139. Appendix O contains a site-specific residential construction plan for this residence (Drawing No. 337236-RES-08 as filed on Oct 23, 2015). We have included a recommendation that Columbia Gas file evidence of landowner concurrence with the site-specific residential construction plans for all locations identified by milepost in table 4.8.3-1 where LX Project construction work areas would be within 10 feet of a residence. This does not mean concurrence with the easement agreement, merely with the accuracy of the property items needing identification and their mapping on this drawing.

IND3 – Rose Zatezalo
(cont'd)

IND03-13 new screening with mature trees and evergreen trees, and an earthen berm after construction is completed due to the expected damage from the heavy machinery and construction.

IND03-14 EXTRA WORKSPACE

Appendix N "Extra Workspace..." (page N-19) indicates at MP 60.7 there will be extra workspaces 79'x50' and 100'x50' for road crossing. (ATWS ID#383 & 384). Are these for Town Hill Road, old T.R. 139? Are these extra workspaces in addition to the permanent easement and temporary workspaces in the area? Is this additional temporary workspace shown on the photos, indicated by red crosshatch marks, the same as the two Extra Workspaces in Appendix N? How will this new road crossing impact the existing Texas Eastern Pipeline (now the Spectra Line) that crosses Town Hill Road now? I would like clarification on these items.

IND03-15 LIGHTING

At the FERC Scoping Meeting in Noble County on January 28, 2015, I questioned if there would be temporary or permanent lighting for the Columbia Gas Transmission pipeline pre-construction or post-construction and no one could give me a firm answer. I read in the Draft EIS that all construction will take place during daylight hours unless an agreement has been made with the landowner. The issue of lighting is not addressed in the Draft EIS. It is of concern to me because the night sky in Noble County is void of light pollution. I would like it to stay that way so the night sky with all the amazing stars and the Milky Way will be still visible with the naked eye!

IND03-16 MAPS & CONSTRUCTION REQUIREMENTS ON MAPS

Appendix O-13 and O-24 "Site Specific Plans for Residences Within 50' of Construction Areas" show maps with details. Both are labeled "Preliminary Not For Construction." Neither map is dated. They appear to be identical, but are they? The "Construction Requirements" listed on the side of the photographic map seem consistent with the rest of the information in the Draft EIS, but I want reassurance that they are the same. Over the past two years there have been several incorrect maps distributed to me from Columbia Gas, so I would like the final maps to be dated and numbered for identification when they are used in the final EIS and for construction.

IND03-17 SECURITY

If construction for the permanent Easement and the Workplace for the pipeline necessitate the removal of the existing, locked, wire gate and the barbed wire fence on the upper parcels, along Town Hill Road, I require that they be replaced. I further require that I be provided with a key to the lock, for access to my parcels. I am concerned that security of my parcels and especially my residence will be hampered by the removal of the gate and fence. Columbia should be required to provide for their replacement as the mitigation-solution.

IND03-14 The extra workspace in adjoining the road is to accommodate construction and access during construction for the pipeline and crossing the road and existing pipeline as mentioned. This additional temporary workspace is included in the easement.

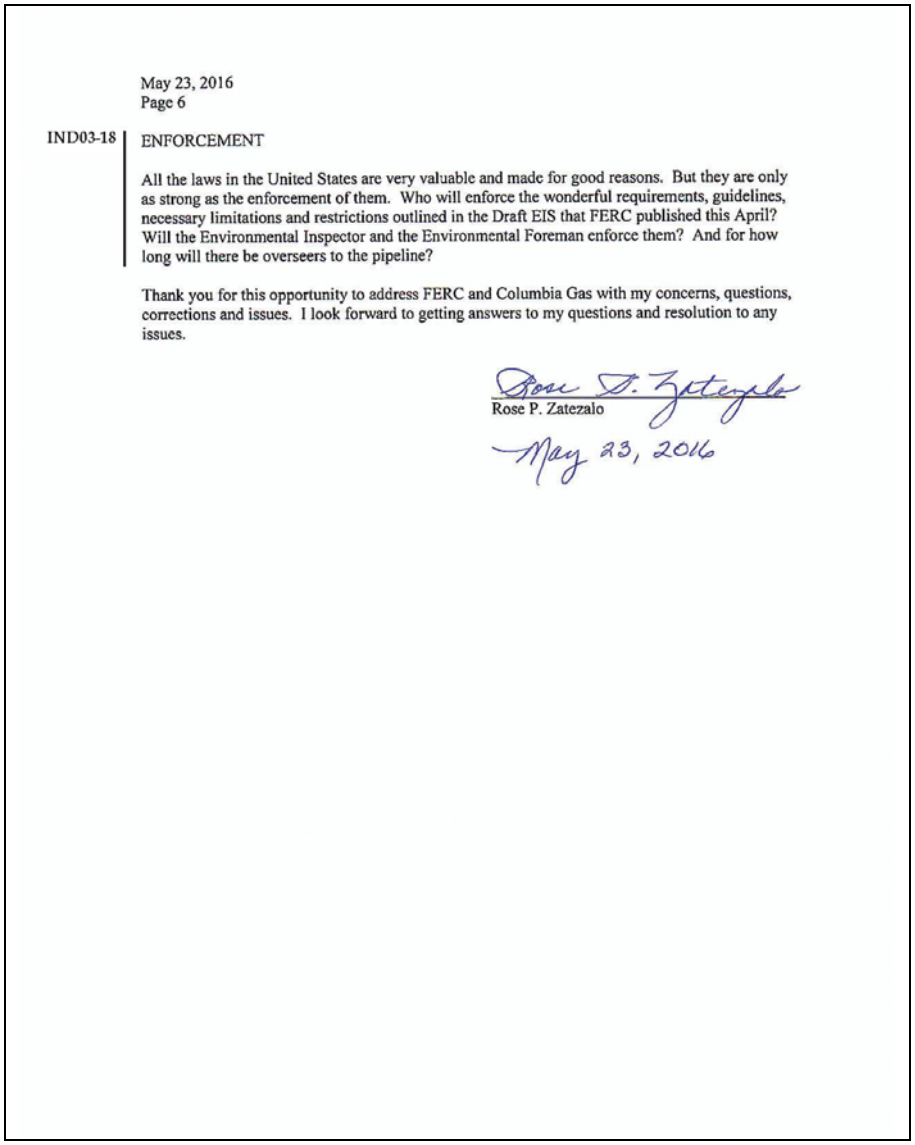
The road crossing will not affect existing adjacent pipelines as various precautions are taken to avoid tampering with existing hot lines. Columbia Gas participates in the "One-Call" program, as described in section 4.12.1 and additional information regarding the safety of utility crossings is discussed in section 4.9.4.1.

IND03-15 There are no aboveground facilities planned for construction on or directly near the property that would require lighting during operations. As for construction, section 4.11.2.2 states facilities would be predominantly scheduled during daylight hours.

IND03-16 Columbia Gas included two maps of the property in their Appendix 1D of the October 23, 2015 filing. Though the two maps vary in scale, the easement and workspace areas are the same. The final EIS will have the same maps unless Columbia Gas provides updated mapping in their Implementation Plan mentioned in EIS condition 6.

IND03-17 Section 4.8.2 of the final EIS discusses land ownership and easement requirements. See comment IND03-13 above.

IND3 – Rose Zatezalo
(cont'd)



May 23, 2016
Page 6

IND03-18 | ENFORCEMENT

All the laws in the United States are very valuable and made for good reasons. But they are only as strong as the enforcement of them. Who will enforce the wonderful requirements, guidelines, necessary limitations and restrictions outlined in the Draft EIS that FERC published this April? Will the Environmental Inspector and the Environmental Foreman enforce them? And for how long will there be overseers to the pipeline?

Thank you for this opportunity to address FERC and Columbia Gas with my concerns, questions, corrections and issues. I look forward to getting answers to my questions and resolution to any issues.

Rose P. Zatezalo

May 23, 2016

IND03-18 In addition to the many local, state, and federal entities (e.g., the EPA) that establish and enforce regulations, FERC would also require that the conditions in the final EIS be implemented. As stated in section 5.2 of the final EIS, within 60 days of the acceptance of the Certificate and before construction begins, Columbia Gas and Columbia Gulf shall file their respective Implementation Plans for review and written approval by the Director of OEP. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Projects.

IND4 – Steve Roley

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Steve Roley, Rockbridge, OH.
I am writing concerning the expanded Columbia Gas line going in next to our property. We own 84 acres in Hocking County. We moved to this property because it is exceptionally beautiful and we hike our property and private road daily. Columbia Gas already has multiple lines running all over our property and while we do receive gas from the storage well, that is our only compensation. The only time we have ever complained about their ongoing intrusion is due the amount of truck traffic and heavy equipment on our private road (they do not own the road) they have an easement but they continue to degrade the road and do very little to help with the cost of maintaining the road. Now they want to put another large line next to our property crossing our private road. The problem with this is that it is a very pristine and scenic area. Over a year ago we talked to the public relations firm that they sent out and went over our concerns. There is cold, fresh water spring that has been there for over 100 years, it runs all year round and feeds into the stream on our property that feeds the Hocking River. We expressed deep concern that Columbia not destroy the beautiful cliff face above and beside the spring or come close to the spring. We were told last year when we showed them that just crossing over the existing pipeline to the other side would eliminate blasting several hundred or or likely a few thousand tons of rock cliffs that we enjoy every day. The other side has one large boulder that likely weighs 4 or 5 tons, that is the only thing that would need to be moved or blasted on that other side.
This made sense to them and they took photos and told us they could not imagine Columbia would want to spend the money blasting the cliffs on the other side or take a chance damaging the cold, fresh water spring. We know it is an important spring for water quality in the Hocking River beside it grows several skunk cabbage plants which are an indicator species of the special niche ecosystem this spring provides to the surrounding area.
Within the last few weeks they put up survey flags. The surveyed area now includes the large cliff face and the spring itself. I contacted the the Ohio EPA and they visited and then agreed the area was important and the spring did not appear on their project maps so they contacted the Army Corps of Engineers.
We are not trying to cause trouble. Columbia Gas used to, at one time, be good neighbors and an honorable business. That is unfortunately no longer the case, they ignore our polite requests to fix the problems their large trucks create on our road, they purposefully hacked up one of our historic mountain laurel bushes by our cabin that was over 100 years old for no reason, they cut down trees and leave their mess, they are constantly bringing invasive species seeds and spreading them on our property with their trucks. I could go on about how they have at every turn, been disrespectful to us as property owners but now this new pipeline next to an existing one is more than we can take.
We walk that road every day and enjoy the birds, animals, trees, plants, stream, etc... we are only 1/2 a mile off US Route 33 and also fear this additional clearing because they remove all trees causing lasting and irreparable noise pollution. But the main concern remains, why blast those hundreds or thousands of tons of amazingly beautiful rock cliffs away, let alone risk destroying an irreplaceable fresh, cold, unpolluted

IND04-01

IND04-01 Section 4.3.1 addresses impacts on groundwater, existing hydrology and drinking water supply. Blasting is discussed in section 4.1.2.2.

IND4 – Steve Roley
(cont'd)

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water source? This pristine water feeds the Hocking River and ultimately the Ohio and Mississippi River when they could easily take the new pipeline to the other side and move one rock and not impact this water source or the cliffs.
We don't want to create problems for Columbia Gas even though as I mentioned they have been at times rude, unprofessional, and treat our property as if it is their own private property to destroy however they see fit. We appreciate the gas we receive from them and wish they would return to the business model they used to have where they treated the land owners with at least a little bit of respect and maintained or help maintain roads they are destroying. The guys that service the wells, particulary Joel Barkhurst has been extremely kind and helpful when we have had a frozen line, but he is the exception in an otherwise aloof big corporate utility conglomerate.
Our request is that someone with some power to review the destruction of this cold fresh water stream and this ancient cliff face, please reveiw and place the new line on the opposite side of the current line away from the stream and cliff face. Ultimately it will likely save Columbia Gas money and it would sure mean a great deal to us and all of those taking drinking water from wells along the Hocking River, along with the wildlife, plant life, waterfowl, etc. that depend on the Hocking River watershed for their sustenance. Thank you for your consideration.

IND4 – Steve Roley
(cont'd)

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IND5 – Wanda Wilt

Wanda Wilt
18682 State Route 664 South
Logan, OH 43138
614-204-9781
wwilt1@columbus.rr.com

June 11, 2016

RE: Comments on Docket: CP15-514-000 Leach Xpress

COMMENTS:

Dear FERC,

The following comments are in regards to the above project, specifically in the Hocking County/Logan, OH area of 664 South. I have tried to find the exact corresponding location identification number, but have not been successful – I'm sorry.

Please note that these comments are being drafted with little prep time, due to the fact that the disc.(on EIS) mailed out to land-owners that gave the June 13, 2016 deadline for submission, was only received on May 31, 2016. The document is over 800 pages long and difficult for the average citizen to interrupt, understand and match up corresponding locations etc.

Specific Concerns:

IND05-01

1. Lack of communication to the landowners in regards to changes in the pipeline in a timely fashion – in order for residents to have time to comment. Myself and neighbors have experienced this throughout the process – the receiving of this disc is a perfect example. There were EIS meetings listed on this disc of information – but the meetings all happened prior to receiving the disc – thereby, preventing the landowners form knowing about the meetings and having a chance to comment and ask questions.

IND05-02

2. The Environmental impact on stripping an entire hillside of trees – for what has been explained to the neighbors (by Columbia Gas) because the landowner that wanted the pipeline rerouted didn't want the pipeline going through her front yard – of rental properties and taking out a few of her large pine trees. This doesn't seem reasonable to

IND05-01 Comment noted. A detailed discussion of the public outreach opportunities can be found in Section 1.3 of the final EIS.

IND05-02 Concerns over trespassing and security are noted. Visual impacts are summarized in ES-7 and further addressed in sections 4.8.6 and 4.8.7.

IND5 – Wanda Wilt (cont'd)

IND05-02 destroy an entire woods, home of many wildlife and bedding area all for a couple of trees. Would like to know full reasoning.

The impact of this moves – changes the impact to our personal property as well as at least one of our neighbors. Prior to the rerouting of the pipeline, our land was not affected, nor was our view. This poses a safety concern also for the exposure of our woods that presently is not exposed to the public. As mentioned, trespassing and other security issues are a concern.

IND05-03 3. We had the ODNR Forestry agent out to assess our trees and he knew nothing about the stripping of the hill side nor an EIS that was done. His opinion is that the impact was going to be great, due to the full mature forestry that would be destroyed forever.

IND05-04 4. There is already a pipeline (501) that runs down a nearby cleared area that is going to be abandoned. It is reasonable to ask, from a landowners point of view, why would you allow more land to be destroyed and taken instead of placing the new pipeline in that current 501 location?

IND05-05 5. The present EIS doesn't appear to address the exact Environmental Impact, Migratory birds and water ways (creeks etc.) that will be affected in our area. Was the EIS done prior to the rerouting of this area? If so, and EIS would most likely need done.

IND05-06 6. Concern regarding the present contract offered – it does not address all the concerns or issues and protection of our land will not be open to the public due to the pipeline crossing under a road way. This opens us up to trespassing, four wheelers, snow mobiles etc. or traffic immediately off of the road way.

IND05-07 7. What is the sound barrier / protection going to be for our area during the work time? The work is slated to begin in November 2016 – November is the main hunting season. Our land is a reserved hunting area only – this greatly impacts the deer and their natural bedding and living areas. This impact is not listed on the disc of 800 pages either.

IND05-08 8. Concern of property value – The pipeline creates an opening to one entire side of our property, which up to this point is closed off to the public. This greatly diminishes the value of this land for hunting, privacy and security.

IND05-03 Comment noted. Interior forest habitat is discussed in section 4.5.4 of the final EIS.

IND05-04 Section 3.3.3 of the final EIS addresses routing variations. Pipeline paralleling is dependent upon many factors including constraints of system capacities, availability of land, or environmental constraints.

IND05-05 Comment noted. Migratory birds are discussed in section 4.6.1.3 and waterbodies are discussed in section 4.3.2 of the final EIS.

IND05-06 FERC does not get involved with contract negotiations between landowners and gas companies. If an agreement cannot be reached, a court may determine what fair market value impacts on properties affected by construction.

IND05-07 Section 4.11.2 addresses noise impacts from construction activities and proposed mitigation measures. Noise levels developed to protect nearby residences are also in place to ensure that pipeline construction and compressor stations authorized by FERC would not have significant adverse impacts on the environment, including wildlife and potentially sensitive species. Section 4.6.1.4 has been revised to address this.

IND05-08 Section 4.2.2.3 and section 4.9.5 of the final EIS discusses the potential damage to property and basis for compensation. Columbia Gas has committed to mitigate for impacts by compensating landowners affected by the project. If the LX and RXE projects require permanent or temporary use of land affecting property owner income, normal practice is for local appraisers to review the placement of the pipeline and conduct appraisals on an individual property basis as a basis for compensation.

IND5 – Wanda Wilt
(cont'd)

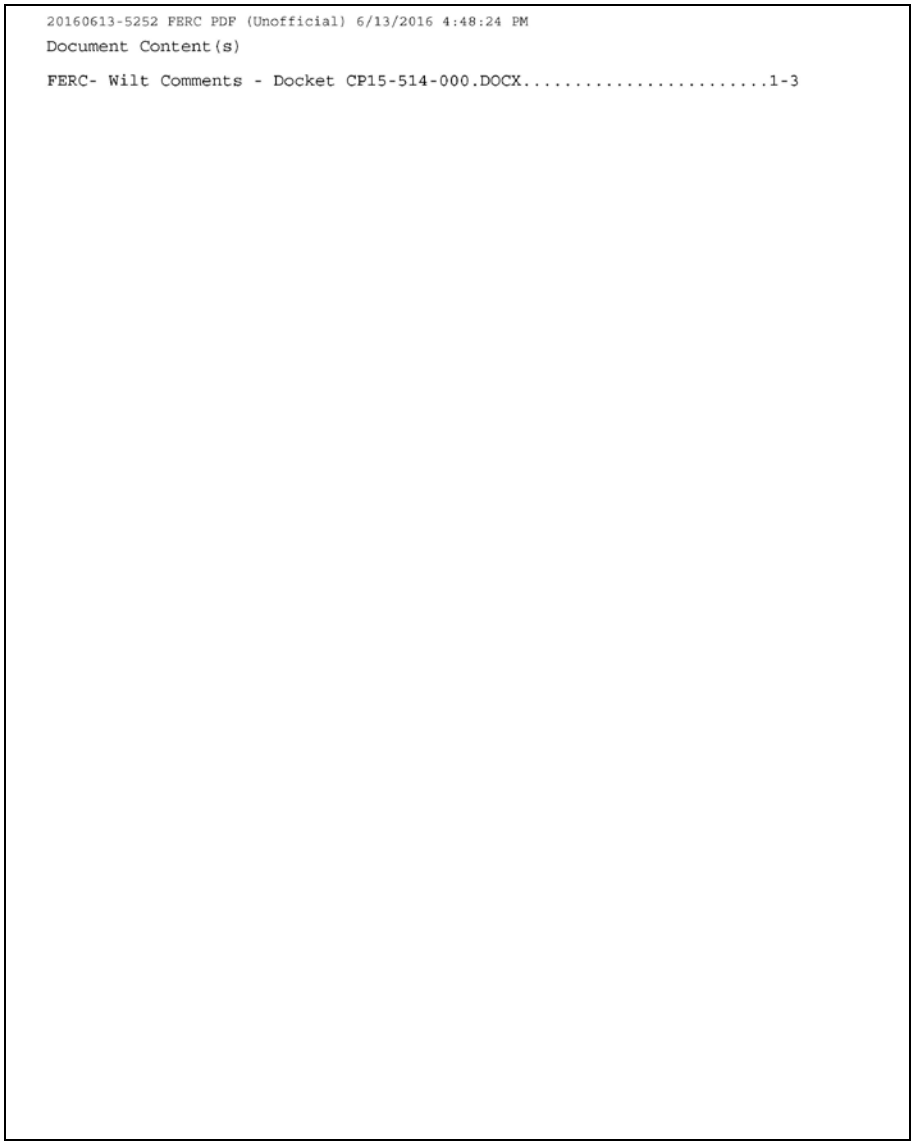
I realize there is a constraint of time and my comments above are roughly drafted without the normal wording and specifics you may be used to. I am hoping this opens a dialogue for answers, addressing our concerns and a chance to have a voice to the impact of this project.

Thank you for considering these comments,

Sincerely,

Wanda Wilt

IND5 – Wanda Wilt
(cont'd)



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