UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline LLC	)	
	)	CP16-10-000
Mountain Valley Pipeline Project	)	

REQUEST FOR REHEARING OF CONDITIONAL ORDER ISSUING CERTIFICATES AND GRANTING ABANDONMENT AUTHORITY AND STAY BY PRESERVE CRAIG, PRESERVE BENT MOUNTAIN, PRESERVE MONROE, SAVE MONROE, INDIAN CREEK WATERSHED ASSOCIATION, SUMMERS COUNTY RESIDENTS AGAINST THE PIPELINE, PROTECT OUR WATER, HERITAGE AND RIGHTS, PRESERVE GILES COUNTY, PRESERVE MONTGOMERY COUNTY VA, AND GREATER NEWPORT RURAL HISTORIC DISTRICT COMMITTEE

Pursuant to 18 C.F.R. §385.713, Preserve Craig, Preserve Bent Mountain, Preserve Monroe, Save Monroe, Indian Creek Watershed Association, Summers County Residents Against the Pipeline, Protect Our Water, Heritage and Rights, Preserve Giles County, Preserve Montgomery County VA, and Greater Newport Rural Historic District Committee (collectively, Petitioners) request rehearing of the Commission's conditional "Order Issuing Certificates and Granting Abandonment Authority," *see* eLibrary no. 20171013-4002 (Oct. 13, 2017) (Certificate Order), and a stay of the effectiveness of that order.

As described below, the administrative record does not demonstrate compliance with the Commission's regulations and policies for issuing certificates under Section 7 of the Natural Gas Act, or the National Environmental Policy Act (NEPA). Petitioners request that the Commission vacate the Certificate Order and remand the matter to Office of Energy Projects (OEP) Staff with instructions to undertake further procedures consistent with its rules and policies.

I.
PETITIONERS

Preserve Craig, Inc. is a nonprofit community organization founded in 1991 to study, educate, and protect the natural, historical, and cultural resources of Craig County, Virginia and the surrounding area. Its established purpose as a non-profit community organization is to educate the public and protect the resources and quality of life of the citizens and environment of Craig County and the Appalachian region.[1] Preserve Craig is a party to this proceeding, having filed a timely, unopposed Motion to Intervene.[2] It filed numerous comments in the certificate

[1] *See* Motion to Intervene of Preserve Craig under CP16-10-000, eLibrary no. 20151127-5055 (Nov. 27, 2015).

[2] *See id.*

proceeding, and related permit proceedings before the United States Forest Service (Forest Service) and Virginia Department of Environmental Quality.[3]

Preserve Bent Mountain is an unincorporated association formed in 1994. It includes over two hundred Bent Mountain residents and many other supporters locally and beyond, whose goals are to educate and engage the public in the enhancement of Poor and Bent Mountain and the surrounding community. The association is interested in the protection of natural resources, and in the continuity of the area's rural culture, heritage and traditions; the area's recreation, community services, economic resources, health and safety of inhabitants, and the wellness and long-term prosperity of the area's people and the region are also of great importance. It is a party to this proceeding having filed a timely, unopposed Motion to Intervene.[4]

Preserve Monroe is a coalition of landowners, residents, businesses, and organizations in Monroe County, West Virginia. It conducts research and extensive educational outreach, holds public meetings, and sends newsletters to their mailing list of over six hundred concerned citizens. It also encourages citizens to participate in the responsible stewardship of the area's resources to ensure the healthy and prosperous future of the county and their families. It opposes the MVP Project and similar natural gas transmission pipelines that pose direct, unmitigated threats to water, health, ways of life, property values, and landowner rights, and which promote unnecessary shale gas development. Preserve Monroe is a party to this proceeding, having filed a timely, unopposed Motion to Intervene.[5]

Save Monroe, Inc. is a nonprofit community based organization consisting of private citizens and landowners who will be impacted by the Mountain Valley Pipeline. It is focused on the preservation of community and landowner rights; preserving safe and clean water for both private and public water supplies; addressing issues of safety concerns to the public; preserving historical and cultural values and landmarks; addressing impact on wildlife, farming, and woodlands; addressing concerns pertaining to disruption of caves, karst topography, and

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[3] *See* Preserve Craig, "Letter Re: Expert Report: Cultural Attachment," eLibrary no. 20151023-5124 (Oct. 23, 2015); "Comment and Objection," eLibrary no. 20160113-5141 (Jan. 13, 2016); "Request for Comprehensive Amended Mountain Valley Pipeline Application," eLibrary no. 20160419-5119 (April 19, 2016); "Letter Re: Need for Study of the Potential Negative Impacts of the Mountain Valley Pipeline Project on Cultural Attachment Resources in the Peters Mountain Vicinity in Monroe, Craig, and Giles Counties," eLibrary no. 20160505-5090 (May 5, 2016); "Comments on the U.S. Army Corps of Engineers' Proposal to Reissue and Modify Nationwide Permit 12," eLibrary no. 20160817-5365 (Aug. 17, 2016); "Letter Re: Report on Erosion and Sedimentation," eLibrary no. 20161221-5353 (Dec. 21, 2016); "Letter Re: Economic and Environmental Impacts of Invasive Plant Species, and Related Requests to Withdraw the DEIS and Reject Proposed Amendments to the Jefferson National Forest LRMP," eLibrary no. 20161221-5349 (Dec. 21, 2016); "Letter Re: Resubmission of Kent Study," eLibrary no. 20161221-5346 (Dec. 21, 2016); "Comment on Mount Tabor Route Variation and Variation 250," eLibrary no. 20170221-5116 (Feb. 21, 2017).

[4] *See* Motion to Intervene of Preserve Bent Mountain under CP16-10-000, eLibrary no. 20151127-5065 (Nov. 26, 2015).

[5] *See* Motion to Intervene of Preserve Monroe under CP16-10-000, eLibrary no. 20151127-5099 (Nov. 27, 2015).

sinkholes and their effects on water supplies and landowners. Save Monroe is a party to this proceeding, having filed a timely, unopposed Motion to Intervene.[6]

Indian Creek Watershed Association, Inc. (ICWA) is a nonprofit community organization founded in 1996 with a mission to preserve and protect Monroe County's abundant, pure water. It promotes education that leads to citizens' involvement with watershed issues. ICWA is a party to this proceeding, having filed a timely, unopposed Motion to Intervene.[7] It intervened to protect the quality of water in Monroe County to benefit the economic and environmental health of the community. ICWA has filed numerous comments in the certificate proceeding, and related permit proceedings before the United States Forest Service and West Virginia Department of Environmental Protection (WVDEP).

Summers County Residents Against the Pipeline (SCRAP) is a group of citizens—property and small business owners, farmers, teachers, professionals in public service and private practice—who share concerns about the potentially negative environmental and economic impacts of the proposed Mountain Valley Pipeline on Summers County, West Virginia. The MVP plans to cross the Greenbrier River at Pence Springs in an area of shallow bedrock in a limestone river valley with significant mapped areas of karst geology. (The Greenbrier is the primary tributary of the New River in West Virginia.) Both the Greenbrier River and groundwater supplies along the entire MVP route are jeopardized by this project. These water resources are the county's single most valuable natural resource in sustaining the larger community, its families and businesses. Summers County is a heavily forested county. The stunning beauty of these hardwood forests and the confluence of three spectacular rivers (the Greenbrier, the Bluestone, and the New River) draw returning visitors, those seeking summer homes, and people wanting to make a permanent home in Summers County. Mountain Valley is proposing to cut a 125' swath through Summers County on steep slopes and through stream valleys, thereby creating man-made corridors prone to mudslides and ground water contamination. The MVP Project would ensure the expansion of edge habitat within the county's core forests—contributing to a potentially devastating loss of biodiversity in the region. Moreover, the linear impact of this corridor would further open the county to the threat of potentially devastating forests fires in a heavily mountainous area ringed by human habitation. The Mountain Valley Pipeline project threatens a promising future for the county of enhanced tourism—growing out of a commitment to the preservation of waterway and forest resources—and thereby undermines efforts to create a local economy capable of sustaining small businesses whose success will depend on the county's natural resources. SCRAP is a party to the proceeding having filed a timely, unopposed Motion to Intervene.[8]

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[6] *See* Motion to Intervene of Save Monroe, Inc. under CP16-10-000, eLibrary no. 20151125-5076 (Nov. 25, 2015).

[7] *See* Motion to Intervene of Indian Creek Watershed Association, Inc. under CP16-10-000, eLibrary no. 20151123-5166 (Nov. 23, 2015).

[8] *See* Motion to Intervene of Summers County Residents Against the Pipeline under CP16-10-000, eLibrary no. 20151127-5155 (Nov. 27, 2015).

Protect Our Water, Heritage and Rights (POWHR) is an interstate coalition representing groups in thirteen counties in Virginia and West Virginia dedicated to protecting the water, local ecology, heritage, land rights, and human rights of individuals, communities, and regions from harms caused by the expansion of fossil fuel infrastructure. POWHR and its member organizations support strong local citizens' groups; coordinate, conduct and sponsor research on the impacts of fossil fuel infrastructure development in the Appalachian region; and promote the preservation of the biodiversity, historical landmarks, cultural attachments, pristine waters, geologic integrity, property rights and the optimal wellness and prosperity of all in the region. POWHR is a party to the proceeding having filed a timely, unopposed Motion to Intervene.[9]

Preserve Giles County is a citizens group organized to oppose interstate gas pipelines, and the hydraulic fracturing they sustain, and to preserve our natural heritage and the way of life it provides. Preserve Giles exists to empower citizens of our county, consistent with the principles of environmental democracy. It is committed to pursuing these goals by utilizing non-violent direct action, working with elected officials, and in coalition with other communities and environmental defense organizations. It is a party to this proceeding having filed a timely, unopposed Motion to Intervene.[10]

Preserve Montgomery County VA is a cooperative organization of citizens and residents of areas potentially affected by the MVP Project who are concerned about the pipeline and its potential effects. Preserve Montgomery presented information relevant to the Commission's evaluation of the impacts of the project during the proceeding. It is a party having filed a timely, unopposed Motion to Intervene.[11]

The Greater Newport Rural Historic District Committee (Committee) is a not-for-profit association of volunteers formed in the early 1990s for the purpose of surveying, documenting, and preserving the historic and rural farming communities integral to and surrounding the historic Village of Newport, Virginia (Newport Historic District-National Register of Historic Places NR #94000059). The rural farming communities which comprise the Greater Newport Rural Historic District (District) include: the Sinking Creek Valley, Clover Hollow/Plowscrew, Mountain Lake Road, and Spruce Run Valley. The Committee provided resources and research, inventoried properties, buildings, and structures in the District in support of the nomination to the National Register of Historic Places (http://www.dhr.virginia.gov/registers/Counties/Giles/035-0412_Greater_Newport_Rural_Historic_District_2000_Final_Nomination.pdf). As a result of the Committee's efforts, the District was placed on the National Register of Historic Places in 2000 (NR# 00000489). The Committee has filed numerous comments and objections regarding the mishandling of the Section 106 process, and failure to comply with Cultural Resource expert opinions, including those of the State Historic Preservation Officer. The Committee is

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9 *See* "Motion to Intervene of POWHR under CP16-10-000," eLibrary no. 20151125-5343 (Nov. 25, 2015).

10 *See* "Motion to Intervene of Preserve Giles County," eLibrary no. 20161220-5142 (Dec. 20, 2016).

11 *See* "Motion to Intervene of Preserve Montgomery County VA," eLibrary no. 20151123-5062 (Nov. 21, 2015).

committed to the preservation of the historic Village of Newport and its associated rural historic district. It is a party to the proceeding having filed a timely, unopposed Motion to Intervene.[12]

II.
BACKGROUND

On October 23, 2015, Mountain Valley filed an application for a Certificate of Public Convenience and Necessity under NGA section 7(c).[13] It filed resource reports under 18 C.F.R. section 380.12 on December 1, 2014,[14] and revised reports on October 23, 2015.[15] On November 13, 2015, the Commission issued the Notice of Applications and solicited Motions to Intervene.

Office of Energy Projects (OEP) Staff issued the draft Environmental Impact Statement (EIS) on September 16, 2016. Comments were due on December 22, 2016. Mountain Valley continued to file new or revised information regarding the proposed project, alternatives, and potential impacts during the draft EIS comment period. Many parties, including the Petitioners, objected to the Commission's publication of the draft EIS based on incomplete information.[16] OEP Staff issued two Post-DEIS Information Requests in January and March of 2017.[17] OEP Staff issued the final EIS on June 23, 2017.[18] It did not provide a formal comment period for the final EIS; however, many parties, including the Petitioners, did file comments. OEP Staff did not respond to comments filed on the final EIS. Mountain Valley continued to file environmental information following publication of the final EIS. OEP Staff did not supplement the final EIS in response to the additional information filed.

On October 13, 2017, the Commission issued the Certificate Order. The Certificate Order approves Mountain Valley's construction of a 303.5-mile-long, 42-inch-diameter natural

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[12] Motion to Intervene of Greater Newport Rural Historic District Committee," eLibrary no. 20151117-5094 (Nov. 17, 2015).

[13] *See* MVP, "Application for Certificate of Public Convenience and Necessity and Related Authorizations," eLibrary no. 20151023-5035 (Oct. 23, 2015). Prior to filing its application, Mountain Valley received permission to use the Commission's pre-filing procedures (*see* 18 C.F.R. section 157.21). *See* FERC, "Letter responding to Mountain Valley Pipeline LLC's letter filed 10/27/14 re Approval of Pre-Filing Request for the planned Mountain Valley Pipeline Project under PF15-3," eLibrary no. 20141031-3001 (Oct. 31, 2014).

[14] *See* MVP, "Report of Mountain Valley Pipeline LLC Draft Resource Report #1 and Summary of Alternatives under PF15-3," eLibrary no. 20141201-5054 (Dec. 01, 2014).

[15] *See* MVP, Revised Reports, eLibrary no. 20151023-5035.

[16] *See* Preserve Craig, "Economic and Environmental Impacts of Invasive Plant Species, and related requests to withdraw the DEIS and reject proposed amendments to the Jefferson National Forest LRMP," eLibrary no. 20161221-5349 (Dec. 19, 2016).

[17] *See* FERC, "Post-DEIS Environmental Information Request," eLibrary no. 20170127-3018 (Jan. 27, 2017); FERC, "Post-DEIS Environmental Information Request #2," eLibrary no. 20170320-3003 (Mar. 20, 2017).

[18] *See* FERC, "Final Environmental Impact Statement," eLibrary no. 20170623-4000 (June 23, 2017).

gas pipeline from Wetzel County, West Virginia (milepost (MP) 0.0) to an interconnection with Columbia Gas Transmission, LLC's WB System in Braxton County, West Virginia, at MP 77.6, and then to an interconnection with Transco's mainline system at MP 303.5 in Pittsylvania County, Virginia.[19]

The Certificate Order includes many environmental conditions, some of which include additional survey work to identify potential project impacts. There are several permits required under state and federal law that are still outstanding, specifically: the Bureau of Land Management's grant of a right-of-way, the U.S. Army Corps' issuance of a Clean Water Act (CWA) section 404 permit; Virginia Marine Resources Commission's Subaqueous Bottoms Habitat Permit, and Virginia Department of Environmental Quality's issuance of a CWA section 401 permit. Also, the Commission has not yet completed consultation with the U.S. Fish and Wildlife Service under Endangered Species Act section 7, or the National Historic Preservation Act section 106 process.

The Certificate Order is conditional in that it states that Mountain Valley may not begin construction until it satisfies certain environmental conditions, including those that require it to obtain necessary permits. Mountain Valley nonetheless is seeking to rely on the Certificate Order to exercise the right of eminent domain to condemn private property. Since the Commission issued the Certificate Order, Mountain Valley has sued over three hundred landowners in Virginia and one hundred forty landowners in West Virginia to acquire easements and access through eminent domain.[20]

III.
STATEMENT OF ISSUES

Issue 1. Whether the Commission Erred in Not Making a Finding regarding Mountain Valley's Qualifications in the Certificate Order.

Statutes

15 U.S.C. § 717f(e)

Issue 2. Whether the Final EIS Demonstrates a "Hard Look" at the Environmental Impacts of the MVP Project as Required by NEPA.

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[19] *Id.* at ¶ 7.

[20] Duncan Adams, *Mountain Valley Sues Landowners to Gain Pipeline Easements and Access through Eminent Domain*, THE ROANOKE TIMES (Oct. 27, 2017), available at http://www.roanoke.com/business/news/mountain-valley-sues-landowners-to-gain-pipeline-easements-and-access/article_abff5d87-1aee-5a50-b3c2-b3ee0c812e44.html (last checked Nov. 13, 2017); Ken Ward, Jr., *MVP developers suing hundreds of WV, Virginia landowners for easements*, CHARLESTON GAZETTE-MAIL (Nov. 2, 2017), available at https://www.wvgazettemail.com/news/special_reports/marcellus/mvp-developers-suing-hundreds-of-wv-virginia-landowners-for-easements/article_f018a143-861d-5a7d-9e07-846fe6ea5cc2.html (last checked Nov. 13, 2017).

Cases

Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 103 S. Ct. 2246, 76 L. Ed. 2d 437 (1983)

Bissell v. Penrose, 49 U.S. 317, 12 L. Ed. 1095 (1850)

Colorado Envtl. Coal. v. Dombeck, 185 F.3d 1162 (10th Cir. 1999)

Delaware Riverkeeper Network v. F.E.R.C., 753 F.3d 1304 (D.C. Cir. 2014)

Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437 (4th Cir. 1996)

Marsh v. Oregon Nat. Res. Council, 490 U.S. 360, 109 S. Ct. 1851, 104 L. Ed. 2d 377 (1989)

Nat. Res. Def. Council, Inc. v. Hodel, 865 F.2d 288 (D.C. Cir. 1988)

Nat. Res. Def. Council, Inc. v. Morton, 458 F.2d 827 (D.C. Cir. 1972)

Nat'l Audubon Soc'y v. Dep't of Navy, 422 F.3d 174 (4th Cir. 2005)

Natural Resources Defense Council v. U.S. Forest Service, 421 F.3d 797 (9th Cir. 2005)

Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372 (9th Cir.1998)

Nevada v. Dep't of Energy, 457 F.3d 78 (D.C. Cir. 2006)

Okanogan Highlands Alliance v. Williams, 236 F.3d 468 (9th Cir.2000)

Pac. Coast Fed'n of Fishermen's Associations v. Blank, 693 F.3d 1084 (9th Cir. 2012)

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 109 S. Ct. 1835, 104 L. Ed. 2d 351 (1989)

S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dep't of Interior, 588 F.3d 718 (9th Cir. 2009)

Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d 1357 (D.C. Cir. 2017)

Small Refiner Lead Phase–Down Task Force v. U.S.E.P.A., 705 F.2d 506 (D.C.Cir.1983)

The Fund for Animals v. Norton, 294 F. Supp. 2d 92 (D.D.C. 2003)

Envtl. Def. v. U.S. Army Corps of Engineers, 515 F. Supp. 2d 69 (D.D.C. 2007)

Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152 (10th Cir. 2002)

Statutes

42 U.S.C. § 4321

42 U.S.C. § 4332(2)(C)

42 U.S.C. § 4332(2)(C)(ii)

42 U.S.C. § 4332(c)

42 U.S.C. § 4332(C)(ii)

Regulations

18 C.F.R. § 380.1

40 C.F.R. § 1500.1

40 C.F.R. § 1502.1

40 C.F.R. § 1502.14(f)

40 C.F.R. § 1502.16

40 C.F.R. § 1502.17

40 C.F.R. § 1502.22

40 C.F.R. § 1502.24

40 C.F.R. § 1505.2(c)

40 C.F.R. § 1506.5(a)

40 C.F.R. § 1508.20

Issue 3. Whether the Commission Erred in Not Supplementing the Final EIS Prior to Issuing the Certificate Order.

Cases

Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989)

South Carolina Electric & Gas Co., 109 FERC ¶ 61,331 (2004)

Warm Springs Task Force v. Gribble, 621 F.2d 1017 (9th Cir. 1980)

Regulations

40 C.F.R. section 1502.9

40 C.F.R. § 1502.9(c)(1)(ii)

Issue 4. Whether the Commission Erred in Not Thoroughly Considering Reasonable Alternatives as Required by the NGA and NEPA sections 102(2)(C)(iii) and 102(2)(E).

Cases

Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190 (D.C. Cir. 1991)

City of Grapevine, Tex. v. Dep't of Transp., 17 F.3d 1502 (D.C. Cir. 1994)

Envtl. Def. Fund, Inc. v. Corps of Engineers of U.S. Army, 492 F.2d 1123 (5th Cir. 1974)

Izaak Walton League of Am. v. Marsh, 655 F.2d 346 (D.C. Cir. 1981)

Laclede Gas Co. v. F.E.R.C., 873 F.2d 1494 (D.C. Cir. 1989)

Missouri Pub. Serv. Comm'n v. F.E.R.C., 234 F.3d 36, 41 (D.C. Cir. 2000)

National Fuel Gas Supply Corp., 158 FERC ¶ 61,145 (2017)

Natural Resources Defense Council v. U.S. Forest Service, 421 F.3d 797 (9th Cir. 2005)

Sierra Club v. Morton, 510 F.2d 813 (5th Cir. 1975)

Sierra Club v. Watkins, 808 F. Supp. 852 (D.D.C. 1991)

State of California v. Block, 690 F.2d 753 (9th Cir. 1982)

Am. Gas Ass'n v. F.E.R.C., 593 F.3d 14, 19 (D.C. Cir. 2010)

Tongass Conservation Soc. v. Cheney, 924 F.2d 1137 (D.C. Cir. 1991)

Statutes

42 U.S.C. § 4332(2)(C)(iii)

42 U.S.C. § 4332(2)(E)

Regulations

18 C.F.R. § 380.15(a)

40 C.F.R. § 1502.13

40 C.F.R. § 1502.14

40 C.F.R. § 1502.24

40 C.F.R. § 1508.25(b)(2)

Issue 5. Whether the Record Supports a Finding that the Project as Approved Avoids or Minimizes Impacts to Scenic, Historic, Wildlife, and Recreational Values as Required by the NGA.

Cases

Star Central Gas Pipeline, Inc., 124 FERC ¶ 61,042

Statutes

15 U.S.C. § 717f

Regulations

18 C.F.R. § 380.15(a)

Policy

FERC, "Statement of Policy: Certification of New Interstate Natural Gas Pipelines" (1999), Docket No. PL99-3-000

IV.
STANDARD FOR REHEARING

This section sets out standards, which apply in judicial review and are the basis for our argument that the Certificate Order erred in the specific ways alleged in the Argument in the following section. The authorities cited herein apply to all of the issues identified for rehearing.

This certificate proceeding under the NGA is an adjudication as defined by the Administrative Procedures Act (APA) section 554.[21]

[21] 5 U.S.C. § 554. Under APA section 556, the Commission is required to conduct a hearing for a certificate proceeding. 5 U.S.C. § 556. In any hearing required under APA section 556,

> parties are entitled to a reasonable opportunity to submit for the consideration of the employees participating in the decisions – (1) proposed findings and conclusions; or (2) exceptions to the decisions or

The APA's "arbitrary and capricious standard" applies to Commission orders issued under the NGA.[22] It also applies to judicial review of claims brought under NEPA.[23] Under APA section 706(2), 5 U.S.C. § 706(2), a court "… shall hold unlawful and set aside agency action, findings, and conclusions found to be … (A) arbitrary, capricious, abuse of discretion, or otherwise not in accordance with the law; (D) without observance of procedure required by law; or (E) unsupported by substantial evidence …."

Under this standard, the Court can uphold the Commission's decisions under the NGA if it "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'"[24] While the scope of judicial review is "narrow and a court is not to substitute its judgment for that of the agency," the agency "must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choices made.'"[25] "A

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recommended decisions of subordinate employees or to tentative agency decisions; and (3) supporting reasons for the exceptions or proposed findings or conclusions. 5 U.S.C. § 557(c).

An agency must make, and the record must show, a "ruling on each [proposed] finding, conclusion, or exception presented [by a Party]." *Id*. Its final decision must include "…findings and conclusions, and the reasons or basis therefore, on all material issues of fact, law, or discretion presented on the record…." *Id.* "The purposes of the APA provision requiring specific findings and conclusions are to prevent arbitrary agency decisions, provide parties with a reasoned explanation for those decisions, settle the law for future cases, and furnish a basis for effective judicial review." *Armstrong v. Commodity Futures Trading Comm'n*, 12 F.3d 401, 403 (3d Cir. 1993); *see also Ne. Broad., Inc. v. F.C.C.*, 400 F.2d 749, 758–759 (D.C. Cir. 1968) (citations omitted).

[22] *Am. Gas Ass'n v. F.E.R.C.*, 593 F.3d 14, 19 (D.C. Cir. 2010).

[23] "Courts reviewing agency action for compliance with NEPA must confirm 'that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious.'" *Nevada v. Dep't of Energy*, 457 F.3d 78, 87–88 (D.C. Cir. 2006).

[24] *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S. Ct. 2856, 77 L. Ed. 2d 443 (1983) ("*Motor Vehicle*") (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168, 83 S. Ct. 239, 9 L. Ed. 2d 207 (1962) ("*Burlington Truck*")).

[25] *Motor Vehicle*, 463 U.S. at 43. Thus:

> [i]f the administrative action is to be tested by the basis upon which it purports to rest, that basis must be set forth with such clarity as to be understandable. It will not do for a court to be compelled to guess at the theory underlying the agency's action; nor can a court be expected to chisel that which must be precise from what the agency has left vague and indecisive.

Sec. & Exch. Comm'n v. Chenery Corp., 332 U.S. 194, 196–7, 67 S. Ct. 1760, 91 L. Ed. 1995 (1947); *see also Fed. Power Comm'n v. Texaco Inc.*, 417 U.S. 380, 397, 94 S. Ct. 2315, 41 L. Ed. 2d 141 (1974); *Columbia Gas Transmission Corp. v. Fed. Energy Regulatory Comm'n*, 628 F.2d 578, 593 (D.C. Cir. 1979). Similarly:

> We noted in [a prior case] that we do not pretend to have the competence or the jurisdiction to resolve technical controversies in the record, or ... to second-guess an agency decision that falls within a 'zone of reasonableness.' Rather, our task is to 'ensure public accountability,' by requiring the agency to identify relevant factual evidence, to explain the logic and the policies underlying any legislative choice, to state

passing reference to relevant factors, however, is not sufficient to satisfy the Commission's obligation to carry out 'reasoned' and 'principled' decisionmaking."[26]

NGA section 19r(b)[27] further provides that "the finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. Under this standard, substantial evidence is record evidence which is expressly found to be: (A) reliable and probative for the purpose of supporting a finding and (B) superior to competing evidence with respect to a given finding.[28]

V.
ARGUMENT

A. The Commission Erred in Not Making a Finding Regarding Mountain Valley's Qualifications in the Certificate Order.

Under NGA section 7(e),

> a certificate shall be issued to any qualified applicant therefor, authorizing the whole or any part of the operation, sale, service, construction, extension, or acquisition covered by

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> candidly any assumptions on which it relies, and to present its reasons for rejecting significant contrary evidence and argument.

United Steelworkers of Am., AFL-CIO-CLC v. Marshall, 647 F.2d 1189, 1207 (D.C. Cir. 1980) (internal citations omitted).

"Most fundamentally, our task is 'to ensure that the [agency] engaged in reasoned decisionmaking.'" *Farmers Union Cent. Exch., Inc. v. F.E.R.C.*, 734 F.2d 1486, 1500 (D.C. Cir. 1984) ("*Farmers Union*") (quoting *Int'l Ladies' Garment Workers' Union v. Donovan*, 722 F.2d 795, 815 (D.C. Cir. 1983)).

[26] *American Gas*, 593 F.3d at 19 (quoting *Missouri Pub. Serv. Comm'n v. F.E.R.C.*, 234 F.3d 36, 41 (D.C. Cir. 2000)).

[27] 15 U.S.C. § 717r(b).

[28] *See* 18 C.F.R. § 385.509 ("The presiding officer may also exclude from evidence any other material which the presiding officer determines is not of the kind which would affect reasonable and fair-minded persons in the conduct of their daily affairs."); Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993); *Motor Vehicle*, 463 U.S. at 43; *Burlington Truck*, 371 U.S. at 168. *See also Butte Cty., Cal. v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010):

> …an agency's refusal to consider evidence bearing on the issue before it constitutes arbitrary agency action within the meaning of § 706. This proposition may be deduced from case law applying the substantial evidence test, under which an agency cannot ignore evidence contradicting its position. The substantiality of evidence must take into account whatever in the record fairly detracts from its weight. Although we are dealing with the question whether agency action is arbitrary or capricious, in their application to the requirement of factual support the substantial evidence test and the arbitrary or capricious test are one and the same.

Id. (internal citations and quotation marks omitted).

> the application, if it is found that the applicant is able and willing properly to do the acts and to perform the service proposed and to conform to the provisions of this chapter and the requirements, rules, and regulations of the Commission thereunder….[29]

The Certificate Order does not make a finding regarding Mountain Valley's ability and willingness to perform the acts required by the statute and implementing regulations. The Commission has not responded to comments by various parties that Mountain Valley has not complied with the Commission's regulations for providing environmental information and preparing an application for certificate to date.[30]

B. The Final EIS Does Not Demonstrate a "Hard Look" at the Environmental Impacts of the MVP Project as Required by NEPA.

The Certificate Order states that the Commission received comments raising concerns regarding project impacts on "drinking water sources, surface water, karst, steep slopes, cultural resources, threatened and endangered species, forests, erosion, invasive species, visual resources, and health and safety."[31] It adopts the findings in the final EIS that most of these impacts will be insignificant:

> construction and operation of the MVP and Equitrans Expansion Projects may result in some adverse environmental impacts on specific resources. The final EIS concludes that impacts on most environmental resources would be temporary or short-term. However, in the case of the clearing of forest, the final EIS concludes that impacts will be long-term and significant. For the other resources, impacts will be reduced to less-than-significant levels with the implementation of mitigation measures proposed by the applicants and other mitigation measures recommended by Commission staff and included as environmental conditions in this order.[32]

The Certificate Order concludes: "[b]ased on our consideration of this information and the discussion above, we agree with the conclusions presented in the final EIS and find that the projects, if constructed and operated as described in the final EIS, are environmentally acceptable actions."[33]

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29 15 U.S.C. § 717f(e).

30 *See* eLibrary nos. 20161222-5321, 20161221-5446, 20150616-5189 (re-submitted to docket as 20161221-5446), 20151127-5175, 20160331-4008, 20160421-5195, 20161222-5518, 20170320-3003, 20170330-5339, 20170622-5015, 20161222-5201, and 20160818-5138.

31 Certificate Order, ¶ 131.

32 *Id.* at ¶ 130.

33 *Id.* at ¶ 308.

NEPA as designed to "prevent or eliminate damage to the environment."[34] It requires that

> federal agencies prepare environmental impact statements for all projects "significantly affecting the quality of the human environment," 42 U.S.C. § 4332(2)(C), identifying "any adverse environmental effects which cannot be avoided should the proposal be implemented," 42 U.S.C. § 4332(2)(C)(ii). A "reasonably complete discussion of possible mitigation measures" is implicitly required.
>
> "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1. For this reason, agencies are under an affirmative mandate to "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements[,] identify any methodologies used and ... make explicit reference by footnote to the scientific and other sources relied upon for conclusions[.]" 40 C.F.R. § 1502.24.[35]

The purpose of NEPA's requirement that federal agencies prepare an EIS prior to any decision that could significantly affect environmental quality is "to guarantee that agencies take a 'hard look' at the environmental consequences of proposed actions utilizing public comment and the best available scientific information."[36] "The hallmarks of a 'hard look' are thorough investigation into environmental impacts and forthright acknowledgment of potential environmental harms."[37]

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[34] *Envtl. Def. v. U.S. Army Corps of Engineers*, 515 F. Supp. 2d 69, 77–78 (D.D.C. 2007) (citing 42 U.S.C. § 4321).

[35] *Id.* at 78. CEQ has issued regulations for implementing NEPA, and specifically for preparing Environmental Impact Statements. *See* 40 C.F.R. § 1502.1 et seq.; *Nevada*, 457 F.3d at 87 ("Guiding the DOE's [Department of Energy] NEPA analysis are regulations promulgated by the [CEQ], as well as the DOE's own regulations, which track the CEQ regulations."). The Commission "will comply with the regulations of the [CEQ] except where those regulations are inconsistent with the statutory requirements of the Commission." 18 C.F.R. § 380.1.

[36] *Colorado Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1171–72 (10th Cir. 1999) (citing *Bissell v. Penrose*, 49 U.S. 317, 350, 12 L. Ed. 1095 (1850)); *see also Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97, 103 S. Ct. 2246, 76 L. Ed. 2d 437 (1983). The purpose of taking a "hard look" is not "merely to force the *agency* to reconsider its proposed action, but, more broadly, to inform Congress, other agencies, and the general public about the environmental consequences of a certain action in order to spur all interested parties to rethink the wisdom of the action." *Nat. Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288, 296 (D.C. Cir. 1988).

[37] *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 187 (4th Cir. 2005) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350, 109 S. Ct. 1835, 104 L. Ed. 2d 351 (1989)). A "hard look" means more than a perfunctory listing of impacts. *Natural Resources Defense Council, Inc.*, 865 F.2d at 299.

The Council for Environmental Quality's (CEQ) regulations implementing NEPA make clear that the "hard look" standard applies to the agency's consideration of measures to mitigate the environmental effects of the proposed and alternative actions.[38]

> The public is … entitled to an accurate EIS that indicates whether a project's environmental impacts "can be fully remedied by, for example, an inconsequential public expenditure, [or whether they will] only be modestly ameliorated through the commitment of vast public and private resources."[39]

> An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. *Compare Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1381 (9th Cir.1998) (disapproving an EIS that lacked such an assessment) *with Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 477 (9th Cir.2000) (upholding an EIS where "[e]ach mitigating process was evaluated separately and given an effectiveness rating"). The Supreme Court has required a mitigation discussion precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided. *Methow Valley*, 490 U.S. at 351–52, 109 S.Ct. 1835 (citing 42 U.S.C. § 4332(C)(ii)). A mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination.[40]

> [O]mission of a reasonably complete discussion of possible mitigation measures would undermine the "action-forcing" function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.[41]

CEQ's regulations governing procedures for preparing a final EIS require that the statement include "appropriate mitigation measures not already included in the proposed action or alternatives."[42]

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38 "The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission." 18 C.F.R. § 380.1.

39 *Envtl. Def. v. U.S. Army Corps of Engineers*, 515 F. Supp. 2d 69, 84 (D.D.C. 2007). The court in Environmental Defense rejected the Army Corps' efforts to defend an erroneous mitigation calculation on the basis that the Army Corps' mitigation team would "implement, monitor, and adjust mitigation techniques so as to balance the project's twin aims of flood control and environmental protection." *Id.* The court stated: "If such assurances were allowed to paper over the flaws in the Corps' mitigation analysis, however, they would effectively gut the environmental safeguards that Congress enacted in the CWA and NEPA." *Id.* at 84-85.

40 *S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dep't of Interior*, 588 F.3d 718, 727 (9th Cir. 2009); *see also Pac. Coast Fed'n of Fishermen's Associations v. Blank*, 693 F.3d 1084, 1103 (9th Cir. 2012).

41 *Robertson*, 490 U.S. at 352.

42 40 C.F.R. § 1502.14(f).

The regulations define mitigation as more than any improvement. "Mitigation" includes:

(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.

(e) Compensating for the impact by replacing or providing substitute resources or environments.[43]

> [A] court reviewing an EIS for NEPA compliance must take a holistic view of what the agency has done to assess environmental impact. [¶] Courts may not "flyspeck" an agency's environmental analysis, looking for any deficiency, no matter how minor.… [H]owever, a totality of the circumstances approach means that a court must view deficiencies in one portion of an EIS in light of how they affect the entire analysis. *See* 40 C.F.R. § 1502.1 (requiring that an EIS "shall be supported by evidence that the agency has made the necessary environmental analyses").… An agency may not, for example, paper over one inadequate mode of analysis by referencing another with shortcomings of its own. A reviewing court must therefore examine all of the various components of an agency's environmental analysis in order to determine, on the whole, whether the agency has conducted the required "hard look."[44]

A court will not disturb a decision "[s]o long as the record demonstrates that the agencies in question followed the NEPA procedures, which require agencies to take a 'hard look' at the environmental consequences of the proposed action …."[45]

> NEPA review, however, is not toothless. Reviewing courts must independently evaluate the record to confirm that the agency made a reasoned decision based on its analysis of the evidence before it. *See, Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 378, 109

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43 40 C.F.R. § 1508.20.

44 *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 186 (4th Cir. 2005).

45 *Envtl. Def. v. U.S. Army Corps of Engineers*, 515 F. Supp. 2d 69, 78 (D.D.C. 2007) (quoting *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1163 (10th Cir. 2002), *as modified on reh'g*, 319 F.3d 1207 (10th Cir. 2003); *see also Robertson*, 490 U.S. at 350*; Nat. Res. Def. Council, Inc. v. Morton*, 458 F.2d 827, 838 (D.C. Cir. 1972).

S. Ct. 1851, 104 L. Ed. 2d 377 (1989). If it did not, a court "may properly conclude that the agency has acted arbitrarily and capriciously."[46]

The final EIS does not include adequate information to support the Commission's findings that impacts related to geologic, water (ground waters, surface waters and fisheries, wetlands), forest, visual, and cultural resources will be insignificant, or will otherwise be mitigated to the extent practicable.[47] The record shows that the Commission's analysis of these resources relied on incomplete, inaccurate, and/or undisclosed data. The errors and omissions in the analysis violate NEPA. As discussed below, they also undermine the Certificate Order's conclusion that the MVP Project complies with the NGA's implementing regulations which require that pipelines be sited to avoid or minimize impacts to scenic, historic, wildlife, and recreational values.

1. The Final EIS Does Not Show Geologic Hazards Will be Effectively Mitigated.

The Certificate Order finds that "[k]arst features could present a hazard to the MVP Project due to cave or sinkhole collapse."[48] It adopts the final EIS's conclusion that impacts to geological resources "will be adequately minimized" through implementation of Mountain Valley's best management practices (BMPs) and as well as OEP Staff's recommendations regarding karst topography.[49]

The final EIS summarizes risks associated with construction in karst that were raised in comments on the draft EIS:

- the degree of subsurface karst interconnectivity clearly shows the project's potential to impact water quantity and quality to area groundwater users (springs and wells);
- negative impacts to caves and cave fauna, as well as surface water during pipeline construction through mature karst areas;

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[46] *Envtl. Def. v. U.S. Army Corps of Engineers*, 515 F. Supp. 2d at 78 (holding the Army Corps' failure to provide a complete and accurate explanation of its fish habitat model violated NEPA's "scientific integrity" requirement); *see also Sierra Club v. Fed. Energy Regulatory Comm'n*, 867 F.3d 1357 (D.C. Cir. 2017) (holding that the EIS did not contain adequate information regarding the project's contribution to greenhouse-gas emissions and remanding to the agency for preparation of a conforming environmental impact statement); *Delaware Riverkeeper Network v. F.E.R.C.*, 753 F.3d 1304 (D.C. Cir. 2014) (holding that the EIS did not include meaningful assessment of the cumulative impact of the four projects approved and remanding to the agency for further consideration).

[47] When Forest Service staff asked whether "the proposed mitigation impacts would be analyzed in the environmental impact statement," Mountain Valley responded that "a high level summary of the proposed mitigation would be included but the impacts would not be fully analyzed." Preserve Craig's FEIS Comments, eLibrary no. 20170801-5174 (Aug. 8, 2017), p. 21.

[48] Certificate Order, ¶ 151.

[49] *Id.* at ¶ 157, *see also* Final EIS, p. 5-2.

- presence of the pipeline during its operational life would provide for long-term vulnerability to groundwater contamination due to the potential for spills and/or releases that may occur from a pipeline rupture caused by increased rates of corrosion due to oxygenated recharging groundwater flowing preferentially along the completed backfilled trench line; and
- the pipeline trench would function as a "zone of low hydraulic head" effectively acting as an interceptor trench that would preferentially "shunt" shallow groundwater flow into and along the trench increasing the likelihood of subsidence, collapse and pipeline failure.[50]

The final EIS acknowledges that the risks associated with karst are compounded by the existence of other geological hazards, including weak soils, groundwater, and seismicity.[51] It nonetheless finds that these risks

> would be mitigated by the measures identified for landslides, erosion, and steep slopes above, in addition to utilizing appropriate pipeline design such as using thicker-walled pipe in areas of potential seismic, landslide, and subsidence hazards. Mountain Valley would employ engineering geologists, geotechnical engineers, or other specialists, depending on the hazard, to monitor construction in areas where hazards have been identified and provide construction recommendations and mitigation measures including minor route adjustments, should they be required.[52]

The final EIS does not adequately address deficiencies in the evaluation of karst impacts and mitigation raised by expert geologists and hydrogeologists.[53]

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50 Final EIS, p. 4-61.

51 *Id.* at 4-63.

52 *Id.*

53 *See* Dr. Ernst Kastning, "An Expert Report on Geological Hazards in the Karst Regions of Virginia and West Virginia: Investigations and Analysis Concerning the Proposed Mountain Valley Gas Pipeline," eLibrary no. 2016713-5029 (July 13, 2016); Dr. Ernst Kastning, "Revised Report on the Potential Damage to the Karst Aquifer of the Mount Tabor, Virginia Area," eLibrary no. 20170310-5024 (Mar. 10, 2017); Dr. Ernst Kastning, "Supplemental Report regarding Geologic Issues with the Proposed Mountain Valley Pipeline," eLibrary no. 20170524-5177; Dr. Chris Groves, "Karst Landscapes and Aquifers of the Central Appalachian Mountains and Implications for the Proposed Mountain Valley Pipeline," eLibrary no. 20161223-5058 (Dec. 23, 2016); Roanoke County's Draft EIS Comments, eLibrary no. 20161222-5049 (Dec. 22, 2016), Att. 1 (Paul A. Rubin, "Expert Report on behalf of Giles and Roanoke Counties Virginia" (First Rubin Report)), Att. 2 (Dr. Pamela C. Dodds, "Hydrogeological Assessment of Impacts Caused by Constructing the Mountain Valley Gas Pipeline Through Roanoke County, Virginia); Giles and Roanoke Counties, "Supplemental Comments regarding the Potential Impacts of Construction and Operation of the Mountain Valley Pipeline Project in Karst Terrain," eLibrary no. 20170602-5147 (June 2, 2017), Att. 1 (Paul A. Rubin, "Second Hydroquest Report regarding Environmental Issues Associated with Karst Geology Along the Proposed Mountain Valley Pipeline Project" (Second Rubin Report)); Dr. Pamela C. Dodds, "Hydrogeological Assessment of the Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke Virginia," eLibrary no. 20170622-5028; Indian Creek Watershed Association's DEIS Comments, eLibrary no. 20161222-5540 (Dec. 22, 2016), Enc. 1 (Dr. Pamela C. Dodds,

For example, the Commission did not require Mountain Valley to undertake studies necessary to identify potential impacts to karst resources and measures to effectively mitigate those impacts at most karst resource locations along the project route. Giles and Roanoke Counties' hydrogeologic expert, Paul A. Rubin, recommended that Mountain Valley conduct detailed geophysical traverses along critical karstic portions of the proposed route, tracer studies to document where the conduits that underlie sinkholes trend, and identification of hydrocarbons and gas that would be mobilized in the event of pipeline rupture.[54] The final EIS states that Mountain Valley undertook evaluation of groundwater flow paths for "several" karst locations, but finds it unnecessary and infeasible to require dye trace studies at all karst features.[55] It does not cite to a specific basis for finding that the recommended studies are not relevant to the evaluation of reasonably foreseeable significant adverse impacts. It does not explain why study of additional locations is not feasible. It does not show that the costs would be exorbitant.[56]

The final EIS summarily reports Mountain Valley's analysis, but does not show independent evaluation of the analysis by OEP Staff. Further, the record does not disclose the names and qualifications of Mountain Valley's karst specialists, and their names do not appear in the List of Preparers. This does not comply with CEQ regulations.[57]

The final EIS does not include thorough evaluation of the impacts of pipeline rupture to karst formations and public safety along the proposed route. It finds that construction of the MVP Project "would represent only a slight increase in risk to the nearby public."[58] This is based largely on assumptions regarding Mountain Valley's ability to avoid or minimize undisputed risks associated with pipeline construction in a highly karstified setting. As stated above, the final EIS does not provide an adequate basis for those assumptions. Further, the Commission has not updated its analysis to address information submitted by Mr. Rubin

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Hydrogeological Assessment of Karst Impacts of Constructing MVP across Peters Mountain"); Indian Creek Watershed Association's Supplemental Information, eLibrary no. 20161221-5434 (Dec. 21, 2016), Enc. 1 (Dr. Pamela C. Dodds, "Hydrogeological Assessment of the Proposed Mountain Valley Pipeline Route Through Subwatersheds with Tributaries to Indian Creek, Monroe County, WV").

54 First Rubin Report, p. 11.

55 Final EIS, p. 4-34.

56 *See* 40 C.F.R. § 1502.22.

57 CEQ's regulations provide:

> The agency shall independently evaluate the information submitted and shall be responsible for its accuracy. If the agency chooses to use the information submitted by the applicant in the environmental impact statement, either directly or by reference, then the names of the persons responsible for the independent evaluation shall be included in the list of preparers (40 C.F.R. § 1502.17). It is the intent of this paragraph that acceptable work not be redone, but that it be verified by the agency.

40 C.F.R. § 1506.5(a).

58 Final EIS, p. 4-573.

regarding the potential impacts of pipeline rupture and new recommendations for safety distances to avoid loss of life and property because of pipeline rupture.[59]

2. The Final EIS Does Not Show Project Impacts on Waters Will Be Effectively Mitigated.

a. The final EIS does not support the Certificate Order's findings regarding sedimentation.

The Certificate Order notes "concerns regarding potential effects on surface waterbodies during construction and operation of the projects due to sedimentation or spills or leaks of hazardous materials."[60] It responds: "[t]he final EIS concludes that dry open-cut waterbody

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[59] *See* Rubin Second Report. Rubin's Second Report described studies and actual accidents that demonstrate the swift, severe, and potentially deadly consequences of pipeline ruptures. *Id.* at 3. He highlights a recent study that recommends a minimum safety distance of 2,300 meters (7,544 feet) from natural gas pipelines and important infrastructure or resources.[59] Applying that recommendation to the MVP Project, Rubin found:

> Russo and Parisi's recommendations, when correlated with vulnerable karst areas along the proposed MVP Project route, demonstrate that the distances between fragile cave networks and the proposed pipeline are far lower than the recommended safety distance. Jones and Kastning (2017) provide examples showing that the Mount Tabor Variation crosses many significant and sensitive karst features. For example, Figure 8-1 in their report, "Five High-Risk Channel Crossings on the Mount Tabor Variation," shows the proposed MVP route traversing a sinkhole-riddled area directly over a dye-traced conduit route tributary to the Slusser's Chapel Cave stream. *There is no safety distance at all*. This makes the risk of ecological and human damage posed by the project immensely high.…

Id. at 6.

Rubin provided specific examples of pipeline ruptures caused by sudden sinkhole collapse and subsidence and slumping of soils in steep terrain. In each example, there is record of a fiery explosion that sent segments of previously buried pipeline hundreds of feet away from the rupture centerline, causing injuries and extensive damage. *Id.* at 9-12. Rubin stated that the proposed route is vulnerable to sinkhole collapse and subsidence.

Rubin concluded, in part, that Mountain Valley:

> has not adequately addressed the threats posed by the proposed pipeline in terms of likely, real-world consequences. It has not presented scientific evidence to support its claims that it can effectively avoid those threats and the attendant consequences by sidestepping sinkholes during construction and monitoring post-construction.… [T]he impacts of any pipeline rupture would likely be instantaneous and disastrous. I continue to recommend that the proposed pipeline route be re-evaluated and additional consideration given to avoiding adverse environmental impact in major karst areas.… [¶] MVP has not provided risk analyses that objectively calculate public safety distances from the proposed pipeline. Portions of the proposed pipeline route fall well within the safety distance determined by Russo and Parisi, and others (e.g., see the second recommendation bullet on page 6 of this report).… [¶] It is critically important that MVP fully disclose the true public risk associated with pipeline rupture and reroute all pipeline segments that are planned such that they fall within published safety distances.

Id. at 13-14.

[60] Certificate Order, ¶ 184.

crossings result in temporary (less than 4 days) and localized (for a distance of only a few hundred feet of the crossing) increases in turbidity downstream of construction, but the magnitude of this increase is minimal compared to increased turbidity associated with natural runoff events."[61] It describes various measures Mountain Valley will implement pursuant to its Erosion and Sediment Control Plan and the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Commission's Plan), and finds these measures "will provide acceptable protection of surface waterbodies."[62]

The Certificate Order cites to the final EIS at page 4-149 as the basis for this conclusion. Page 4-149 of the final EIS essentially states that there are no anticipated "long-term or significant impacts on surface waters as a result of the project" because Mountain Valley will bury the pipeline beneath the bed of all waterbodies, implement erosion and sedimentation controls, and restore streambanks and streambed contours as close as practical to pre-construction conditions.[63] Absent hydrologic sedimentation analysis or comparable study, there is an inadequate scientific basis for this conclusion. A statement that mitigation will be effective with nothing more does not satisfy the Commission's duty under NEPA to explain and disclose the basis for its findings.

Neither the final EIS nor the Certificate Order directly address the Petitioners' and other parties' requests for hydrologic analysis of sedimentation for the entire MVP Project route. [64] Neither document provides a scientific basis for limiting hydrological sedimentation analysis to the Jefferson National Forest.

The U.S. Environmental Protection Agency (EPA) specifically recommended that "the same parameters used for streams and waterbodies within the Jefferson National Forest be used for those resources outside of the Forest."[65]

Dr. Pamela Dodds' provided an expert opinion[66] that:

> the Revised Universal Soil Loss Equation, has been used to quantify the amount of sediment that will be released during the proposed construction in the National Forest,

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61 *Id.* at ¶ 185.

62 Certificate Order, ¶ 185 (citing Final EIS at 4-149).

63 Final EIS, p. 4-149.

64 Preserve Craig's Final EIS Comments, eLibrary no. 20170801-5174 (Aug. 1, 2017), p. 17; letter from Indian Creek Watershed Board of Directors to Secretary Kimberly D. Bose, eLibrary no. 20170324-5244 (Mar. 24, 2017), p. 2.

65 EPA's Draft EIS Comments, Enc. 1, p. 9.

66 Preserve Bent Mountain, "Hydrogeological Assessment of Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke County, Virginia" eLibrary no. 20170622-5028 (June 22, 2017), pp. 41-42.

but has not been applied in any other areas along the proposed MVP construction corridor. Calculations of increased stormwater discharge and of sediment released during construction are critical to an evaluation of increased sediment to streams from Best Management Practices structures, vertical stream bed scour, and downstream stream bank erosion.[67]

The Hydrologic Sedimentation Analysis prepared by Environmental Solutions and Innovations, Inc. (ESI) on Mountain Valley's behalf for the Jefferson National Forest shows the MVP Project will have substantial impacts on the stream systems studied.[68] The study found that "[c]umulatively, approximately 29.31 miles of stream segments downstream of the Project Area within the JNF and within the study area are expected to have a 10 percent increase in sediment loads or more …."[69] ESI defined any cumulative increase to sediment loads greater than 10% to be "substantial."[70] Thus, the 3.4 mile crossing of the Jefferson National Forest will have potentially substantial impacts on approximately 30 miles of stream segments, including tributaries of Rich Creek on Peters Mountain and a portion of Craig Creek.[71]

The results of the ESI study are strong indication that sedimentation impacts over the 300-mile pipeline route will be substantial according to the standards used by ESI. Due to the

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67 *See* eLibrary no. 20170622-5028, p. 37. Dr. Dodds stated that stormwater, not just waterbody crossings should be considered: "[i]ncreased stormwater discharge causes downstream stream bank erosion, introducing sediment into the streams."

68 ESI states:

> Construction of MVP within the JNF and private lands has potential to introduce excess sediment into waterways within the JNF and downstream areas, which may result in changes to water quality and potentially impact aquatic biota. Although MVP will implement specific conservation measures (i.e., erosion and sediment controls) to minimize impacts to waterways, these measures are unlikely to prevent all sediment inputs. Sedimentation of streams by erosion is a natural process, but land development and disturbance may accelerate this process. Increased erodibility, due to the loosening and exposure of fine particles increases the likelihood of sediment-laden runoff from the Project into nearby waterways. FEIS, p. O3-4

69 The study goes on to state that the study "likely" overestimates the MVP Project's contribution to sediment loads above baseline because the study did not account for the pre-existing Pocahontas Road. Final EIS, App. O, p. O3-24. The Commission does not explain why it did not require Mountain Valley to correct this error.

70 *Id.* at App. O, O3-6. ESI explained:

> One commonly used impact threshold is one in which the metric of impact is increased by 10 percent or more (USEPA 2003). This approach recognizes the biological reality that even a relatively small (in absolute terms) amount of sediment may degrade a pristine stream, while a larger amount might be needed to further degrade a historically impacted stream. Therefore, to identify the extent of sedimentation effects from the proposed action on JNF (i.e., Cumulative Effect boundaries), stream segments downstream with a 10 percent increase over baseline in maximum yearly load are delineated. *Id.* at O-29.

71 *See* letter from Indian Creek Watershed Board of Directors to Secretary Kimberly D. Bose, eLibrary no. 20170324-5244 (Mar. 24, 2017), p. 2.

lack of hydrologic sedimentation analysis for the rest of the route,[72] there is no scientific basis for concluding that sedimentation impacts will be insignificant for waterways located on non-federal lands affected by the MVP Pipeline.

Further, there is evidence in the record that Mountain Valley and the Commission have relied on inaccurate data in evaluating the effectiveness of proposed erosion and sedimentation control measures.[73] For example, the Commission's finding regarding the effectiveness of proposed mitigation measures appears to rely on the assumption that silt fencing has a 79 percent

[72] The ESI study is outdated with respect to sedimentation impacts on the Jefferson National Forest. The study is based on the October 2015 route, not the current route, which excludes the formerly-known-as Mt Tabor Variation, which runs along the base of Brush Mountain just southeast of JNF and is within the "Intersecting JNF and Project Subwatershed." Hence, the study does not cover the approximately 3-mile long segment that includes the steep descent of Brush Mountain into the North Fork Roanoke River watershed (Milepost 220.7-221.5, October 2016 route) and the subsequent segment that runs along the base of Brush Mountain, parallel to the mountain, with much of that segment running across or at the base of steep slopes (MP221.5-223.7) within the North Fork Roanoke River watershed. Based on terrain, it appears that the current routing segment that was not studied would produce more sediments than the within-watershed segment that it replaced.

The segment that was not studied (MP 220.7 - ~224) occurs in areas that drain into the North Fork Roanoke River through tributaries that include Mill Creek, which enters the North Fork either within or a short distance upstream from habitat of the sedimentation-sensitive and federally endangered Roanoke logperch. The corridor segment within the North Fork Roanoke River watershed extends from approximately MP 220.7-228.4 (October 2016 route) and includes additional steep slopes near where it crosses the North Fork Roanoke River itself. It also includes the areas that drain into Slussers Chapel Cave, which contains globally rare species and itself drains into Mill Creek.

[73] *See* Dr. Pamela C. Dodds, "Hydrogeological Assessment of Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke County, Virginia," eLibrary no. 20170622-5028 (June 22, 2017), pp. 29-32.

effectiveness rating.[74] However, the standard effectiveness rating for silt fencing is actually 40 percent.[75]

The recent problems with erosion and sedimentation impacts at the Rover pipeline indicate that the erosion and sedimentation control measures approved by the Commission for the MVP Project will not be effective. The West Virginia Department of Environmental Protection (WVDEP) issued a cease and desist order to Rover Pipeline LLC, ordering the company to suspend land development activity until such time when compliance with the terms and conditions of its permit and all pertinent laws and rules is achieved.[76] The mitigation measures that were used on the Rover pipeline are substantially the same as the measures required for the MVP Project, where the slopes are much steeper and the soils are highly erodible. The problems with the Rover Pipeline's construction have been so severe that members of Congress have directed the Commission to investigate.[77]

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[74] *See* Dr. Pamela C. Dodds, "Notice of Objection to the Draft Record of Decision for the Mountain Valley Project Land and Resource Management Plan Amendment for the Jefferson National Forest, Monroe County, West Virginia And Giles And Montgomery Counties, Virginia, eLibrary no. 20170731-5067 (July 31, 2017), pp. 24-26:

> RUSLE2 incorporates estimated sediment containment, through the use of Best Management Practices (BMPs) through the use of a "support practice factor". The value selected unilaterally for the RUSLE2 evaluation presented in the MVP Hydrologic Analysis is 79% effectiveness or containment by use of silt fencing. *The 79% effectiveness is not endorsed by the VDEQ and is not the typical rating in any other document that evaluates BMPs. Most evaluations apply a 10% to 40% effectiveness for silt fencing* (p. 24).
>
> …[MVP's] use of a 79% sediment containment effectiveness is based on a M.S. thesis by Gregg Steven Dubinsky, 2014, "Performance Evaluation of Two Silt Fence Geosynthetic Fabrics During and After Rainfall Event". The study used 4 feet by 8 feet sheets of plywood with compacted sediment on the surfaces tilted at 10%, 25%, and 33% slopes with rain event simulations. The results reported…: "*Overall measured results* showed that woven and nonwoven fabrics achieved performance efficiencies of 57 and 59 percent in turbidity, and 59 and 62 percent in suspended sediment concentrations, respectively." …The actual results, therefore, were less than the 79% effectiveness value used in the [MVP] calculations. (p. 25) *(emphasis added)*

[75] *Id* at 24. *See also* Dr. Pamela C. Dodds, *Hydrogeological Assessment of Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke County, Virginia*, eLibrary no. 20170622-5028 (June 22, 2017), p. 30.

[76] *See* ICWA, "Supplemental Information on Serious Violations in Pipeline Construction Projects Relevant to Inadequacies in MVP Project Plan," e-Library no. 20170728-5187 (July 28, 2017). WVDEP's order contains extensive photographic documentation of both the misuse and failure of the same sediment control tools proposed for use on the MVP Project. *See id.* at 10.

[77] *See* Save Monroe, "Comment of Congressman Frank Pallone, Jr. and Senator Maria Cantwell concerning Rover Pipeline and Energy Transfer Partners," eLibrary no. 20170731-5069 (July 31, 2017). Specifically, the Congress members asked FERC to answer the following questions:

> 1) What policies, procedures, and regulations serve to ensure and verify that FERC's assessments of natural gas pipeline certificate applications are based on complete and accurate information?
> 2) How many applications for certificates of "public convenience and necessity" did FERC receive during 2000 - 2017, and how many of those applications did FERC deny?
> 3) What FERC procedures or regulations govern or monitor regional distribution of natural gas pipeline certificate approvals? How do these or other FERC policies or regulations account for the number of

The Commission cannot reliably conclude that the proposed mitigation will effectively mitigate adverse sedimentation impacts to surface waters when it has not quantified the sedimentation impacts for roughly 90 percent of the MVP Project route, and has not provided any other scientific basis for this finding.

b. The final EIS does not support the Certificate Order's findings regarding groundwater quality.

The Certificate Order states that, "[b]ecause karst features provide a direct connection to groundwater, there is a potential for pipeline construction to increase turbidity in groundwater due to runoff of sediment into karst features or to contaminate groundwater resources by inadvertent spills of fuel or oil from construction equipment."[78] It finds that Mountain Valley's implementation of the erosion control measures in the Commission's Plan and Mountain Valley's Karst-specific Erosion and Sediment Control Plan will minimize impacts on karst related groundwater.

As stated above, the Commission did not undertake a hydrologic sedimentation analysis for more than 90 percent of the MVP Project route. Thus, the Commission does not know the potential sediment loads that will be entering surface or groundwaters as a result of project construction. The Certificate Order does not explain the methodology it used to determine that the introduction of sediment to groundwaters would be minimized in the absence of studying the potential increase in sediment loads over the entire project route.

Further, the Commission did not undertake dye trace studies to determine groundwater pathways. The Certificate Order reports that the "VADCR [Virginia Department of Conservation and Recreation request[ed] that Mountain Valley conduct additional dye-tracing studies to determine the underground connectivity and relationships between karst features and sinkholes in the vicinity of the MVP Project."[79] The Certificate Order rejects this request as "not feasible or necessary."[80] It does not cite to any scientific sources for this conclusion, and this information is not otherwise provided in the final EIS.

In addition to not requiring dye-tracing studies, the Commission did not require Mountain Valley to map "all of the locations of water wells, springs, and other drinking water sources within 150 feet (500 feet in karst terrain) of construction work areas and aboveground facilities,

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existing pipelines in a given region during FERC's consideration of applications for new natural gas pipeline construction? *Id.* at 3.

78 Certificate Order, ¶ 171.

79 Certificate Order, ¶ 155. Other parties also requested dye-trace studies. *See, e.g.,* letter from Robert Jones to Secretary Kimberly D. Bose, eLibrary no. 20170404-5277 (April 4, 2017); ICWA, "Supplemental information to the FERC and the U.S. Forest Service," eLibrary no. 20170523-5020 (May 22, 2017), p. 2.

80 Certificate Order, ¶ 156.

prior to construction" prior to issuing the final EIS or Certificate Order.[81] It did not provide a basis for limiting mapping of water sources to 500 feet in karst terrain.[82] Virginia's Office of Environmental Health and Safety recommended that "a sanitary survey within 1,000 feet on either side of the pipeline be performed at a minimum to ensure people and properties using local and regional groundwater and surface water for recreational use or human consumption are identified and protected."[83] The final EIS does not show consideration of mapping that was prepared by parties to the proceeding.[84] Due to its lack of investigation, the Commission does not know how many potential surface/groundwater connections there are along the project route that could be impacted.

The Commission's decision not to require dye-tracing studies and mapping of groundwater sources within 500 feet of karst deprived it of information necessary to determine the MVP Project's impacts on groundwater sources. The Commission does not know the quantity or location of surficial features that could provide an entry point for sediment to groundwater, or the geographic extent of those features (i.e., how far sediment will be carried). The Commission cannot reliably conclude that the approved mitigation will effectively mitigate sedimentation impacts on groundwater in the absence of this information.

c. The final EIS does not show consideration of impacts on groundwater recharge and flow routes.

Petitioners asked that OEP Staff direct Mountain Valley to undertake study of the potential impacts to groundwater recharge and flow routes as a result of pipeline construction and operation.[85] In support, they cited reports by Dr. Pamela C. Dodds providing a

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81 *Id.* at ¶ 172.

82 Evidence in the record shows that 500-feet is an inadequate distance. Dr. Kastning submitted information regarding the contamination of the Red Sulphur Public Service District spring on Peters Mountain, WV caused by the spill site and related sinkhole along the Columbia Gas-Celanese pipeline right of way. Dr. Ernst Kastning, "Geologic Hazards in the Karst Regions of Virginia and West Virginia," eLibrary no. 20160713-5029 (July 13, 2016), p. 40. The pipeline was approximately one-half mile from the spring, which provided drinking water to over 4,000 customers.

83 Commonwealth of Virginia's Response to Draft EIS, eLibrary no. 20161222-5394 (Dec. 22, 2016) (transmitting Memorandum from Dwayne Roadcap, Division Director of Office of Environmental Health and Safety to Drew Hammond, Acting Director Office of Drinking Water) (Dec. 9, 2016), p. 1).

84 For example, ICWA members identified more than 98 springs along and near the MVP route in two critical areas of Peters Mountain and Greenville-Ellison Ridge in Monroe County, West Virginia. ICWA submitted the results of its mapping—which showed the prevalence and density of springs in highly vulnerable areas with steep slopes, shallow soil, and/or karst—as evidence to support requests that the Commission require independent hydrogeological analyses to determine threats to springs and wells that could be affected by pipeline construction and blasting. *See. e.g.*, ICWA, "Evidence of Prevalence and Density of Springs On/Near the MVP Corridor in Sample Areas of Monroe County, WV, Confirms Need for Hydrogeological Studies," eLibrary 20160902-5165 (Sept. 2, 2016); *see also* eLibrary nos. 20161222-5499, 20161222-5201, 20151125-5164.

85 *See, e.g.*, ICWA, eLibrary no. 20161222-5540 (Dec. 22, 2016), Enc. 1, p. 20 (Dr. Pamela C. Dodds, "Assessment of Karst Impacts of Constructing MVP across Peters Mountain.")

hydrogeological assessment of the MVP Project. Dr. Dodds found that deforestation and blasting for the MVP Project would likely "reduce groundwater recharge and cause significant changes to the amount of groundwater available as drinking water sources, as well as to groundwater flow routes."[86] She stated:

> Groundwater flows along bedrock bedding planes and fractures, forming seeps and springs where the bedding planes and fractures intercept the ground surface. The seeps and springs also occur within streams and along stream banks, providing water to streams during drought conditions. Deforestation results in reduced groundwater recharge, with the consequent decreased availability of groundwater. Blasting causes changes in the bedrock fractures, resulting in changes in the direction of groundwater flow. Consequently, seeps and springs will not receive the groundwater that was available prior to construction.[87]

The U.S. Environmental Protection Agency also expressed concern about the Project's potential to alter groundwater flow pathways.[88] In response to the draft EIS, it commented

> The DEIS notes that blasting in karst can potentially change groundwater flow, create contamination, and affect yield and turbidity. It is also noted that potential impacts on water wells, springs, wetlands and other resources could occur. Although the DEIS states that Mountain Valley is aware of possible changes or loss to surface water and will use specialized construction techniques, EPA is concerned that there is insufficient information to conclude that karst blasting and other construction activities would only result in temporary, insignificant impacts. Changes in the geology, even just cracks and fissures, can alter flow patterns, permanently impacting aquatic life and water chemistry. EPA recommends that FERC conduct a fracture trace/lineament analysis at all karst stream crossings and potential blasting areas along the route; additional monitoring or modifications of route should be proposed to avoid permanently altering flows and impacting biology in interconnected karst voids and cave systems. The impacts on groundwater and surface water are intertwined in karst ecosystems and that point should

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86 Roanoke County, Draft EIS Comments, eLibrary no. 20161222-5459 (Dec. 22, 2016). Att. 2, p. 4; First Rubin Report, p. 10; ICWA, eLibrary no. 20161222-5540 (Dec. 22, 2016), Enc. 1, p. 20 (Dr. Pamela C. Dodds, "Assessment of Karst Impacts of Constructing MVP across Peters Mountain"); *see also* Dr. Pamela C. Dodds, "Report on Subwatersheds of Tributaries to Indian Creek," eLibrary no. 20161221-5434 (Dec. 21, 2016); Dr. Pamela C. Dodds, "Report on Hungard Creek," eLibrary no. 20161222-5071 (Dec. 22, 2016); Dr. Pamela C. Dodds, "Report on Lick Creek," eLibrary no. 20161222-5056 (Dec. 22, 2016); and Dr. Pamela C. Dodds, "Report on Greenbrier River at Pence Springs Crossing," eLibrary no. 20161222-5013 (Dec. 22, 2016).

87 *Id.* at 43-44; *see also* Dr. Pamela C. Dodds, "Hydrogeological Assessment of Proposed Mountain Valley Pipeline Construction Impacts to Mill Creek, Bent Mountain Area, Roanoke County, Virginia," eLibrary no. 20170622-5028 (June 22, 2017), pp. 2, 23-24.

88 Letter from Jeffrey D. Lapp, EPA, to Nathaniel J. Davis, Sr., eLibrary no. 20170731-5091 (July 31, 2017) (EPA's FEIS Comments), Enc. 1, unnumbered p. 4; *see also* letter from Jeffrey D. Lapp, EPA, to Nathaniel J. Davis, Sr., eLibrary no. 20161229-0033 (Dec. 20, 2016) (EPA's DEIS Comments), Enc. 1, p. 4.

be elaborated; contaminating groundwater could lead to surface water contamination and altering subsurface flows could affect surface flows.[89]

In comments on the final EIS, the EPA reiterated:

> Alteration of shallow bedrock may modify hydrologic pathways and storage potential of aquifers. These impacts may not be consistent over the entire length of the pipeline and may need to be evaluated on a case-by-case basis where groundwater resources are used for farming practices or drinking water-supply.[90]

The final EIS does not respond to this comment. As stated above, the final EIS and Certificate Order rejected requests for additional dye-tracing studies, which would have provided baseline data of existing groundwater pathways.

Absent consideration of the MVP Project's potential impacts on groundwater recharge and flow routes, there is an inadequate record basis to conclude that impacts to groundwaters will be effectively mitigated by the conditions attached to the Certificate Order.

d. The final EIS does not fully evaluate potential impacts to Roanoke logperch.

The Certificate Order cites the Final EIS's finding that the MVP Project is likely to adversely affect Roanoke logperch.[91]

Petitioners agree with this finding, and with the Commission's decision to initiate formal consultation with the U.S. Fish and Wildlife Service (FWS). However, they disagree with the final EIS's analysis that potential impacts to Roanoke logperch can be adequately mitigated by restricting the time of year for construction, specifically waterbody crossings.[92]

Roanoke logperch depend upon free-flowing and pristine waters of primary systems such as Mill and Bottom Creeks for their downstream existence. Sedimentation is a primary threat to their continued existence, and a limiting factor on their recovery. As stated above, the Commission has not undertaken hydrologic sedimentation analysis necessary to predict the MVP Project's contribution to sedimentation on affected waterways. It has not adequately considered the impacts of activities other than waterbody crossings on sedimentation, e.g., quantifying increased stormwater discharge. Thus, it has not fully considered the project impacts on these fish. Further, the Commission's decision to defer consultation with the FWS until after the final

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89 EPA's DEIS Comments, Enc. 1, p. 13.

90 *Id*. at Enc. 1, p. 6.

91 Certificate Order, ¶ 210.

92 Final EIS, p. 4-233.

EIS was published and Certificate Order issued does not excuse it of its obligation to provide an assessment of whether the mitigation proposed for Roanoke logperch will be effective.

3. The Final EIS Does Not Support a Finding that Impacts to Forested Lands Have Been Mitigated to the Extent Practicable.

The Certificate Order cites the final EIS in support of finding that the MVP Project's significant impacts would be mitigated to the extent practicable:

> The final EIS addresses forest habitat impacts and impact avoidance, minimization, and mitigation in sections 4.4 and 4.5. It concludes that impacts on forest resources would be significant, but have been minimized to the extent practicable. For example, the final EIS states that impacts on forest will be reduced by collocating the MVP Project adjacent to existing rights-of-way for about 30 percent of the project route. Mountain Valley will also reseed construction areas with native vegetation during restoration.[93]

The final EIS does not show that Staff developed or fully considered mitigation measures for impacts on forested lands that would accomplish the objectives set out in 40 C.F.R. section 1508.20. It does not support the Certificate Order's finding that "all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted."[94]

The final EIS recommends different mitigation measures for federal and non-federal forested lands. It does not explain the disparate treatment. There is no dispute that the composition of the federal and non-federal forested lands affected by the MVP Project within Virginia and West Virginia are the same. Thus, there appear to be available and practicable measures to mitigate project impacts on forested lands that are not being required for most of the forested lands that will be affected by the project, which are non-federally owned.

a. The final EIS did not adequately identify direct and indirect impacts to forest fragmentation.

The final EIS states that removal of interior forest to create the project right-of-way would contribute to forest fragmentation and the creation of forest edges, and result in the removal of habitat for interior species.[95]

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93 Certificate Order, ¶ 109.

94 40 C.F.R. § 1505.2(c) (requiring that the record of decision "[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not.").

95 Final EIS, p. 4-181.

However, the final EIS does not address the full range of loss of forest values[96] when irreplaceable cores are permanently fragmented."[97] According to the Virginia Department of Conservation and Recreation (VDCR):

> Impacts of forest fragmentation on a diverse suite of forest ecosystem services is not thoroughly acknowledged, analyzed, nor quantified in the MVP Final EIS. Rather, forest fragmentation was initially addressed in the Migratory Bird Conservation Plan (MBCP), and it was only addressed for its impacts on bird habitat… Within the existing versions of the MBCP, an assessment of forest fragmentation impacts and mitigation is attempted via use of a Habitat Equivalency Analysis (HEA), *but this approach is not designed to and does not address forest fragmentation.*[98]

Mountain Valley's HEA also erred in the treatment and calculation of area of forest impacts:

> The MVP-HEA defines the area of the construction footprint beyond these permanent disturbances as the area of temporary impact, because vegetation … would be planted in these previously interior forested areas. While such an approach may be relevant for a forest habitat impact analysis it does not address the other critical ecosystem services provided by forest cores, beyond habitat values.[99]

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96 Intact blocks of forest (at least 100 acres of interior forest) provide multiple forest values that "increase with area and provide valuable ecosystem services for as long as that core persists in an unfragmented state. These services include protections for air and water quality, erosion prevention, sediment retention, groundwater recharge, carbon sequestration, oxygen production, temperature regulation, protection from storm and flood damage, in addition to wildlife habitat and biodiversity values." *Id.* The MVP HEA divides forest into different types, and does not "account for the various intrinsic values that large forest cores provide by aggregating adjacent forest cover types into functional cores." Letter from Clyde E. Cristman to Secretary Kimberly D. Bose, eLibrary no. 20170721-5183 (July 21, 2017), p. 3.

97 *Id.*

98 *Id.* at 2. The VDCR explained:

> The MVP-HEA addresses impacts of the proposed MVP on habitat for migratory birds and a subset of ecosystem services by quantifying and weighting values of different forest cover types along the length of the construction footprint and within a 100-meter buffer into the adjacent forest. The decline in values between pre- and post-construction is used to calculate the total impact of the project to the services listed. There are two major issues with this approach. First, rather than consideration of ecosystem services *in addition to* habitat impacts and increasing the overall forest fragmentation impacts, their addition dilutes the importance of interior habitats (i.e. habitat quality becomes one of five categories of functional metrics, all with equal ranges of values and summed to calculate a composite metric). Second, it is highly unlikely that impacts to the full range of ecosystem services of large, intact forest cores can be estimated by the MVP-HEA, since it does not account for contiguousness, patch size, and landscape context.

Id. at 3 (italics in original; underline added).

99 *Id.* at 4.

Instead, for purposes of fragmentation analysis, Mountain Valley should have defined the direct impact as the entire area of the construction footprint intersecting forest cores (i.e. the MVP's permanent ROW plus temporary ROW).[100] These errors resulted in a significant underestimate of the impacts of forest fragmentation, whereby VDCR estimated a total impact of 16,611 acres within Virginia alone compared to Mountain Valley's estimate of 3,993 acres.[101] Significant areas of core forest in West Virginia will be similarly impacted by fragmentation.[102]

The Commission has not accurately disclosed the impacts of forest fragmentation. As a result, it does not have an adequate basis to find that the proposed mitigation will mitigate such impacts to the extent practicable.

The Commission erred in relying on Mountain Valley's incorrect analysis of forest fragmentation.[103] The Commission's choice of scientific methodology is entitled to deference, but only when it has provided a reasoned scientific explanation for its choice.[104] Such explanation must include disclosure and documentation for the scientific methodology used. It must also include the considerations the Commission found persuasive when choosing one expert over another in the face of competing evidence.[105] The Commission has not provided the

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100 *Id.*

> In the case of core forests, direct impacts include the area that would be replanted, because the full function of the impacted interior forest would not be replaced and fragmentation would be permanent. The new forest that would eventually mature (i.e. in the temporary ROW) would not be equivalent to the forest before pipeline disturbance, due to inevitable permanent changes in microhabitat conditions, vegetation structure, species composition and introduction of invasive vegetation in the short and long term.
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> *Id.*

101 *Id.* at 4, Table 1.

102 For example, the final EIS did not disclose loss of core forest in Monroe County. Fifty-nine percent 59% of the MVP's 22-mile route through Monroe County will cut through large core forest tracts (larger than 500 acres). *See* Supplemental Information of ICWA under CP16-10. "MVP DEIS Ignores Significant Information and Lacks Analyses of Compound and Cumulative Hazards. ICWA provides spatial analysis examples and ITMS Map Collection," eLibrary no. 20161222-5201 (Dec. 22, 2016). ICWA and Mr. Ragland shared information and concerns regarding a farm near Indian Creek, which will have 1.5-mile of right-of-way, an access road, temporary work stations, and hydrostatic testing, with adverse impacts on forested ridges, pastures, springs, streams, wetland, and Indian Creek. *See* eLibrary no. 20160818-5138 (Aug. 18, 2016). In addition to loss of ecosystem services and habitat, the impacts of deforestation and ridgetop leveling will be compounded by the steep slopes and severe erosion potential on and adjacent to the project right-of-way.

103 *See Natural Resources Defense Council v. U.S. Forest Service*, 421 F.3d 797, 812 (9th Cir. 2005); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446-48 (4th Cir. 1996).

104 40 C.F.R. § 1502.24.

105 *The Fund for Animals v. Norton*, 294 F. Supp. 2d 92, 110 (D.D.C. 2003), *motion for relief from judgment granted sub nom. Fund For Animals v. Norton*, 323 F. Supp. 2d 7 (D.D.C. 2004), and *enforcement denied*, 390 F. Supp. 2d 12 (D.D.C. 2005) ("Defendants have failed to point to any explanation in the record as to why NPS apparently chose to credit one expert over another. Thus, in light of the agency's mandate to protect the parks, the Court is at a loss to understand the agency decision."). *See also Small Refiner Lead Phase–Down Task Force v.*

required explanation in support of its reliance on Mountain Valley's analysis, which was not fully disclosed or documented,[106] over the evidence and recommendations provided by VDCR.

b. The final EIS does not show that replanting in disturbed areas designated for restoration is impracticable.

The final EIS requires hand planting of woody vegetation within the Jefferson National Forest, but not non-federal forested lands.[107] The final EIS acknowledges that oaks and similar native species are not likely to regenerate without re-planting.[108] However, it rejected requests for re-planting in non-federal forested areas: "[w]e do not believe that re-planting of trees in this ecoregion on this scale would provide a significant advantage to natural reforestation."[109]

The final EIS does not identify any methodologies used or reference the scientific sources relied upon for this conclusion. By contrast, Dr. Carl Zipper[110] offered numerous scientific sources in support of re-planting in order to better mitigate the project's unresolved impacts on

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U.S.E.P.A., 705 F.2d 506, 520 (D.C.Cir.1983) ("Moreover, as this Circuit has made abundantly clear, factual uncertainty does not give the agency decision-maker carte blanche to make unsupported choices. Rather, faced with conflicting evidence, the decision-maker must "identify the considerations he found persuasive." (internal quotations and citation omitted)).

[106] Letter from Clyde E. Cristman to Secretary Kimberly D. Bose, eLibrary no. 20170721-5183 (July 21, 2017), p. 3.

[107] *See* Final EIS, "Table 2.4-2: Construction, Restoration, and Mitigation Plans for the Mountain Valley Project and the Equitrans Expansion Project," p. 2-32 (incorporating Mountain Valley's Habitat Mitigation Plan (eLibrary no. 0170511-5018) (requiring hand planting within the Jefferson National Forest)). *See also* U.S. Forest Service, Draft Record of Decision, Mountain Valley Project Land and Resource Management Plan Amendment for the Jefferson National Forest (June 2017), p. 23 ("*The FS and MVP LLC have developed mitigation measures, such as reducing the long-term operational ROW … Along the edge of this linear corridor a variety of FS-approved shrubs, small trees and shallow rooted trees will be planted …*").

[108] Final EIS, p. 4-173 (finding that oak reproduction is lacking). Dr. Zipper offered expert opinion that accepted practice in forestry is to re-plant trees of species intended for re-establishment that do not establish easily or do not move from current plantings into unplanted areas by natural recruitment (e.g., oaks and hickories) while allowing species that move across landscapes and easily to re-establish by natural recruitment (e.g., Virginia pine, tulip poplar). *See* letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20161121-5051 (Nov. 20, 2017), pp. 8-9; letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 8-9.

[109] Final EIS, App. AA, Response IND244-8. Staff also responded: "[r]eplanting would limit the species planted to what is commercially available on a very large scale. Natural recruitment would allow for a more highly variable plant species and also would allow for species to regenerate that are best suited for the local conditions." Dr. Zipper provided an extensive response based on his experience and expertise and supported by numerous citations to scientific literature. *See* letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 11-14.

[110] Dr. Zipper is an expert in the field of Crop and Soil Sciences. His curriculum vitae is available at https://www.cses.vt.edu/content/dam/cses_vt_edu/people/tenure/cv/zipper-cv-2017.pdf (last checked Nov. 13, 2017).

forested lands.[111] VDCR also recommended replanting native trees.[112] The Certificate Order states that the final EIS responded to Dr. Zipper's proposed forest mitigation measures, but does not acknowledge the summary and unsupported nature of the response.[113]

c. The final EIS does not adequately evaluate the environmental consequences of using a woody seed mix to minimize effects on forest.

The Certificate Order states: "the proposed use of a woody seed mix is a reasonable measure to minimize impacts on forests."[114] It requires Mountain Valley to implement this measure in accordance with its Habitat Mitigation Plan.[115]

This measure was not evaluated in the draft EIS.[116] It was first introduced in the final EIS: "Mountain Valley would supplement the herbaceous seed mix with a woody seed mix comprised of native overstory, understory, and shrub oak-hickory forest species."[117] Table 2.4-2 of the final EIS incorporated by reference a description of the woody seed mix contained in Mountain Valley's Habitat Mitigation Plan. However, the final EIS did not evaluate the environmental consequences of using the woody seed mix to minimize impacts on forest. It did not cite to any scientific authorities in support of this measure.

Dr. Zipper filed comments on the final EIS providing evidence that the use of the woody seed mix would not only be ineffective in restoring forested lands, but potentially would be detrimental to forest restoration. Use of a woody seed mix could establish dense stands of pines within deciduous forest areas. This would facilitate the establishment of forest communities within the corridor that are dissimilar to the adjacent deciduous forest, to suppress natural

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111 *See* letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20161121-5051 (Nov. 20, 2016), p. 8; letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 8-11.

112 VDCR's FEIS Comments, p. 13. "The planted acres should be protected from conversion to any other land use in perpetuity through the use of a protective instrument that overlays the mitigation acreage." *Id.*

113 Certificate Order, ¶ 200.

114 *Id.* at ¶ 203.

115 *See* eLibrary no. 20170511-5018.

116 The draft EIS mentions "planting seeds of shrub species along the edge of the permanent right-of-way" in Jefferson National Forest (draft EIS, p. 4-148) but makes no other mention of shrub seeding in non-JNF forest areas. The Draft Migratory Bird Habitat Conservation Plan, prepared by Mountain Valley referenced by the DEIS (Table 2.4-2), and circulated in association with the DEIS (*see* eLibrary no. 20161027-5212, p. 31) did state that that "native" shrub species would be either seeded or planted; but it did not state the species, seeding rates, or other details. The Draft Migratory Bird Habitat Conservation Plan described shrub seeding/planting as a proposed means of providing habitat for migratory birds, not for the purpose of mitigating adverse effects to forest.

117 Final EIS, p. 4-181.

regeneration,[118] and to cause adverse visual effects within the region's scenic mountainous landscapes, especially in winter.[119]

A related problem, from an ecological restoration standpoint, is that the practice's outcome is unpredictable and will vary widely from place to place and among seeding times, and would not be an effective means for restoring forest of similar growth characteristics and species composition to adjacent areas.[120] Further, wild grape, if seeded as proposed and established successfully, would interfere with re-establishment of native trees.[121]

The Certificate Order reiterates the final EIS's finding that use of a woody seed mix is reasonable even though the final EIS did not evaluate the potential impacts of this measure.

d. <u>The final EIS does not adequately evaluate project impacts related to invasive species.</u>

The final EIS states that the removal of forest could introduce non-native invasive species.[122] It finds that Mountain Valley's implementation of its *Exotic and Invasive Species Control Plan* would reduce the potential introduction and spread of non-native invasive plant and weed species.[123] The final EIS does not include or cite to any scientific basis for finding that the proposed measures will be effective to mitigate the introduction and spread of non-native invasive species caused by project construction and operation. Mountain Valley's plan does not provide this information.

Instead, the evidence in the record shows that the proposed mitigation measures will *not* be effective.[124] This does not comply with the Commission's obligation to include a reasonably complete and independent assessment of whether proposed mitigation will be effective.

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118 While there is substantial evidence that use of a woody seed mix could suppress natural regeneration (*see* letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 17-26), there is no evidence for the Commission's finding that replanting with native trees appropriate for the ecoregion would impair natural recruitment.

119 *See id.*

120 *Id.*

121 *Id.*

122 Final EIS, p. 4-181.

123 *Id.* at 4-191.

124 *See* letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 11-17; *see also* letter from Dr. Murphy to Secretary Kimberly D. Bose et al., eLibrary no. 20161221-5349 (Dec. 19, 2016); letter from Dr. Murphy to Secretary Kimberly D. Bose, eLibrary no. 20150616-5193 (June 15, 2015). Dr. Zipper identified the following deficiencies:

- Monitoring for two-years is inadequate because the "invasion potential will occur throughout the project's lifetime;"

4. The Final EIS Does Not Show that the Commission Properly Considered Project Impacts to and Mitigation for Visual Resources

The Certificate Order references the final EIS's conclusion "that the MVP Project will not have significant adverse visual impacts on the Weston and Gauley Bridge Turnpike Trail, Blue Ridge Parkway, Appalachian National Scenic Trail, and the Jefferson National Forest."[125]

The final EIS acknowledges that "the pipeline corridor itself can be a significant visual feature, especially in mountainous terrain with multiple viewpoints," and that construction of aboveground facilities would cause permanent visual impacts.[126] It describes visual impacts assessments from Key Observation Points (KOPs) along the Appalachian Trail and within the Jefferson National Forest.[127] It also states that mitigation measures would be required to meet Scenic Integrity Objectives for the Jefferson National Forest within 5 years of construction.[128] It concludes that "overall impacts on land use and visual resources would be adequately minimized."[129]

Mountain Valley stated that it assessed visual impacts from the project's crossing of the Jefferson National Forest and Appalachian Trail "with management direction using USFS's Scenery Management System (SMS)."[130] It described the key specific tasks with this process as: "(1) define the analysis area, (2) identify key observation points (KOPs), (3) conduct viewshed analysis for the KOPs; (4) assess visual impacts; and (5) assess Project consistency with the USFS management direction, based on the [Scenic Integrity Objectives (SIOs)]."[131]

- Hand cutting cannot effectively remove many of the invasive species that occur in the project area;
- The plan does not include a mechanism to prevent seed production by invasive exotic plants;
- The plan does not prioritize re-establishment of canopy cover by native forest trees;
- The plan does not include thorough rinsing of hydroseeder tanks to prevent spread of residual seed from other jobs.

Letter from Dr. Zipper to Secretary Kimberly D. Bose, eLibrary no. 20170725-5023 (July 25, 2017), pp. 13-16. Dr. Zipper also provided detailed descriptions of "[e]xotic invasive plant species known as especially problematic in and near proposed disturbance areas," which describes each species' ecological threat, and the effectiveness of proposed mitigation measures to control the species. *See id.*, Ex. E.

125 Certificate Order, ¶ 225.

126 Final EIS, p. 5-9.

127 *Id.* at 5-10.

128 *Id.*

129 *Id.*

130 Mountain Valley, Jefferson National Forest Visual Impact Assessment, eLibrary no. 20170501-5410 (May 1, 2017), p. 1.

131 *Id.* at 2.

The final EIS does not address the errors in Mountain Valley's implementation of its methodology identified by the Roanoke Appalachian Trail Club.[132]

In addition to errors in implementation of the methods for visual impact assessment, the record does not show that the Commission adequately considered mitigation for visual impacts outside of the Appalachian Trail and Jefferson National Forest.

The Forest Service described the mitigation measures that it was requiring to reduce the visual impacts of the project:

> The FS [Forest Service] is working with Mountain Valley to incorporate additional mitigation measures, such as reducing the permanent operational right-of-way that is converted to herbaceous cover from 50 feet wide to 10 feet wide for its length on the Jefferson National Forest, This would significantly reduce the visibility of the pipeline, especially when viewed in the far middle-ground and background distance zones, and it would reduce or eliminate its visibility when viewed on an angle. Along the edge of this linear corridor a variety of FS approved shrubs, small trees and shallow rooted trees should be planted and maintained along a slightly undulating line in order to break up the straight edge and offer a variety of plant heights to reduce a hard shadow line. Reducing the herbaceous right-of-way width and allowing more of a vegetative transition within the operational corridor (i.e., grasses over the pipeline then shrubs between the grasses and treeline) would help mitigate the effects of the change to the scenic character of the area. This would also lessen the visual impacts of the pipeline as seen from the ANST from other viewsheds, including KOPs that were identified in public comments.[133]

The final EIS did not consider and the Certificate Order does not require comparable measures to mitigate the visual impact on private land as that required for the Jefferson National Forest. For example, instead of a 50-foot temporary construction corridor and a 10-foot permanent undulating corridor, Mountain Valley

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[132] *See* letter from Dr. Diana Christopulos to Secretary Kimberly D. Bose, eLibrary no. 20170223-5090 (Feb. 23, 2017). These errors include, but are not limited to:

- Omission of KOPs;
- Photographs taken in foggy conditions, rather than "typical viewing conditions;" and
- Photographs taken from distances of 300 to 400 feet, rather than adjacent to the proposed crossings.

Id. at 2-6. *See also* "Comment of Appalachian Trail Conservancy under CP16-10, et. al., Notice of ATC Objection to the USFS Draft Record of Decision on Mountain Valley Pipeline," eLibrary no. 20170814-5185 (Aug. 14, 2017) (discussing errors in the implementation of the visual impacts methodology).

[133] Final EIS, App. AA, FA10-1.

would clear-cut a 125-foot pipeline highway across West Virginia ridges visible from Peters Mountain in Monroe County to Keeney Knob, approximately 40 miles away in Summers County WV. For thousands of local, national, and international hikers who travel the [Appalachian Trail] or visit Hanging Rock each year, their view of "Almost Heaven" would be forever scarred.[134]

The permanent corridor on non-federal lands would be straight, 50-feet wide with sharp, not transitioned edges, the same width as the temporary corridor in the Jefferson National Forest. As noted in the final EIS: "in forest the regeneration of trees would take many years, resulting in a long-term effect on forested vegetation."[135] With 235 miles (more than 75 percent of the route) crossing forest,[136] the visual effect of the MVP Project would remain an unnatural 125-foot-wide scar for years.

5. The Final EIS Does Not Show that the Commission Properly Considered Project Impacts to Cultural and Historic Resources.

The Certificate Order states that Commission Staff agrees with the determination of the Virginia Department of Historic Resources that "the MVP Project would have adverse effects on the Big Stony Creek Historic District, Greater Newport Rural Historic District, North Fork Valley Rural Historic District, Bent Mountain Rural Historic District, and Coles-Terry Rural Historic District because visual impacts will diminish the feelings and settings of these historic districts."[137] It notes that Mountain Valley filed Treatment Plans with the Commission and Virginia Department of Historic Resources to resolve adverse effects on these districts.[138] It states that "Environmental Condition No. 15 of this order will ensure future consultations with the SHPOs and reviews of treatment plans."[139]

Environmental Condition No. 15 requires completion of the NHPA Act section 106 process.[140]

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134 Maury Johnson (Appalachian Trail Conservancy member), *The Appalachian Trail: A Path from our Past into our Future*, eLibrary no. 20170619-5064, p. 3 (June 18, 2017).

135 Final EIS, p. 4-177.

136 *Id. at* ES-7.

137 Certificate Order, ¶ 247.

138 *Id.* at ¶ 252.

139 *Id.*

140 Certificate Order, App. C, p. 6. Environmental Condition No. 15 states:

> Mountain Valley and Equitrans **shall not begin construction** of facilities and/or use staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
>
> a. Mountain Valley and Equitrans each files with the Secretary:
> b. remaining cultural resources survey reports;

Under NEPA section 102(c)[141] a federal agency must "include in every recommendation or report on proposals … major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on— (

(i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action.

"The affected human environment reviewed under NEPA includes aesthetic, historic, and cultural resources as these terms are commonly understood, including such resources as sacred sites."[142]

a. The final EIS does not include a complete or accurate discussion of the MVP Project's impacts to historic and cultural resources.

The Certificate Order expressly defers the completion of identification of effects and evaluation of avoidance, minimization, and mitigation to some future date prior to construction. This does not comply with NEPA, which requires that the environmental analysis be completed before the agency makes its decision.[143]

Petitioners objected to the incomplete analysis of project impacts on historic resources located along the project route.[144] The final EIS does not show that the analysis has been completed.

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c. site evaluation reports, avoidance plans, or treatment plans, as required; and comments on the reports and plans from the appropriate State Historic Preservation Offices, federal land managing agencies, interested Indian tribes, and other consulting parties.
d. the Advisory Council on Historic Preservation has been afforded an opportunity to comment if historic properties would be adversely affected; and
e. the FERC staff reviews and the Director of OEP approves all cultural resources reports and plans, and notifies Mountain Valley and/or Equitrans in writing that either treatment measures (including archaeological data recovery) may be implemented or construction may proceed. (emphasis in original)

[141] 42 U.S.C. § 4332(c); *see also* 40 C.F.R. § 1502.16 (describing required contents for EIS's discussion of Environmental Consequences).

[142] CEQ and ACHP, "NEPA and NHPA, Handbook for Integrating NEPA and Section 106," available at http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf (last checked Nov. 13, 2017).

[143] 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1500.1 ("NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.").

[144] *See* Save Monroe, Preserve Craig, The Wilderness Society, "Comments on FEIS to BLM citing objections and evidence of procedural and environmental issues re JNF DROD for MVP and proposed Forest Plan Amendments," eLibrary no. 20170801-5174 (Aug. 1, 2017), pp. 24-25.

b. The final EIS does not explain why an assessment of Cultural Attachment was not performed consistent with the Forest Service's recommendations.

During the pre-filing and filing periods for the MVP Project, the Commission and the Forest Service received a multitude of comments from individuals and organizations requesting analysis of the project's impacts on Cultural Attachment[145] at Peters Mountain, consistent with the methodology the Forest Service previously developed to evaluate another project proposed for the mountain.[146] Many of these comments include landowner comments about their deep spiritual attachment to Peters Mountain, and their strong cultural identification with its physical and historical presence.

On August 11, 2015, at the request of the Forest Service, the Commission directed Mountain Valley to "[i]nclude a detailed discussion of 'cultural attachment' along the proposed pipeline route crossing the Jefferson National Forest. The study of cultural attachment should be conducted by a qualified professional cultural anthropologist."[147] Mountain Valley hired a professional cultural anthropological consulting firm Applied Cultural Ecology (ACE) which produced the report, *The Mountain Valley Pipeline Jefferson National Forest Segment Cultural*

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145 "Cultural Attachment" is the cumulative effect over time of a collection of traditions, attitudes, and practices that ties a person to the land, to physical place, and to kinship patterns. "Cultural" relates to "the cumulative effect over time of a collection of traditions, attitudes, practices and stories." Indeed, the word "culture" originates from a Latin root meaning "to cultivate". "Attachment" relates to that which "ties a person to the land, to physical place and to kinship patterns."

In a culturally attached area, land is not valued as a commodity or an investment. Where people are attached to a specific land or a specific place, normal mitigation of the loss is impractical … its loss cannot be mitigated through monetization, or by the receipt of comparable land as determined by an appraiser. By definition, by usage, by meaning, there is only one "this place."

See Preserve Bent Mountain, "Summary of Poor and Bent Mountain History and Cultural Attachment," eLibrary no. 20161222-5151 (Dec. 22, 2016); *see* also James A. Kent, MA, JD, *The Scientific Validity of Cultural Attachment as a Social Phenomenon and the Basis for an "All Lands" Approach in NEPA Decisionmaking*, eLibrary no. 20151023-5124, (Oct. 23, 2015).

146 *See, e.g.*, e-Library nos. 20151023-5124, 20160505-5090, 20160630-5121, 20161205-5227, 20161220-5035, 20161221-5346, 20161222-5551, 20161223-5157, 20150806-5144, 20151125-5117, 20150804-5026, 20160524-0028, 20150616-0137, 20150608-0139, 20150306-0028, 20150130-0028, 20150827-0041, 20161216-0008, 20161121-0301, 20151013-5158, 20151013-5206, 20151013-5207, 20150807-5034, 20150616-5243, 20150616-5278, 20150616-5279). Over twenty years ago, the Forest Service established Cultural Attachment as significant issue under NEPA as it made its decision about whether to allow an APCO 765kV line to cross the Jefferson National Forest on Peters Mountain in the same vicinity as the MVP. In 1995, the Forest Service commissioned James Kent and Associates to perform the professional assessment of Cultural Attachment (*Cultural Attachment: Assessment of Impacts to Living*) that was incorporated into both the DEIS (1996) and in the ROD (2002). Cultural Attachment was cited as one of the reasons that the Forest Service chose the No Action Alternative. The basis for rejecting the power line route that caused adverse impacts to Cultural Attachment was the consultant's conclusion, which was adopted by the Forest Supervisor, that the significant impacts to Cultural Attachment could not be mitigated.

147 e-Library no. 20150811-3043, p. 21.

Attachment Report.[148] The report finds that there would likely be an impact on Cultural Attachment for Peters Mountain *and recommends study to fully assess the impact and resolve adverse effects*.[149]

The final EIS cites ACE's opinion that "the people who reside in the Peters Mountain area have a cultural attachment to the land that is unique to this portion of Appalachia."[150] The final EIS also affirms the consideration of Peters Mountain as a rural historic landscape.[151] It acknowledges requests for an effects analysis to determine the effect of the pipeline on cultural attachment to Peters Mountain.[152] The final EIS does not explain why the Commission and Forest Service did not complete an independent, professional effects analysis assessment, as requested by the Forest Service.

c. <u>The final EIS does not adequately evaluate project impacts on cultural attachment outside of federal lands, or impacts to mitigate those alternatives.</u>

The Certificate Order does not adequately address the project's impacts on cultural attachment. It summarily describes "cultural resources," but omits the complex series of facts and issues presented by families who are threatened with displacement from homes and places to which they have strongly identified. It does not discuss cultural attachment in the context of minimizing impacts to landowners.

The final EIS describes comments received regarding the project's impacts on cultural attachment.[153] It states that OEP Staff undertook an effects analysis for cultural attachment, based on the report prepared by ACE on Mountain Valley's behalf.[154]

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148 e-Library no. 20160127-5356 (Jan. 27, 2016).

149 *See id.*

150 Final EIS, p. 4-474.

151 *Id.* ("Furthermore, the NPS has indicated that historic rural landscapes may qualify for nomination to the NRHP (McClelland et al., 1999). Likewise, traditional cultural places can also be nominated to the NRHP (Parker and King, 1998). In the opinion of ACE, Peters Mountain could be considered a rural historic cultural landscape (Bengston and Austin, 2016). **We agree."** (emphasis added)).

152 *Id.* ("A letter to the FERC and FS dated May 4, 2016, from the Border Conservancy, Save Monroe, Preserve Craig, and Preserve Giles presented their comments on the ACE report. The groups requested that the FERC and FS have a cultural anthropologist conduct an effects analysis." (citing e-Library no. 20160505-5090).

153 *See* Final EIS, p. 4-414. Also see eLibrary no. 20161024-5068 (Newport Historical District); no.20170802-5115 – p.18 (Giles & Roanoke County 401); no. 20161121-0301 (Ettelson, Richard),

154 Final EIS, p. 4-474. The report is entitled, "*The Mountain Valley Pipeline Jefferson National Forest Segment Cultural Attachment Report.*" *See* e-Library no. 20160127-5356 (Jan. 27, 2016). "[T]he anthropological study concentrated on the adjacent landscape of Peters Mountain which is crossed by the proposed MVP pipeline route between about MPs 194 and 200, in Monroe County, West Virginia and Giles County Virginia." Final EIS, p. 4-472.

Based on this, the final EIS finds that

> Construction and operation of the MVP should not have long-term significant adverse effects on cultural attachment to the land, because it would not change land ownership, lifeways, economic activities, cultural practices or beliefs, and effects on most environmental resources (such as impacts on air quality, water quality, and farmland soils) would be reduced or mitigated through measures implemented by Mountain Valley.[155]

However, the final EIS does not demonstrate that project impacts on most environmental resources relevant to cultural attachment will be effectively mitigated; thus, there is an inadequate basis for finding that the project will not impact cultural attachment.

In fact, the record is replete with examples of project impacts on cultural attachment. One resident of rural Giles County, Virginia describes a loss, ultimately, of identity:

> [F]amily history and heritage bind us to this land…I know every nook and cranny on my farm –I know where the wet weather springs are, I know where the creek sinks, I can find the rock that holds the giant seashell fossil, I know which hickory the squirrels "cut" first in late August. I can find the thicket where the big buck deer spends his day; I know where the lady slippers bloom and the morels can be found in early spring. I know where the best mossy banks are to sit for quiet reflection. I watch the red-tailed hawks soar above the land on the air currents and listen to the howl of the coyote late at night. I walk daily on the many paths that deer and cattle have made on my farm and observe the changes in the landscape and the seasons. ***These are the things that ground me to place and provide my identity and I take great offense that your experts consider their loss to be mitigatable and summarily dismiss them.***[156]

The Virginia State Historic Preservation Officer (SHPO) confirmed that the project would have adverse effects on cultural attachment that had not yet been resolved:

> It is our opinion that (five rural historic districts) will be adversely affected by the MVP bisecting them and leaving a permanent fifty-foot wide imprint on their landscapes. This condition is incompatible with the existing rural historic character of the districts, which derive much of their historic significance and NRHP-eligible status *from that very agrarian setting and feeling the undertaking will diminish…"*[157]

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155 *Id.* at 4-474.

156 Request of Jean Porterfield, Newport, Giles County, Va., eLibrary no. 2016 0920-5073 (Sept. 20, 2016).

157 Letter from Roger W. Kirchen, Director, VDHR, to Megan L. Neylon, eLibrary no. 20170721-5026 (July 7, 2017). Concerns including visual effects, blasting, additional cultural resource surveys, and determinations of effect are required not only for the specific properties identified in the SHPO's letter, but also for NHRP-*eligible*

Kirchen went on to discuss the Programmatic Agreement and conditions of mitigation. It should be noted that concerns including visual effects, blasting, additional cultural resource surveys and determinations of effect are required not only for the five properties mentioned in the letter, but also for NHR-eligible properties, e.g., Bent Mountain Rural Apple Orchard District, presently in the path of a permanent access road with high attendant impacts. The applicant has never sought alternatives to these and other impacts to historically significant and cultural resources—and has thus skipped a significant step in the 106 process. Other permits, including the Corps of Engineers, would be proceeding illegally if they advanced in the face of failure to consider alternatives.

OEP Staff are still consulting with consulting parties to identify and evaluate avoidance, minimization, and mitigation to resolve these adverse effects.

C. The Commission Erred in Not Supplementing the Final EIS Prior to Issuing the Certificate Order.

The Commission decided not to issue a supplement to the final EIS prior to issuing the Certificate Order, even though the project had changed and there was new information that was relevant to its evaluation of the impact of the MVP Project. The Commission's decision not to supplement is inconsistent with CEQ's rule for preparation of a supplement.

NEPA imposes an ongoing duty to complete the record for necessary findings. "[A] federal agency has a continuing duty to gather and evaluate new information relevant to the environmental impact of its actions."[158] Under NEPA, the Commission is required to prepare a supplement to an FEIS if

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.[159]

The Commission "[m]ay also prepare supplements when the agency determines that the purposes of [NEPA] will be furthered by doing so."[160]

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properties, e.g., Bent Mountain Apple Orchard Rural Historic District, presently in the path of a permanent access road with high attendant impacts. Id.

158 *Warm Springs Task Force v. Gribble*, 621 F.2d 1017, 1023 (9th Cir. 1980) ("*Warm Springs*").

159 40 C.F.R. § 1502.9(c)(1)(ii); *South Carolina Electric & Gas Co.*, 109 FERC ¶ 61,331 (2004) (citing FERC's discretion to give greater scrutiny to land sales in light of new information and circumstances since last environmental review).

160 *Id.* § 1502.9(c)(2).

A "rule of reason"[161] applies to the decision whether to prepare a supplemental environmental document.

> … NEPA does require that agencies take a "hard look" at the environmental effects of their planned action, even after a proposal has received initial approval …. Application of the "rule of reason" thus turns on the value of the new information to the still pending decisionmaking process. In this respect the decision whether to prepare a supplemental EIS is similar to the decision whether to prepare an EIS in the first instance: If there remains a "major Federal action" to occur, and if the new information is sufficient to show that the remaining action will "affec[t] the quality of the human environment" in a significant manner or to a significant extent not already considered, a supplemental EIS *must* be prepared.[162]

As described above, the Commission has made changes to the Project that affect the findings in the final EIS. The Certificate Order requires Mountain Valley to use a woody seed mix, a measure that will have significant impacts on forest resources that were not addressed in the final EIS.

Further, the Commission has not addressed new circumstances and information filed in the record since the final EIS was issued.

As described above, Giles and Roanoke Counties submitted a second expert report prepared by Paul Rubin, which described studies and actual accidents that demonstrate the swift, severe, and potentially deadly consequences of pipeline ruptures.[163] He cited a recent industry study that recommended a minimum safety distance of 2,300 meters (7,544 feet) from natural gas pipelines and important infrastructure or resources. The Commission has not re-evaluated its analysis of karst and public safety issues in light of this information.

On October 17, 2017, the U.S. Court of Appeals for the Fourth Circuit vacated the Clean Water Act section 401 water quality certification issued by WVDEP.[164] WVDEP subsequently

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161 *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989).

162 *Id.* at 374 (alteration in original; emphasis added).

> Reasonableness depends on such factors as the environmental significance of the new information, the probable accuracy of the information, the degree of care with which the agency considered the information and evaluated its impact, and the degree to which the agency supported its decision not to supplement with a statement of explanation or additional data.

Warm Springs, 621 F.2d at 1024-25 (9th Cir. 1980) (internal citations omitted).

163 Second Rubin Report.

164 *Sierra Club et. al. v. West Virginia Dep't of Environmental Protection*, Case No. 17-1714 (Case Doc. 45) (Oct. 17, 2017).

waived certification on November 1, 2017.[165] The final EIS assumed that Mountain Valley would be required to comply with the conditions of 401 certification in its analysis of the environmental consequences of the MVP Project and the adequacy of mitigation.[166] The 401 certification included measures that are not otherwise required by the Certificate Order.[167] The Commission has not yet supplemented its environmental analysis to show how vacatur of the 401 certification affects its analysis of impacts to geologic and water resources in West Virginia.

The Commission's decision not to supplement the final EIS despite evidence that the criteria requiring supplementation under 40 C.F.R. section 1502.9 have been met was arbitrary and capricious and not supported by substantial evidence.

D. The Commission Erred in Not Thoroughly Considering Reasonable Alternatives as Required by the NGA and NEPA sections 102(2)(C)(iii) and 102(2)(E).

The Certificate Order finds that there are no feasible system alternatives that would offer an environmental advantage over the MVP Project.[168]

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165 *See* letter from Scott Mandirola to Secretary Kimberly D. Bose, eLibrary no. 20171106-0009 (Nov. 1, 2017).

166 *See* Final EIS, pp. 4-60, 5-3, 5-4.

167 For example, the 401 certification required an enhanced karst management plan:

> "As part of Mountain Valley's 401 WQC for West Virginia the WVDEP has conditioned Mountain Valley to provide an enhance [sic] karst management plan, which would, at a minimum, include provisions for
>
> - a pre-plan meeting with the WVDEP to discuss agency expectations;
> - access to the final right-of-way and access road areas for WVDEP staff to conduct
> - inspections;
> - field reviews with WVDEP Division of Water and Waste Management staff;
> - the identification of all karst features that would be within, or receive drainage from access roads and right-of-way;
> - depictions of karst drainage patterns;
> - use of construction designs that would minimize disturbed areas, and temporal disturbances;
> - avoidance of construction during wetter times of the year;
> - typical construction drawings for mitigation of encountered unanticipated karst features;
> - mitigation measures to be used if a water supply's quality is affected;
> - mitigation measures to be used if a water supply's quantity is diminished or lost; and
> - re-examination of setback distances for equipment storage and fueling areas.

Final EIS, p. 4-60. The final EIS also stated that Mountain Valley may be required to map the location of water wells, springs, and other drinking water sources for distances longer than five hundred feet in karst terrain "if dye traces, cave maps, or other information provided in the enhanced karst management plan required by WVDEP's Special Condition 16 of the Conditional 401 WQC depict distant underground connectivity." *Id.* at 5-3, n. 1.

168 Certificate Order, ¶¶ 297 – 304.

For example, it finds that a "one-pipe" alternative would not be technically feasible or practical, and would not offer a significant environmental advantage.[169] It explains:

> While "the existence of a more desirable alternative is one of the factors which enters into a determination of whether a particular proposal would serve the public convenience and necessity," that is not at issue in this case. Here, neither the "one-pipe" nor the "two-pipe, one right-of-way" alternative is a viable or desirable alternative. The final EIS nonetheless took a hard look at these alternatives." We agree with the determination in the final EIS and need not consider either alternative any further.[170]

Commissioner Cheryl LaFleur dissented based largely on the failure to thoroughly investigate system alternatives that would lessen environmental impacts of the projects: "I am particularly troubled by the approval of these projects because I believe that the records demonstrate that there may be alternative approaches that could provide significant environmental advantages over their construction as proposed."[171]

She cited the one-pipe alternative to show that there were likely other system alternatives that could lessen environmental impacts that had not been considered:

> … in the MVP FEIS, Commission staff evaluated a single pipeline alternative to the MVP project that would utilize the proposed [Atlantic Coast Pipeline (ACP)] to serve MVP's capacity needs. While this alternative was found to have certain environmental disadvantages, such as the need for additional compression to deliver additional gas, the EIS acknowledges that this alternative would "essentially eliminate all environmental impacts on resources along the currently proposed MVP route."
>
> I recognize that the [ACP and MVP merged system alternatives] were eliminated from further consideration because they were deemed not to meet each project's specific stated goals. *However, I believe that these alternatives demonstrate that the regional needs that these pipelines address may be met through alternative approaches that have significantly fewer environmental impacts.*[172]

Commissioner LaFleur also raised concerns regarding the needs assessment for the MVP Project, noting that Mountain Valley had not provided specific evidence regarding the end use for the majority of the gas to be delivered on its pipeline.[173] She stated that "evidence of the specific end use of the delivered gas within the context of regional needs is relevant evidence

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169 *Id.* at ¶ 301.

170 *Id.* at ¶ 106.

171 *Id.* at Commissioner LaFleur's dissenting opinion, p. 3.

172 *Id.* at 4 (emphasis added).

173 *Id.* at 3.

that should be considered as part of our overall needs determination."[174] She stated that "careful consideration of a fuller record could help the Commission better balance environmental issues, including downstream impacts, with the project need and its benefits."[175]

The Certificate Order does not directly address Commissioner LaFleur's dissent.

The Commission's implementing regulations impose a substantive duty on the Commission to consider alternative pipeline routes that avoid or minimize environmental impacts.[176] Its Certificate Policy Statement also provides that the Commission's "goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, the avoidance of unnecessary disruption of the environment, and the unneeded exercise of eminent domain."[177]

Under the NGA, the Commission is obligated "to carry out 'reasoned' and 'principled' decisionmaking."[178] "In cases where parties raise reasonable alternatives to the Commission's position, [the U.S. Court of Appeals for the D.C. Circuit has] held that reasoned decisionmaking requires considering those alternatives."[179] The court has applied this requirement to include consideration of alternatives raised by dissenting commissioners.[180]

NEPA imposes certain procedures on federal agencies to ensure their decisions are fully informed regarding the potential environmental impacts of a proposed action. NEPA section 102(2)(C)(iii) requires a detailed statement of "alternatives to the proposed action."[181] Under this section an EIS must

> present the alternatives to the proposed action. This discussion-of-alternatives requirement is intended to provide evidence that those charged with making the decision have actually considered other methods of attaining the desired goal, and to permit those removed from the decisionmaking process to evaluate and balance the factors on their

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174 *Id.* at 4. Former Chair Norman Bay raised similar concerns regarding the need to examine other evidence, in addition to precedent agreements, to evaluate project need. *National Fuel Gas Supply Corp.* 158 FERC ¶ 61,145 (2017), *Separate Statement* by Commissioner Bay, p. 2.

175 *Id.*

176 18 C.F.R. § 380.15(a).

177 Certificate Policy Statement, p. 2.

178 *American Gas Ass'n*, 593 F.3d at 19 ("*American Gas*") (quoting *Missouri Public Service Com'n*, 234 F.3d at 41).

179 *Id.* (citing *Laclede Gas Co. v. F.E.R.C.*, 873 F.2d 1494, 1498 (D.C. Cir. 1989)).

180 *Id.*

181 42 U.S.C. § 4332(2)(C)(iii).

own. A thorough consideration of all appropriate methods of accomplishing the aim of the proposed action is expected.[182]

CEQ's regulations require that an EIS:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.[183]

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.[184]

A "rule of reason governs 'both *which* alternatives the agency must discuss, and the *extent* to which it must discuss them.'"[185]

In addition, NEPA section 102(2)(E) requires that the federal lead agency "study, develop, and describe appropriate alternatives to recommended course of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources …."[186] The purpose is "to insist that no major federal project should be undertaken without intense

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182 *Sierra Club v. Morton*, 510 F.2d 813, 825 (5th Cir. 1975) (internal citations and notes omitted). *See also Sierra Club v. Watkins*, 808 F. Supp. 852, 874 (D.D.C. 1991) ("[E]ven if a project is found to be environmentally beneficial, an agency must still consider alternatives.").

183 CEQ guidance further clarifies that an EIS include those reasonable alternatives that "are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." CEQ, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18026-01 (Mar. 23, 1981) (hereafter, "Forty Questions"), Question 2a.

184 40 C.F.R. § 1502.14; *see also* 40 C.F.R. § 1508.25(b)(2).

185 *City of Grapevine, Tex. v. Dep't of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994) (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991) (emphases in original)); *see also Tongass Conservation Soc. v. Cheney*, 924 F.2d 1137, 1140 (D.C. Cir. 1991).

186 42 U.S.C. § 4332(2)(E).

consideration of other more ecologically sound courses of action, including shelving the entire project or of accomplishing the same result by entirely different means."[187]

Commissioner LaFleur's dissent was not the only request for consideration of system alternatives to reduce environmental harm. In comments on the draft EIS, the EPA specifically requested that the Commission further evaluate system alternatives that would reduce environmental impacts, including the one pipe alternative.[188]

The final EIS is non-responsive to EPA's request. It largely relies on the summary discussion in the draft EIS, stating that OEP Staff "evaluated merging the ACP and the MVP into one project (one pipeline alternative; using a variety of engineering options) along the ACP route."[189] It acknowledges that this alternative "would essentially eliminate all environmental impacts on resources along the currently proposed MVP pipeline route."[190] However, it notes this alternative could have other impacts related to the need for additional compression and lateral lines.[191] The final EIS ultimately finds "that the one-pipe alternative would not be technically feasible or practical"[192] It similarly rejected requests for thorough consideration of route alternatives that would better mitigate project impacts.[193]

The final EIS does not show that a one-pipe alternative is unreasonable and thus properly eliminated from further study.[194] It eliminated from detailed consideration any system alternatives that would utilize one pipe from further study based on potential impacts to air

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187 *Envtl. Def. Fund, Inc. v. Corps of Engineers of U.S. Army*, 492 F.2d 1123 (5th Cir. 1974); *see* Daniel R. Mandelker, *NEPA Law and Litigation* (Thompson West 2003), § 9:22, p. 9-53.

188 EPA's DEIS Comments, Encl. 1, p. 4. The EPA stated:

> As the EIS recognizes the potential environmental advantages to this alternative, it may be appropriate to evaluate and weigh impacts from this alternative within the EIS and not, for example, eliminate the alternative on the basis of air impacts without considering its potential to reduce environmental impacts to other resources. We recommend FERC discuss potential modifications that could be made to increase the efficiency of the one pipe option, particularly which may allow for the combination of volumes into the currently proposed 42-inch diameter pipe. The use of the proposed 42-inch line (instead of 48-inch) would reduce impact of additional temporary workspace and increased construction ROW width. Although FERC concludes that this alternative may not be reasonable or practicable, EPA suggests FERC further consider ways to increase efficiency in order to utilize the 42-inch pipe for the one pipe alternative. *Id.*

189 Final EIS, p. 5-16.

190 *Id.* at p. 3-14.

191 Certificate Order, ¶ 300.

192 Final EIS, p. 5-16.

193 *See, e.g.*, eLibrary no. 20170306-5177 (Mar. 6, 2017) (requesting consideration of Alternative Route 1A).

194 *See State of California v. Block*, 690 F.2d 753 (9th Cir. 1982); *Natural Resources Defense Council v. U.S. Forest Service*, 421 F.3d 797 (9th Cir. 2005).

quality and need for additional lateral lines. However, it does not provide any evidence in support of these findings. It states that a one-pipe alternative may require additional compression, which in turn "could triple air quality impacts in comparison to the MVP and ACP *considered individually*."[195] However, it does not state how the air quality impacts compare if the MVP and ACP Projects are *considered collectively*. It does not provide or cite to more detailed information on how the Commission estimated the air quality impacts. It does not provide adequate information to evaluate the potential impacts of lateral lines and permit comparison of those impacts to the MVP Project. This does not comply with its obligations under NEPA to "insure the professional integrity, including scientific integrity of the discussions and analyses in environmental impact statements," to "identify any methodologies used," and to cite scientific sources relied upon for conclusions in the final EIS.[196]

The final EIS does not show that a one-pipe alternative could not be designed to meet the purpose or need of the MVP Project.[197] Indeed, as stated by Commissioner LaFleur, the record is incomplete regarding specific evidence regarding the end use of the gas to be delivered by the MVP Project. Such evidence is critical to identifying and evaluating alternatives that would meet project need while better achieving the Commission's goal of enhancing competitive transportation, avoiding overbuilding, avoiding unnecessary disruption of the environment, and avoiding the unneeded exercise of eminent domain.[198]

The record does not support the Certificate Order's findings that there are no system alternatives that would provide a significant environmental advantage over the MVP Project.

E. The Record Does Not Support a Finding that the Project as Approved Avoids or Minimizes Impacts to Scenic, Historic, Wildlife, and Recreational Values as Required by the Commission's Regulations.

The Certificate Order concludes:

> We find that the benefits that the MVP Project will provide to the market outweigh any adverse effects on existing shippers, other pipelines and their captive customers, and landowners or surrounding communities. Consistent with the criteria discussed in the Certificate Policy Statement and NGA section 7(e), and subject to the environmental

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195 Final EIS, 3-15.

196 40 C.F.R. § 1502.24; *see also Izaak Walton League of Am. v. Marsh*, 655 F.2d 346, 368 (D.C. Cir. 1981) ("the administrative record must disclose the studies and data used in compiling environmental impact statements … any methodologies relied upon should be carefully described.")

197 *Id.* For example, the final EIS generally describes potential disadvantages to servicing MVP's proposed taps. It does not indicate any investigation by OEP Staff to evaluate those disadvantages or determine whether they could be overcome.

198 *See* 40 C.F.R. § 1502.13 (requiring discussion of "the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.").

discussion below, we find that the public convenience and necessity requires approval of Mountain Valley's proposal, as conditioned in this order.[199]

The Commission administers Section 7 of the Natural Gas Act to authorize the construction and operation of interstate natural gas pipeline and storage projects.[200] The Commission's decision whether to grant a pipeline certificate under the NGA section 7(c) is based upon a determination that the project is in the public interest. In weighing the public interest, the Commission is required to consider a project's potential impact on pipeline competition, the possibility of overbuilding, subsidization of existing customers, potential environmental impacts, avoiding the unnecessary use of eminent domain, and other factors.[201]

Under the Commission's regulations, a pipeline's route must be designed to avoid or minimize effects: "[t]he siting, construction, and maintenance of facilities shall be undertaken in a way that avoids or minimizes effects on scenic, historic, wildlife, and recreational values."[202]

The Commission's Policy Statement states that applicants should structure "its proposed project to avoid adverse economic, competitive, environmental, or other effects on the relevant interests[203] from the construction of the new project…."[204] When elimination of all adverse effects is not possible, the Commission's objective is to "encourage the applicant to minimize the adverse impact on each of the relevant interests."[205]

As stated above, the evidence in the record does not demonstrate that the Commission followed the procedures necessary to demonstrate that the MVP Project, as conditioned and approved in the Certificate Order, identifies, avoids or minimizes impacts on scenic, historic,

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199 Certificate Order, ¶ 64.

200 15 U.S.C. § 717f.

201 *Available at* http://www.ferc.gov/legal/maj-ord-reg/PL99-3-000.pdf. *See also* FERC, "Order Clarifying Statement of Policy," (Feb. 9, 2000), *available at* http://www.ferc.gov/legal/maj-ord-reg/PL99-3-001.pdf. *See also South Star Central Gas Pipeline, Inc.*, 124 FERC ¶ 61,042, 61,210-11 (2008). FERC's "goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction."

202 18 C.F.R. § 380.15(a).

203 FERC, "Policy Statement Certification of New Interstate Natural Gas Pipeline Facilities," (Sept. 15, 1999) (Certificate Policy Statement), p. 23. "These are: the interests of the applicant's existing customers, the interests of competing existing pipelines and their captive customers, and the interests of landowners and surrounding communities." *Id.*

204 *Id.*

205 *Id.*

wildlife, and recreational values. As such, the Commission has not shown that unnecessary effects on landowners and surrounding communities have been avoided.

The Commission has not responded to specific objections that certain landowners' interests will be adversely affected by the Commission's failure to complete the record on environmental impacts. James Chandler commented that the draft EIS did not describe geological hazards and multiple water resources (wells, springs, creeks, streams, and wetlands) that would be crossed or otherwise impacted by the pipeline right-of-way and an access road proposed to be located on his property.[206] In another example, ICWA commented that the draft EIS did not identify address karst features, steep slopes, springs, and unmitigable sedimentation hazards on the property owned by Landcey Ragland, which would be bisected by the project.[207] These errors were not addressed in the final EIS, and the Certificate Order did not require a landowner-specific crossing plan for Mr. Chandler's or Mr. Ragland's property.[208] Neither the final EIS nor the Certificate Order explain the criteria the Commission applied to determine whether a landowner-specific crossing plan would be required. This does not comply with the Commission's substantive duty under the NGA.

VI.
REQUEST FOR STAY

The Commission reviews requests for a stay under the standard established by the Administrative Procedure Act, 5 U.S.C. § 705, and will grant a stay when "justice so requires."[209]

In assessing a request for stay, the Commission considers several factors, which typically include:

> (1) whether the party requesting the stay will suffer irreparable injury without a stay; (2) whether issuing the stay may substantially harm other parties; and (3) whether a stay is in the public interest. The most important element of the stay standard is a showing that the movant will be irreparably injured without a stay. If the party requesting the stay is unable to demonstrate that it will suffer irreparable harm absent a stay, we need not examine other factors.[210]

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206 Comment of James Chandler, eLibrary no. 20170622-5015 (June 22, 2017).

207 *See* ICWA, eLibrary no. 20161222-5201 (Dec 22, 2016); Section 3, p. 2; *see also* ICWA and Landcey Ragland, "Monroe County Landowner Property near Indian Creek Crossing: Issues for MVP Route and 404/401/Stormwater Permits," eLibrary no. 20160818-5138 (Aug. 17, 2016).

208 *See* Certificate Order, App. C, p. 7 (Environmental Condition 18).

209 5 U.S.C. § 705; *see Florida Se. Connection, LLC Transcon. Gas Pipe Line Co., LLC Sabal Trail Transmission, LLC*, 154 FERC ¶ 61264 (Mar. 30, 2016) (finding justice did not require a stay).

210 *Florida Southeast Connection, LLC Transcontinental Gas Pipe Line Company, LLC Sabal Trail Transmission, LLC*, 154 FERC ¶ 61264.

As discussed below, the Petitioners satisfy the criteria for a stay under the APA.

A. Petitioners Will Suffer Irreparable Harm for which there is No Adequate Legal Remedy If It Prevails on Appeal.

The D.C. Circuit has held that the "basis for injunctive relief in the federal courts has always been irreparable harm and inadequacy of legal remedies."[211] Mere injuries, in terms of money, time, and energy necessarily expended absent a stay, are not enough. However, the possibility that corrective relief will not be available if the project is allowed to proceed weighs heavily in favor of a finding of irreparable harm.[212]

In *National Fuel*, a citizens group requested a stay of construction of a compressor station, arguing that impacts on air and water quality constituted irreparable harm.[213] The Commission denied the request. It found that even if the compressor station were built, so long as the developer complied with the terms of the certificate, the anticipated harm would be fully mitigated. That is not the case here. As described below, the Certificate Order does not fully mitigate the potential impacts to forested lands and water supplies.

The MVP Project will remove acres of forest, including old growth and interior forest. The Forest Service has acknowledged that old growth forest "is not replaceable and the harvest of old growth cannot be mitigated."[214] Even if the Certificate Order is later vacated and the forest is allowed to regenerate, "it would take many years for trees to mature."[215] In the meantime these lands would no longer provide habitat for interior forest species, and would be vulnerable to invasive species.

The Certificate Order acknowledges the potential harm to groundwater resources because of construction.[216] The Certificate Order does not fully mitigate these potential impacts. It only provides for repair of construction damages to the quantity or quality of domestic water supplies

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211 *Wisconsin Gas Co. v. F.E.R.C.*, 758 F.2d 669 (D.C. Cir. 1985) ("*Wisconsin Gas*").

212 *Virginia Petroleum Jobbers Ass'n v. Fed. Power Comm'n*, 259 F.2d 921, 925 (D.C. Cir. 1958).

213 *National Fuel*, 139 FERC ¶ 61,037 (2012) (denying stay where not showing of irreparable harm).

214 Final EIS, App. AA, FA10-1.

215 Certificate Order, ¶ 192.

216 "Because karst features provide a direct connection to groundwater, there is a potential for pipeline construction to increase turbidity in groundwater due to runoff of sediment into karst features or to contaminate groundwater resources by inadvertent spills of fuel or oil from construction equipment." Certificate Order, ¶ 171.

to "*near* pre-construction conditions" or for replacement water supply.[217] As property owners have testified, there is no suitable replacement for natural springs on their properties.[218]

Given the Certificate Order does not fully mitigate the loss of forested lands and contamination of groundwater resources, the potential harm caused by the MVP Project is irreparable.

B. Mountain Valley Would Not Be Substantially Harmed If a Stay Were Granted.

While the potential harm to Petitioners is irreparable in the absence of a stay, Mountain Valley would not be substantially harmed if a stay were granted. Mountain Valley is seeking to proceed to construction to meet the anticipated-service date of November 2018 under its precedent agreements.[219] However, even if Mountain Valley does not make the anticipated-service date, it will not face financial liability under the precedent agreements.[220] Regardless, potential harm to Mountain Valley from breach of the precedent agreements would be an economic loss and does not constitute irreparable harm.[221]

C. Justice Requires a Stay.

Petitioners meet the criteria for a stay under the Commission's standards. Allowing the MVP Project to proceed in advance of remedying the errors identified will result in unnecessary and irreparable harm to forest lands, groundwater supply, viewsheds, and historic resources. By contrast, a stay will not substantially harm Mountain Valley.

VII. REQUEST FOR RELIEF

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217 Certificate Order, ¶ 172.

218 Parties to the proceeding have explained that it is not feasible to connect many properties along the project route to municipal water supplies. eLibrary no. 20161222-5459, pp. 10-12; eLibrary no. 20170918-5180, pp. 9-12. *See also* letter from Roberta Motherway Bondurant to David K. Paylor (Aug. 22, 2017), p. 6 ("*Bent Mountain residents live entirely on well and spring water* on an upland plateau that rests at about 2,400 to 2,600 feet, above the Roanoke Valley, and continuing to rise up to some residences atop Poor Mountain, in some places at perhaps 35-3700 feet." (emphasis in original)); Memorandum from Dwayne Roadcap to Drew Hammond, Acting Director, Office of Drinking Water, *supra* n. 83 ("Homeowners in the counties associated with the pipeline could be using springs, cisterns, hand-dug wells, and drilled wells near the pipeline's path.").

219 *See, e.g.*, Precedent Agreement between Mountain Valley and Consolidated Edison Company of New York, Inc., eLibrary no. 20160127-5200 (Jan. 21, 2016).

220 *See id.* at ¶ 16.

221 *Wisconsin Gas*, 758 F.2d at 674 ("It is also well settled that economic loss does not, in and of itself, constitute irreparable harm."). "Recoverable monetary loss may constitute irreparable harm only where the loss threatens the very existence of the movant's business." *Id.* (citing *Washington Metropolitan Area Transit Comm'n v. Holiday Tours, Inc.*, 559 F.2d 841, 843 n. 2 (D.C. Cir.1977)).

The Petitioners request that the Commission consider the merits of the requests for rehearing, vacate the Certificate Order, and undertake further procedures to ensure that any certificate issued to Mountain Valley complies with the Commission's statutory and regulatory obligations. The Petitioners also request that the Commission stay the effectiveness of the Certificate Order pending a decision on the merits of their rehearing request.

Dated: November 13, 2017

Respectfully submitted,

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Judy Azulay
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Stephen Miller, D.O.
SAVE MONROE

/s/ Chris Chanlett

_____

Chris Chanlett
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AGAINST THE PIPELINE

/s/ Roberta M. Bondurant

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Roberta M. Bondurant
PROTECT OUR WATER HERITAGE
RIGHTS

/s/ Donna Pitt

_____

Donna Pitt
PRESERVE GILES COUNTY

/s/ Carl Zipper

_____

Carl Zipper, Ph.D.
PRESERVE MONTGOMERY COUNTY
VA

/s/ David Brady

_____

David Brady
GREATER NEWPORT RURAL HISTORIC
DISTRICT COMMITTEE

DECLARATION OF SERVICE

Mountain Valley Pipeline, LLC's Mountain Valley Pipeline Project (CP16-10-000) and Equitrans, LP's Equitrans Expansion Project (CP16-13-000)

I, Emma Roos-Collins, declare that I today served the attached "Preserve Craig, Preserve Bent Mountain, Save Monroe, Summers County Residents Against the Pipeline, and Protect Our Water, Heritage and Rights' Request for Rehearing of Order Issuing Certificates and Granting Abandonment Authority and Request for Stay" by electronic mail, or by first-class mail if no e-mail address is provided, to each person on the official service list compiled by the Secretary in this proceeding.

Dated: November 13, 2017

By:

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