UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of

MOUNTAIN VALLEY PIPELINE, LLC EQUITRANS, LP

Docket Nos. CP16-10-000 CP16-13-000

REQUEST FOR REHEAHRING AND RECISION OF CERTIFICATES AND MOTION FOR STAY OF

APPALACHIAN VOICES, CENTER FOR BIOLOGICAL DIVERSITY, CHESAPEAKE CLIMATE ACTION NETWORK, NATURAL RESOURCES DEFENSE COUNCIL, PROTECT OUR WATER, HERITAGE AND RIGHTS (POWHR), SIERRA CLUB, WEST VIRGINIA RIVERS COALITION, WILD VIRGINIA, BOLD ALLIANCE, ORUS ASHBY BERKLEY, CHARLES CHONG, REBECCA CHONG, JUDY HODGES, STEVEN HODGES, DONALD JONES, GORDON JONES, ELISABETH TOBEY, RONALD TOBEY, AND KEITH WILSON

Pursuant to section 19(a) of the Natural Gas Act ("NGA"), 15 U.S.C. §717r(a) and Rule 713 of the Federal Regulatory Energy Commission's ("FERC") Rules of Practice and Procedure, 18 C.F.R. § 385.713, Appalachian Mountain Advocates, on behalf of Appalachian Voices, Center for Biological Diversity, Chesapeake Climate Action Network, Natural Resources Defense Council, Protect Our Water, Heritage and Rights (POWHR), Sierra Club, West Virginia Rivers Coalition, and Wild Virginia, and Chris Johns, on behalf of Bold Alliance and landowners Orus Ashby Berkley, Charles Chong, Rebecca Chong, Judy Hodges, Steven Hodges, Donald Jones, Gordon Jones, Elisabeth Tobey, Ronald Tobey, and Keith Wilson, (collectively, "Intervenors") hereby request rehearing of FERC's "Order Issuing Certificates and Granting Abandonment Authority," issued October 13, 2017, in the above-captioned proceeding ("Certificate Order"). See Mountain Valley Pipeline, LLC, 161 FERC ¶ 61,043 (Oct. 13, 2017). FERC granted the Intervenors' respective motions to intervene in this proceeding. *See id.* at ¶

21. Thus, the Intervenors are "parties" to this proceeding, 18 C.F.R. § 385.214(c), and have standing to file this request for rehearing. See 15 U.S.C. § 717r(a); 18 C.F.R. § 385.713(b).

We request that the Certificate Order and deficient final environmental impact statement ("FEIS") be withdrawn and the environmental analysis and public convenience and necessity analysis be redone in a manner that complies with FERC's obligations pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 et seq., and the Natural Gas Act ("NGA"), 15 U.S.C. § 717 et seq.

STATEMENT OF RELEVANT FACTS

FERC's Certificate Order authorizes Mountain Valley Pipeline, LLC ("Mountain Valley") to construct the Mountain Valley Pipeline ("MVP" or "the Project"), a 42-inch diameter 303.5 mile, mostly greenfield pipeline that would carry up to 2,000,000 dekatherms (Dth) per day of gas from Wetzel County, West Virginia to Pittsylvania County, Virginia by means of three new compressor stations in West Virginia, and to perform unidentified future construction activities pursuant to a blanket certificate under Part 284, Subpart G of FERC's regulations. The Certificate Order also authorizes Equitrans, L.P. (Equitrans) to construct the Equitrans Expansion Projects (EEP), which involves construction of 7.87 miles of new pipeline and one new compressor station in Pennsylvania to facilitate the movement of up to 600,000 Dth per day of gas from southern Pennsylvania and northern West Virginia to proposed interconnections with the MVP in West Virginia. The Order grants both applicants' requested rates of return, including their requested 14 percent return on equity (ROE).

The corporate entities that own Mountain Valley are closely related to those that have contracted to ship gas on the MVP. Mountain Valley is a joint venture of five different companies: (1) MVP Holdco, LLC, a subsidiary of EQT Corporation; (2) US Marcellus Gas Infrastructure, LLC, a subsidiary of NextEra Energy Capital Holdings, Inc.; (3) WGL Midstream, Inc., a subsidiary of WGL Holdings, Inc.; (4) RGC Midstream, LLC, a subsidiary of RGC Resources, Inc.; and (5) Con Edison Gas Midstream, LLC, a subsidiary of Consolidated Edison, Inc. 1 The five shippers that have together contracted for the entirety of the MVP's capacity are: (1) EQT Energy, LLC (1.29 million Dth per day), a subsidiary of EQT Corporation; (2) USG Properties Marcellus Holdings, LLC (250,000 Dth per day), a subsidiary of NextEra Energy, Inc.; (3) WGL Midstream, Inc. (200,000 Dth per day); (4) Roanoke Gas Company (10,000 Dth per day), a subsidiary of RGC Resources, Inc.; and (5) Consolidated Edison of New York, Inc. (250,000 Dth per day). Only two of those contracting parties, Roanoke Gas Company and Consolidate Edison of New York, representing roughly 13 percent of the MVP's capacity, are end users.³ The rest of the shippers have entered into their contracts based on speculation that they will be able to sell the gas necessary to fill their contracted capacity to as yet unidentified end users.⁴

¹ Certificate Order ¶4 n.4.

 $^{^{2}}$ *Id.* ¶10.

³ *Id.* ¶292 n.286.

⁴ See id., Dissent at 3–4.

Notice of Mountain Valley's and Equitrans' applications was published in the *Federal Register* on November 13, 2015.⁵ On November 27, 2015, Intervenors

Appalachian Voices, Chesapeake Climate Action Network, Sierra Club, and West

Virginia Rivers Coalition submitted a Motion to Intervene and Protest, which included a request for an evidentiary hearing to resolve disputed issues of material fact regarding the need for and impacts of the projects.⁶ Intervenor Bold Alliance filed a late motion to intervene on April 6, 2017.⁷ Following a NEPA scoping process in which Intervenors participated,⁸ on September 16, 2016, FERC published a draft environmental impact statement ("DEIS") that contained substantial gaps in information required to understand the impacts of the projects and permitted the applicants to submit significant missing information both during the course of and after the close of the DEIS public comment period.⁹ On October 19, 2016, Intervenors requested that FERC issue a revised or supplemental DEIS that would permit the public to adequately understand and comment

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⁵ 80 Fed. Reg. 70,196.

⁶ Motion to Intervene and Protest of Appalachian Mountain Advocates et al. in Dockets No. CP16-10 and CP16-13 (Accession No. 20151125-5098).

⁷ Motion to Intervene Out-of-Time of Bold Alliance (April 6, 2017) (Accession No. 20170406-5743)

⁸ Comments on FERC's Notice to Prepare an EIS for the Planned Mountain Valley Pipeline Project, FERC Docket No. PF15-3-000 (June 16, 2015) (Accesisn No. 20150617-5044)

⁹ See FERC, Notice of Availability of the Draft Environmental Impact Statement for the proposed Mountain Valley Project and Equitrans Expansion Project re the Mountain Valley Pipeline LLC et al under CP16-10 et al. (September 16, 2016) (Accession No. 20160916-3014).

on the impacts of the proposed projects. ¹⁰ Following FERC's failure to grant that request, those intervenors filed final comments on the DEIS on December 22, 2016. ¹¹ On February 3, 2017, Mountain Valley filed a Motion to Answer and Answer that included responses to Intervenors' DEIS comments. ¹² On March 24, 2017, Intervenors filed a Motion for Leave to Answer and Answer to Mountain Valley's filing. ¹³ On September 25, 2017, Intervenor Bold Alliance filed a letter outlining the constitutional and statutory violations that would result from a grant of a certificate. ¹⁴ FERC granted all of the above motions in its October 13, 2017 Certificate Order. ¹⁵

¹⁰ Request of Appalachian Mountain Advocates et al. for Revised or Supplemental DEIS in Dockets No. CP16-10 and CP16-13 (October 19, 2016) (Accession No. 20161019-5061).

¹¹ Comments of Appalachian Mountain Advocates et al. on the on the Draft Environmental Impact Statement for the Proposed Mountain Valley Pipeline and Equitrans Expansion Project (December 22, 2016) (Accession No. 20161223-5058) ("Appalachian Mountain Advocates DEIS Comments").

¹² Motion to Answer and Answer of Mountain Valley Pipeline, LLC to Comments on the Draft Environmental Impact Statement (February 3, 2017) (Accession No. 20170203-5263).

¹³ Motion for Leave to Answer and Answer of the Appalachian Mountain Advocates et al. to the Answer of Mountain Valley Pipeline, LLC (March 24, 2017) (Accession No. 20170327-5025) ("Appalachian Mountain Advocates Answer").

¹⁴ Comment of Bold Alliance re: Eminent Domain Issues (September 25, 2017) (Accession No. 20170925-5045). On September 5, 2017, the Bold Alliance and the Bold Educational Fund filed a lawsuit in federal district court against FERC, ACP and MVP challenging the constitutionality of the FERC's certificate process and authorization of use of eminent domain by private natural gas pipeline companies - both as a general matter and specific to the MVP and ACP Projects. Although Bold contends that the federal district court has jurisdiction to entertain all of its claims, as a precaution, it seeks rehearing at the Commission to avoid waiver of its right to challenge the certificate under Section 717f(h) if the federal court declines to hear its case as well as to preserve those issues that are outside the scope of the federal district court case.

¹⁵ Certificate Order ¶26.

Together, MVP and Equitrans' ("the applicants") authorized activities ("the projects") will adversely affect significant sensitive environmental resources. A project of this magnitude has never been undertaken in the steep and challenging Appalachian mountain terrain that the Projects would traverse. Construction of the projects would cross 1,146 waterbodies, including more than 400 perennial waterbodies, and would disturb over 5,200 acres of soils that are classified as having the potential for severe water erosion. About 32 percent of the MVP and 45 percent of the EEP will cross topography with steep (greater than a 15 percent grade) slopes. About 67 percent of the MVP and all of the EEP will cross areas susceptible to landslides. Additionally, the MVP will require construction through about 67 miles of fragile karst terrain. Both projects will result in significant climate-altering greenhouse gas (GHG) emissions. In addition to environmental impacts, the projects would have substantial impacts on landowners, hundreds of whom will have their property forcibly taken through the applicants' use of the eminent domain power granted by FERC's Certificate Order.

CONCISE STATEMENT OF ALLEGED ERRORS

1. FERC violates the NGA by granting the certificate without meaningfully assessing the market demand for the projects. FERC's failure to consider

¹⁶ Final Environmental Impact Statement for Mountain Valley Pipeline, LLC and Equitrans, LP's Mountain Valley Project and Equitrans Expansion Project under CP16-10 et al. (Accession No. 20170623-4000) ("FEIS") at 4-118, 5-2.

¹⁷ Certificate Order ¶ 143.

¹⁸ *Id*.

¹⁹ *Id.* ¶151.

 $^{^{20}}$ Id. ¶¶274, 293.

²¹ *Id.* ¶57.

substantial evidence in the record showing the lack of market demand for the MVP's capacity renders its finding that the project is required by the public convenience and necessity, 15 U.S.C. § 717f(c)(1)(A), unreasonable. FERC's decision to rely solely on the existence of precedent agreements runs counter to its Certificate Policy Statement. Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227, 61, 744, 61,747 (Sept. 15, 1999) ("Certificate Policy Statement"), clarified, 90 FERC ¶ 61,128 (Feb. 9, 2000), further clarified, 92 FERC ¶ 61,094, 61,373 (Jul. 28, 2000).

- 2. FERC violates the NGA by granting the certificate without acknowledging the impact of the affiliate nature of the precedent agreements on those agreements' ability to demonstrate need for the projects. FERC's refusal to "look behind" the affiliate precedent agreements renders its finding that the project is required by the public convenience and necessity, 15 U.S.C. § 717f(c)(1)(A), unreasonable. FERC's decision to ignore the risks of overbuilding presented by blind reliance on affiliate precedent agreements runs counter to its Certificate Policy Statement. Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227, 61,744 (Sept. 15, 1999) ("Certificate Policy Statement"), clarified, 90 FERC ¶ 61,128 (Feb. 9, 2000), further clarified, 92 FERC ¶ 61,094, 61,373 (Jul. 28, 2000).
- 3. FERC violates the NGA by failing to support its decision to approve an unreasonably high rate of return on equity of 14 percent with substantial evidence. FERC's blind reliance on past precedent, without any effort to evaluate the risk faced by the developers of this specific project, renders its finding that the project is required by the public convenience and necessity, 15 U.S.C. § 717f(c)(1)(A), unreasonable. See Sierra Club v. FERC, 867 F.3d 1357, 1378 (D.C. Cir. 2017).
- 4. FERC violates the NGA by not granting an evidentiary hearing to resolve disputed issues of material fact regarding the need for the project. Intervenors made allegations of fact, submitted expert analysis and other evidence to support their allegations, and demonstrated that their allegations were in dispute. Moreover, FERC's Order confirms that these allegations have not been, and should not be, resolved on the basis of the written record. *See* 15 U.S.C. § 717f(c)(1)(B); 18 C.F.R. § 385.502; *Cascade Nat. Gas Corp. v. FERC*, 955 F.2d 1412 (10th Cir. 1992).
- 5. FERC violates NEPA by failing to properly evaluate the purpose and need for the projects in its draft and final EIS. 40 C.F.R. § 1502.13. By relying entirely on the goals of the applicants to establish the purpose of the projects, FERC fails to "exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project." Simmons v. U.S. Army Corps of Eng's, 120 F.3d 664, 669 (7th Cir. 1997) (quoting Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 209 (D.C. Cir. 1991) (Buckley, J., dissenting)).

- 6. FERC violates NEPA by failing to rigorously explore and objectively evaluate all reasonable alternatives to the projects, including reasonable alternatives not within its jurisdiction and including the "no action" alternative. 40 C.F.R. § 1502.14; WildEarth Guardians v. Nat'l Park Serv., 703 F.3d 1178, 1184 (10th Cir. 2013); Milwaukee Inner-City Congregations Allied for Hope v. Gottlieb, 944 F.Supp.2d 656, 670 (W.D. Wis., 2013); Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 235 F.Supp.2d 1143, 1154 (W.D. Wash., 2002). FERC's dismissal of any alternatives that do not meet the applicants' desires improperly restricts its analysis to those "alternative means by which a particular applicant can reach his goals." Simmons, 120 F.3d at 669 (quoting Van Abbema v. Fornell, 807 F.2d 633, 638 (7th Cir. 1986); see also Nat'l Parks & Cons. Ass'n v. Bureau of Land Mgmt., 606 F.3d 1058, 1072 (9th Cir. 2009). In particular, FERC's failure to rigorously analyze the ability of a "one corridor" alternative collocated with the concurrently-approved Atlantic Coast Pipeline to meet any demonstrated need for the projects violates NEPA. See Certificate Order, Dissent at 2–3.
- 7. FERC violates NEPA by failing to include sufficient information in its draft EIS to permit meaningful public review and comment. 40 C.F.R. § 1502.9(a). The DEIS was so lacking in information and analysis that the public (and FERC's sister federal agencies) could not properly assess the project's impacts or critique FERC's assessment thereof. FERC's deficient DEIS and its refusal to provide a revised or supplemental EIS for public review and comment thus violates NEPA's public participation requirements. *Burkey v. Ellis*, 483 F. Supp. 897, 915 (N.D. Ala. 1979); *Habitat Educ. Ctr. v. U.S. Forest Servs.*, 680 F. Supp. 2d 996, 1005 (E.D. Wis. 2010) (emphasis added), *aff'd sub nom. Habitat Educ. Ctr.*, *Inc. v. U.S. Forest Serv.*, 673 F.3d 518 (7th Cir. 2012).
- 8. FERC violates NEPA by failing to adequately analyze the climate change impacts of the end use of the gas transported by the projects. FERC fails to acknowledge that the greenhouse gas emissions from the combustion of the gas are indirect effects of the projects. 40 C.F.R. § 1508.8(b); 40 C.F.R. § 1502.16(b); Sierra Club v. FERC, 867 F.3d 1357, 1371–74 (D.C. Cir. 2017). Further, FERC's discussion of cumulative impacts fails to satisfy NEPA because it does not constitute the requisite "hard look" at the significance of the impacts of the downstream greenhouse gas emissions on the environment, nor does it discuss the comparative impacts of other reasonable alternatives or practicable mitigation measures that could reduce the downstream emissions or their impacts. 40 C.F.R. § 1508.7; Sierra Club, 867 F.3d at 1375. Finally, FERC's analysis of impacts of the projects' downstream greenhouse gas emissions fails to satisfy NEPA because FERC relies on vague, unsubstantiated claims that impacts would be offset by displacement of emissions from burning coal. Sierra Club, 867 F.3d at 1375.
- 9. FERC violates NEPA by failing to take a "hard look" at the direct, indirect, and cumulative impacts of the projects on waterbodies and wetlands. FERC fails to adequately analyze the direct and indirect impacts because it relies on unsupported assumptions about the effectiveness of the applicants' proposed

mitigation measures to conclude that impacts to aquatic resources would not be significant. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998); *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1381 (9th Cir. 1998). FERC's assessment of sedimentation impacts is further undermined by its failure to account for long-term increases in runoff and erosion as a result of land cover change within the pipeline right-of-way. *bertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). Finally, FERC's analysis of the cumulative impacts on aquatic resources of the projects in conjunction with other past, present, and reasonably foreseeable projects lacks sufficient rigor and detail to satisfy NEPA. 40 C.F.R. § 1508.7; *Natural Res. Def. Council v. Hodel*, 865 F.2d 288, 298-99 (D.C. Cir. 1988); *Res. Ltd., Inc. v. Robertson*, 35 F.3d 1300, 1306 (9th Cir. 1994).

- 10. FERC violates the NGA by granting certificates that are conditional on applicants obtaining future permits from state or local agencies. *See* 15 U.S.C. §717f(e). Legislative history and case law indicate that the NGA empowers FERC only to impose "conditions" on pipeline activity in the sense of "limitations," not to make certificates "conditional" in the sense of needing to satisfy prerequisites before pipeline activity can commence. *See N. Nat. Gas Co., Div. of InterNorth, Inc. v. F.E.R.C.*, 827 F.2d 779, 782 (D.C. Cir. 1987); *Panhandle E. Pipe Line Co. v. F.E.R.C.*, 613 F.2d 1120, 1131-32 (D.C. Cir. 1979); *Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 389, 392 (1959).
- 11. FERC violates the Fifth Amendment by granting certificates that are conditional on applicants obtaining future permits from state or local agencies. As soon as FERC issues a certificate, even a "conditional" one, the certificated pipeline entity can arguably start acquiring property by condemnation. 15 U.S.C. §717f(h). But if the entity still has additional permits to obtain, there is a chance it will fail to obtain those permits. If that happens, the entity will never be allowed to begin operations—and it will have taken private property for no reason (i.e., without a public necessity) in violation of the Fifth Amendment.
- 12. By allowing conditional-certificate holders to exercise eminent domain before they have obtained all necessary approvals, FERC interprets the NGA in a manner that violates the Constitution. FERC could obviate this problem by imposing conditions prohibiting applicants from exercising eminent domain until after they obtained all necessary approvals, *see Mid-Atlantic Express, LLC v. Baltimore Cty., Md.*, 410 Fed. App'x 653, 657 (4th Cir. 2011), and, under the doctrine of constitutional avoidance, FERC *should* do so. *See F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009).
- 13. FERC exceeds its statutory authority by granting blanket certificates. The grant of blanket authority covers projects that FERC presently knows, to a virtual certainty, will *not* be where MVP's application describes the pipeline as being. And, in connection with any of these activities, the certificate holder has effectively unrestricted authority to exercise eminent-domain power to force sales

of private property, including of properties outside the areas described in MVP's application. 15 U.S.C. §717f(h). This is incompatible with the statutory requirements imposed by Sections 7(c) and 7(e) of the NGA. FERC's authority does not extend to blanket approvals of unknown future extensions, expansions, rearrangements, or replacements, at least where such actions are not limited to the pipeline footprint actually proposed by an applicant and considered and approved by FERC. See Williston Basin Interstate Pipeline Co. v. Exclusive Gas Storage Leasehold & Easement, 524 F.3d 1090, 1099 (9th Cir. 2008).

- 14. FERC's practice of granting "blanket" certificates—at least those that authorize construction outside evaluated and approved project footprints—violates FERC's statutory mandate to consider the economic and environmental impacts of proposed pipeline projects. *See* 15 U.S.C. §717f(a).
- 15. Granting blanket certificates violates the NGA's notice-and-hearing requirements. 15 U.S.C. §717f(c)(1)(B). This is especially true for "future facility construction" contemplated but not specified by a certificate application.
- 16. Permitting private entities to exercise eminent domain for previously unconsidered project expansions or "rearrangements," as blanket certificates do, violates due-process requirements under the Fifth Amendment. See Boerschig v. Trans-Pecos Pipeline, L.L.C., __ F.3d __, 2017 WL 4367151, at *5 (5th Cir. Oct. 3, 2017); Columbia Gas Transmission, LLC v. 1.01 Acres, More or Less, 768 F.3d 300, 328 (3d Cir. 2014) (Jordan, J., dissenting).
- 17. Granting blanket certificates that allow applicants to condemn property not specifically described in their existing applications violates constitutional separation of powers principles and the private nondelegation doctrine. *Boerschig v. Trans-Pecos Pipeline, L.L.C.*, __ F.3d __, 2017 WL 4367151, at *5 (5th Cir. Oct. 3, 2017); *Williston Basin Interstate Pipeline Co. v. Exclusive Gas Storage Leasehold & Easement*, 524 F.3d 1090, 1099 (9th Cir. 2008).
- 18. FERC violates the just-compensation clause of the Fifth Amendment by granting certificates (and therefore condemnation power) to entities that have not shown they have sufficient financial resources to guarantee payment of just compensation. *Sweet v. Rechel*, 159 U.S. 380, 400-02 (1895); *Wash. Metro. Area Transit Auth. v. One Parcel of Land in Mortgomery County*, 706 F.2d 1312, 1320-21 (4th Cir. 1983).
- 19. FERC violates the NGA by failing to make findings about applicants' ability to pay just compensation. 15 U.S.C. §717f(e) provides that an applicant can obtain a certificate only "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." One of the "acts" contemplated by "this chapter" of the NGA is eminent domain, see 15 U.S.C. §717f(h), and the only way "properly to do" eminent domain is to pay just compensation. Thus, FERC's failure to make a

- finding that an applicant "is able and willing properly to" pay just compensation in a given certificate is fatal. *See Steere Tank Lines, Inc. v. I.C.C.*, 714 F.2d 1300, 1314 (5th Cir. 1983).
- 20. FERC violates the Constitution by failing to use its conditioning power to prevent applicants from "quick-taking" property, i.e., taking property before just compensation has been fully and finally determined in a judicial proceeding. *Cf. Mid-Atlantic Express, LLC v. Baltimore Cty., Md.*, 410 Fed. App'x 653, 657 (4th Cir. 2011); *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 516 (2009).
- 21. FERC violates constitutional separation-of-powers doctrine by failing to use its conditioning power to prevent applicants from "quick-taking" property, i.e., taking property before just compensation has been fully and finally determined in a judicial proceeding. When judges allow quick-taking, they are effectively granting eminent-domain power, which is something only the legislative branch has the constitutional authority to do. *See Berman v. Parker*, 348 U.S. 26, 32 (1954). FERC could prevent that state of affairs with its conditioning power.
- 22. By failing to use its conditioning power to preclude applicants from quick-taking property, FERC facilitates due-process problems. When a pipeline company avails itself of the quick-take procedure in district court, the landowner has no opportunity to conduct discovery, obtain its own appraisal of just compensation, or avail itself of any of the other procedural protections inherent in traditional judicial proceedings. This violates the due-process guarantee of the Fifth Amendment. FERC could prevent that state of affairs with its conditioning power.
- 23. By failing to preclude applicants from quick-taking property, FERC violates the just-compensation clause of the Fifth Amendment. With the quick-take procedure, a pipeline company is able to take property based on only its own, self-serving appraisal of what just compensation will ultimately be. See E. Tenn. Nat. Gas Co. v. Sage, 361 F.3d 808, 823-27 (4th Cir. 2004). This poses constitutionally unacceptable risk that the landowner will not ultimately receive just compensation if it proves to be more than the pipeline company estimated. FERC could obviate that risk by prohibiting applicants from using "quick take."
- 24. FERC's refusal to consider challenges to the constitutionality of the Natural Gas Act and the exercise of eminent domain thereunder violates landowners' Fifth Amendment due-process rights. Although the appellate court that reviews a FERC order can consider such challenges, the damage is already done by the time it gets to, as certificated pipeline companies have often long since taken property and commenced construction, irreversibly altering the landowners' property.
- 25. FERC denied landowners constitutional due process by refusing them access to key documents. In granting MVP's conditional certificate, FERC relied on MVP's precedent agreements and Exhibit G flow diagrams to find project need. Despite landowners' repeated demands for disclosure, FERC denied them access to this

evidence, thus preventing them from meaningfully responding to or rebutting FERC's conclusions in the Certificate Order. See Cleveland Board of Education v. Loudermill, 470 U.S. 532, 546 (1985); Minisink Residents for Envtl. Pres. v. FERC, 762 F.3d 97, 115 (D.C. Cir. 2014); Myersville Citizens for Rural Cmt. v. FERC, 783 F.3d 1301 1328 (D.C. Cir. 2014). FERC cannot cure its violation of the intervenors' due-process rights by disclosing the documents after this rehearing request is filed, as by that time, the deadline for rehearing will have passed and landowners' arguments based on the previously undisclosed information will be untimely under §717f(a) of the NGA.

STATEMENT OF ISSUES

I. FERC's Finding of Public Convenience and Necessity Violates the Natural Gas Act

FERC violated the Natural Gas Act by failing to establish the public market demand for the gas proposed to be carried by the MVP and relying exclusively on Mountain Valley's precedent agreements with its corporate affiliates to establish need for and public benefits of the Project. Under Section 7(c) of the NGA, a proponent of an interstate natural gas pipeline must obtain a "certificate of public convenience and necessity" from FERC. 22 "The statute provides that a certificate shall be issued to any qualified applicant upon a finding that . . . the proposed service and construction is or will be *required* by the present or future *public convenience and necessity*." Because such certificates confer federal eminent domain power upon the applicant, they may only be issued for projects that serve a "public use" in accord with the Fifth Amendment to the United States Constitution. 24 Those polestars of "public use" and "public convenience

²² 15 U.S.C. § 717f(c)(1)(A); *Minisink Residents for Envtl. Preservation and Safety v. FERC*, 762 F.3d 97, 101 (D.C. Cir. 2014).

²³ *Minisink*, 762 F.3d at 101 (quoting 15 U.S.C. § 717f(e)) (internal quotation marks and ellipses omitted) (emphasis added).

²⁴ See Kelo v. City of New London, 545 U.S. 469 (2005).

and necessity" must at all times guide FERC's consideration of applications to construct new pipelines, notwithstanding FERC's past precedent or policy statements.²⁵ Here, substantial evidence supplied to FERC demonstrates that the precedent agreements between Mountain Valley and its owners' corporate affiliates were not sufficient to establish that the Project is required by the present or future convenience and necessity. FERC's Certificate Order thus violates the Natural Gas Act.

FERC uses a policy statement that it issued in 1999 to guide its certificate decisions. ²⁶ On its face, FERC's 1999 Certificate Policy Statement represented a shift in FERC's evaluation of certificate applications away from narrow reliance on the existence of precedent agreements towards a more holistic analysis. Historically, FERC policy required applicants to show market support for a project through contractual commitments for at least 25 percent of the proposed pipeline's capacity. ²⁷ But in 1999, FERC revised its policy, acknowledging that the percentage-of-capacity test was inadequate because, in part, "[t]he amount of capacity under contract . . . is not a sufficient indicator by itself of the need for a project." ²⁸ The Commission further observed that "[u]sing contracts as the primary indicator of market support for the

²⁵ See Pac. Gas & Elec. Co. v. FPC, 506 F.2d 33, 38–39 (D.C. Cir. 1974) ("When the agency applies the policy in a particular situation, it must be prepared to support the policy just as if the policy statement had never been issued. An agency cannot escape its responsibility to present evidence and reasoning supporting its substantive rules by announcing binding precedent in the form of a general statement of policy." (internal citations omitted)).

²⁶ Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227, 61,747 (Sept. 15, 1999) ("Certificate Policy Statement"), *clarified*, 90 FERC ¶ 61,128 (Feb. 9, 2000), *further clarified*, 92 FERC ¶ 61,094, 61,373 (Jul. 28, 2000).

²⁷ Certificate Policy Statement at ¶ 61,743.

 $^{^{28}}$ *Id.* at ¶ 61,744.

proposed pipeline project also raises additional questions when the contracts are held by pipeline affiliates."²⁹ In other words, concerns that capacity contracts in and of themselves are insufficient to demonstrate need are exacerbated when those contracts exist between affiliated entities.

The 1999 policy statement sought to remedy problems caused by FERC's long-standing sole reliance on precedent agreements. To that end, it established a list of means by which the Commission could assess market benefit, one of the indicators of public benefit for a proposed project. Those means included, but were not limited to "precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market. In clarifying its policy, FERC explicitly stated that "as the natural gas marketplace has changed, the Commission's traditional factors for establishing the need for a project, such as contracts and precedent agreements, may no longer be a sufficient indicator that a project is in the public convenience and necessity." 32

Despite the fact that a central, stated purpose of the new policy was to reduce FERC sole reliance on precedent agreements, the agency stubbornly adheres to that outdated approach for the MVP. FERC here relied exclusively on the existence of precedent agreements with Mountain Valley's affiliated shippers to establish the market

²⁹ *Id*.

³⁰ See id. at ¶ 61,747.

³¹ *Id*.

³² Order Clarifying Statement of Policy, 90 FERC ¶ 61,128, 61,390 (Feb. 9, 2000).

need for the Project.³³ Furthermore, FERC refused to consider the affiliate nature of the precedent when relying on them to establish the need for the project.³⁴ FERC's contention that "the Commission does not look behind precedent agreements to question the individual shippers' business decisions to enter into contracts"³⁵ is flatly wrong. The section of the policy statement to which FERC cites for that proposition is not discussing *current* policy as of 2017.³⁶ To the contrary, it cites to the portion of the policy discussing *previous* FERC policy—the very policy that the 1999 policy statement was written to amend.³⁷

FERC thus violated the NGA when it ignored or improperly dismissed overwhelming record evidence showing that those contracts are not reliable indicators of a market need that could support a finding of public convenience and necessity.

Intervenors and others submitted substantial evidence into the docket demonstrating that the precedent agreements are not reliable indicators of market demand. For instance, the record shows that the demand for natural gas in the regions Mountain Valley purports to

³³ Certificate Order ¶41 ("Mountain Valley has entered into long-term, firm precedent agreements with five shippers for 2,000,000 Dth per day of firm transportation service — the project's full design capacity. . . . The shippers on the MVP and Equitrans Expansion Projects will supply gas to a variety of end users and *those shippers have determined* that there is a market for their gas. . . . We find that the contracts entered into by the shippers are the best evidence that additional gas will be needed in the markets that the MVP and Equitrans Expansion Projects are intended to serve." (emphasis added)); *see also id.* n.47 ("[W]e have relied on the existence of precedent agreements to find there is a need for the proposed projects.").

³⁴ *Id.* ¶45.

³⁵ *Id.* ¶45 n.55.

³⁶ See Certificate Policy Statement, 88 FERC at 61,744 (discussing the Commission's pre-1999 policy).

³⁷ See id.

serve is leveling off at the same time that overall pipeline capacity is rapidly expanding, leading to a likelihood of either significant unused capacity or continued use of natural gas despite the existence of cheaper, cleaner alternatives, at the expense of ratepayers. The record also demonstrates that the self-dealing nature of the affiliate agreements undermines their ability to evidence market demand, reflecting instead a desire to take advantage of the high rates of return that FERC affords pipeline operators. FERC erred by granting the Certificate on the basis of the existence of those affiliate precedent agreements and by failing to hold an evidentiary hearing to determine the proper weight to be afforded those agreements, as Intervenors requested.

A. FERC Lacks Sufficient Evidence of Market Demand To Support a Finding of Public Convenience and Necessity

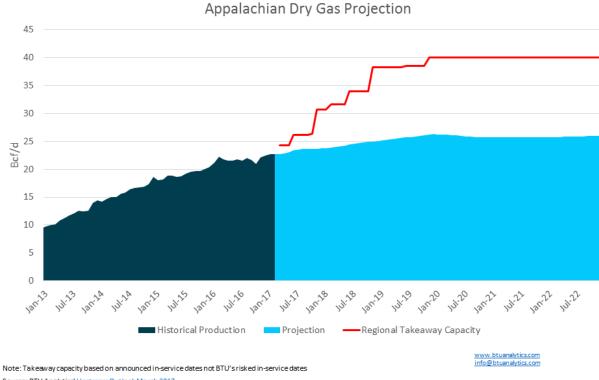
Industry analysts are convinced that we have a substantial surplus of pipeline capacity with existing pipelines, projects under construction, and applications in the regulatory queue. The Energy Information Administration forecasts that residential use of natural gas will decline by 0.6% per year between now and 2040. Commercial and industrial uses are expected to increase 0.4% and 0.6% per year, respectively. Industrial consumption will be especially sensitive to the price of natural gas. Use of gas for electricity generation is predicted to grow at a rate of 0.5% per year. Despite this small predicted increase in demand, and corresponding production levels in the Marcellus and Utica formation, pipeline takeaway capacity from the region is expanding rapidly:

³⁸ See, e.g., June 30, 2017 Comments of Thomas Hadwin on behalf of Friends of the Central Shenandoah (Accession No. 20170630-5306) ("Hadwin Comments") at 6–8.

³⁹ *Id.* at 8.



With Appalachia expected to add incremental gas thanks to Rover and other infrastructure projects, drilling activity will have to keep pace to meet forecasted volumes



Source: BTU Analytics' <u>UpstreamOutlook March 2017</u>

Industry experts project that given the current drilling activity in the Appalachian Basin the pipeline capacity in the region will be over 50 percent greater than the production capacity, at least through 2022.⁴⁰ The excess of pipeline capacity in the Appalachian Basin provides ready access to markets and will equalize prices between production

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⁴⁰ *Id.* at 5 (citing "Drilling Activity: How Much Does the Market Need?, Matthew Hoza, BTU Analytics, March 14, 2017); *see also id.* at 11 ("In the mid to long-term, incremental outbound capacity from Pennsylvania and Ohio is expected to exceed Marcellus production (i.e., pipeline constraints in Marcellus are a short-term phenomenon), assuming expected pipeline expansions go in service on time." (quoting Quadrennial Energy Review Analysis: Department of Energy, Office of Energy Policy and Systems Analysis. "Natural Gas Infrastructure Implications of Increased Demand from the Electric Sector." February 2015. Appendix B: Natural Gas)).

zones. A study by Synapse Energy Economics found that "given existing pipeline" capacity, existing natural gas storage, the expected reversal of the direction of flow on the existing Transco pipeline, and the expected upgrade of an existing Columbia pipeline, the supply capacity of the Virginia-Carolinas region's existing natural gas infrastructure is more than sufficient to meet expected future peak demand." Those findings are not controverted by the Wood Mackenzie demand study that Mountain Valley submitted, which was based on unreasonable assumptions about demand growth. We are thus now facing an excess of pipeline capacity, significantly greater than the maximum production of the region.

As Commissioner LeFleur recognized in her dissent to the Certificate Order,

Mountain Valley has only entered into agreements with end users for 13 percent of the

MVP's capacity. ⁴⁵ The specific need for the remaining capacity is unknown and based

purely on speculation that the project shippers will be able to take advantage of "price"

⁴¹ *Id.* at 6–7

⁴² Since the release of that study, FERC approved the Transco reversal as part of the Atlantic Sunrise Project, Docket No. CP15-138.

⁴³ Synapse Energy Economics, Inc., *Are the Atlantic Coast Pipeline and the Mountain Valley Pipeline Necessary? An examination of the need for additional pipeline capacity into Virginia and Carolinas*, 1-1 (2016) (hereinafter, "Synapse Study"), attached as Exhibit B to Intervenor's DEIS Comments.

⁴⁴ See Appalachian Mountain Advocates Answer at 16–19. FERC acknowledged Intervenors' critique of the Wood Mackenzie report in its Order but did not address the merits of that critique, choosing instead to rely solely on the existence of the precedent agreements to support its finding of public convenience and necessity. Certificate Order ¶39–41.

⁴⁵ Certificate Order, Dissent at 3–4. As explained in more detail below and in the record, even those end user agreements do not support a finding of market demand due to their affiliate nature.

differentials in the Northeast, Mid-Atlantic, and Southeast markets."⁴⁶ Though several major pipeline projects were first conceived when a significant price advantage existed in the Appalachian basin because of the lack of takeaway pipelines, favorable price differentials for the MVP's gas are unlikely to persist given the significant amount of new takeaway capacity from the basin, the depletion of the most productive and thus profitable gas plays, and the comparatively high cost of transportation on the MVP.⁴⁷

Given the risk imposed by the speculation that the project shippers will be able to find a market for the vast majority of the MVP's subscribed capacity, FERC needed to assess other indicators of market demand. It failed to do. As Commissioner LeFleur found, "evidence of the specific end use of the delivered gas within the context of regional needs is relevant evidence that should be considered as part of our overall needs determination." She rightly faulted the other members of the Commission for narrowly focusing on the existence of the precedent agreements, despite the Certificate Policy Statement's recognition of the importance of other indicators of public benefits of a project. FERC's failure to consider the substantial evidence showing a lack of any long-term market demand for the MVP's capacity renders its Certificate Order arbitrary and capricious and violates the Natural Gas Act's mandate that all approved projects be *required* by the public convenience and *necessity*.

⁴⁶ *Id.* at 4.

⁴⁷ Hadwin Comments at 5–6.

⁴⁸ Certificate Order, Dissent at 4.

⁴⁹ *Id*.

B. The Affiliate Nature of Mountain Valley's Precedent Agreements Undermines Their Ability to Support a Finding of Public Convenience and Necessity

FERC's refusal to give heightened scrutiny to the affiliate nature of the precedent agreements on which it relies undermines its conclusion that the Project serves the public convenience and necessity. FERC has previously acknowledged that "the potential for abuse of the pipeline-affiliate relationship exists whether the gas being transported is owned, brokered, or sold by a pipeline's affiliate. The Commission is concerned with a transaction conducted on a pipeline that benefits the pipeline or the corporate group of which it is a part. In such a transaction, there is an economic incentive for the pipeline to favor the transaction." FERC has further acknowledged that "a franchised public utility and an affiliate may be able to transact in ways that transfer benefits from the captive customers of the franchised public utility to the affiliate and its shareholders." Despite that, FERC here refused to look behind the affiliate precedent agreements.

FERC's conclusions regarding the significance of affiliate precedent agreements are not supported by substantial evidence in the record. In contrast to arms-length agreements negotiated between independent market actors, agreements between corporate affiliates do not reflect true demand for new capacity, particularly where one or more of those affiliates is a public utility that can pass costs on to captive ratepayers.

Where pipeline developers can push the risks of an investment onto captive customers,

⁵⁰ FERC Order 497, Inquiry Into Alleged Anticompetitive Practices Related to Marketing Affiliates of Interstate Pipelines, 55 FR 22,139, 22,141 (June 14, 1988).

Cross-Subsidization Restrictions on Affiliate Transactions, 122 FERC \P 61,155 at P 4 (2008).

⁵² Certificate Order ¶45.

traditional market checks (*i.e.*, an investor's decision to spend large amounts of capital) become distorted.⁵³

Both Roanoke Gas and Con Edison have signed 20-year firm transportation agreements for service on MVP. The costs of these firm transportation agreements are passed through to retail customers via an annual gas adjustment mechanism.⁵⁴ At the same time that these customers cover the cost of the pipeline investment, the affiliated pipeline developers (RGC Midstream LLC and Con Edison Gas Midstream LLC) enjoy rates of return in excess of risk—approximately in the 14% range.⁵⁵ The ultimate consequences of this financing structure are far reaching: "a pipeline capacity build-out induced by policies designed to spread the costs of new infrastructure on captive retail gas or electric ratepayers will almost surely become un-economic, undermine market drivers for more efficient solutions and impose unacceptable long term environmental and economic costs."⁵⁶ FERC's determination that any such risks would be obviated by state regulatory review.⁵⁷ is thus not supported by the record and its decision "not to

⁵³ See Appalachian Mountain Advocates DEIS Comments at 8–26.

See Appalachian Mountain Advocates Answer at 7–9; see also Wilson et al., Ratepayer Impacts of ConEd's 20-Year Shipping Agreement on the Mountain Valley Pipeline (September 2017), appended as **Attachment A**.

MVP Application at 37.

Appalachian Mountain Advocates Answer at 8 (quoting Testimony of N. Jonathan Peress, Director of Energy Market Policy, Environmental Defense Fund, Before the Senate Energy and Natural Resources Committee, "Oil and Gas Pipeline Infrastructure and the Economic, Safety, Environmental, Permitting, Construction, and Maintenance Considerations Associated with that Infrastructure" at 4 (June 14, 2016)); *see also* Appalachian Mountain Advocates DEIS Comments at 13–20.

⁵⁷ Certificate Order ¶53.

second guess the business decisions of end users"⁵⁸ renders its finding of public convenience and necessity arbitrary and capricious and in violation of the NGA.

C. FERC's Unreasonably High Return on Equity Undermines the Precedent Agreements' Ability to Support a Finding of Public Convenience and Necessity

FERC lacked substantial evidence to support the high return on equity (ROE) of 14 percent that its Certificate Order permits Mountain Valley to recover. Mountain Valley's ROE has a substantial impact on the recourse rates that FERC allows it to charge and, consequently, the affiliated owner/shippers' incentive to build a new pipeline instead of utilizing existing infrastructure. Given the potential for unreasonably high rates of return to skew incentives towards building new, unnecessary pipelines, FERC should have given closer scrutiny to Mountain Valley's requested ROE. Instead, FERC's dismissal of that danger in its Certificate Order relies entirely on its past precedent and conclusory statements, without meaningfully assessing the appropriate ROE for this particular project.

FERC's high ROE for greenfield pipelines incentivizes overbuilding by offering returns in excess of what can be achieved through other market investments. As Intervenors and others have explained, the ROE that FERC provides for new pipeline construction is much higher than the returns available in comparable industries or elsewhere in the marketplace. For instance, the average return on equity granted by state public utility commissions to investor-owned electric utilities was 9.92 percent, while the projected rate of return for investors in U.S. stocks over the next five years is only around

⁵⁸ *Id*

4 to 7 percent.⁵⁹ "The high returns on equity that pipelines are authorized to earn by FERC and the fact that, in practice, pipelines tend to earn even higher returns, mean that the pipeline business is an attractive place to invest capital. And because . . . there is no planning process for natural gas pipeline infrastructure, there is a high likelihood that more capital will be attracted into pipeline construction than is actually needed." FERC failed to account for those market-skewing incentives when it approved Mountain Valley's requested ROE of 14 percent.

Furthermore, FERC lacked substantial evidence for its approval of the high ROE. The North Carolina Utilities Commission (NCUC), in comments on the Atlantic Coast Pipeline proceeding in which FERC approved an identical 14 percent return on equity, explained that although "in the past the Commission has merely accepted recourse rates based on cases citing previous cases, application of that policy would appear to conflict with the unambiguous statutory requirement that a filing entity demonstrate that its filing,

⁵⁹ Appalachian Mountain Advocates DEIS Comments at 17–18.

⁶⁰ C. Kunkel & T. Sanzillo, Inst. for Energy Econ. & Fin. Analysis, Risks Associated with Natural Gas Pipeline Expansion in Appalachia (2016) at 9, Exhibit C to Appalachian Mountain Advocates DEIS Comments. The attractiveness of FERC's unusually high rates of return is demonstrated by the fact that, following multiple extensions of its binding open seasons in which Mountain Valley failed to attract shippers to fill the MVP's capacity, precedent agreements were only able to be reached with entities when they became co-owners of the Pipeline. Appalachian Mountain Advocates DEIS Comments at 8–11. See also Hadwin Comments at 17–18 ("The Commission awards 50% higher returns for natural gas pipelines compared to the returns deemed to be "fair and reasonable" by other regulators (including the Commission's own rulings) for other similar utility projects such as power plants and transmission lines. The 15.77 percent rate of return authorized for the MVP is exorbitantly high in an era of low single digit interest rates and distorts investment decisions. No justification for a rate this high has been provided in this or any of the Commission's other proceedings. The Commission must provide such a justification on the record, or better yet, lower the returns to be in line with other similar types of projects.")

Including the recourse rates, comports with the public convenience and necessity."⁶¹
Indeed, the past precedent that FERC relies on to justify the 14 percent ROE does not itself include substantial evidence on which it could base a finding that the 14 percent ROE is reasonable.⁶² Here, FERC's only justification for its excessive ROE is this same past precedent and unsupported statements regarding "the risk Mountain Valley faces as a new market entrant, constructing a new greenfield pipeline system."⁶³ FERC does not provide any market information to establish what Mountain Valley's true risk is nor does it assess how Mountain Valley's risk may be lower than that found in previous proceedings given the current low cost of capital.⁶⁴ FERC's failure is not remedied by its claim that Mountain Valley's rates may potentially be reassessed in the future⁶⁵ because once an unnecessary pipeline is approved and constructed based on the incentives provided by the unjustified ROE, the harm to Intervenors' interests will have largely already occurred. Regardless of any potential future adjustments, FERC's approval of the 14 percent ROE in the absence of substantial evidence provides a perverse incentive to

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⁶¹ NCUC, Comments in Support of Project and Protest of Proposed Recourse Rates of the North Carolina Utilities Commission, Docket No. CP15-554 (Accession No. 20151023-5301) at 5–6; *See also* Request for Rehearing of the North Carolina Utilities Commission and the New York State Public Service Commission, Docket No. CP15-138 (Accession No. 20170306-5163) at 16–21.

⁶² *Id.* at 5–6, n.16.

⁶³ Certificate Order ¶82.

⁶⁴ See Hadwin Comments at 17 ("The 15.77 percent rate of return authorized for the MVP is exorbitantly high in an era of low single digit interest rates and distorts investment decisions.")

⁶⁵ See Certificate Order ¶83.

build an unnecessary greenfield pipeline and undermines its finding that the project is required by the public convenience and necessity.⁶⁶

D. FERC Erred by Not Granting an Evidentiary Hearing to Resolve Disputed Issues of Material Fact Regarding the Need for the Project

Fundamentally, no matter how FERC attempts to justify its reliance on affiliate precedent agreements, nothing relieves the agency of its obligation to assess the weight of the evidence before it and to ensure that its findings are supported by substantial evidence. It is not the case that every precedent agreement submitted by every pipeline developer to FERC constitutes an equally valid representation of market demand. Even if some precedent statements may be sufficiently demonstrative of demand, others—namely, those between affiliates—may be at best weak indicators of demand and at worst, no indicator of demand at all. If FERC is going to rely on market need to demonstrate public benefit, it is incumbent on the agency to evaluate the validity of any purported indicator of market demand—especially affiliate precedent agreements. This includes considering other evidence in the record that calls into question the relationship between the precedent agreements and market need. The agency cannot turn a blind eye to the validity of the evidence presented simply because they come in the form of precedent agreements.

In their Motion to Intervene and Protest, certain Intervenors requested a "full evidentiary hearing to resolve contested issues of fact regarding the need for the MVP

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skeptical that a bare citation to precedent, derived from another case and another pipeline, qualifies as the requisite 'substantial evidence.' *See NCUC*, 42 F.3d at 664 (citing *Maine Pub. Serv. Co. v. FERC*, 964 F.2d 5, 9 (D.C. Cir. 1992), for the proposition that 'FERC's use of a particular percentage in a ratemaking calculation was not adequately justified by citation of a prior use of the same percentage without further reasoning or explanation')").

and balance of public benefits and adverse impacts of the MVP."⁶⁷ The Natural Gas Act states that FERC shall set "for hearing" each application for a certificate of public convenience and necessity. ⁶⁸ This requirement "permits all interested parties to be heard and therefore facilitates full presentation of the facts necessary" for FERC's evaluation of the application. ⁶⁹ FERC, however, often resolves disputed issues of fact based on the written record. ⁷⁰ The disputed issues of material fact in this proceeding, however, are not suitable for resolution on the basis of the written record.

As demonstrated above and in their filings in this proceeding, Intervenors have raised substantial disputed issues regarding the demand for natural gas in the regions to be served by MVP, the ability of Mountain Valley's precedent agreements with affiliated shippers to demonstrate need for the project sufficient to support a finding of public convenience and necessity, and the ability of other reasonable alternatives to satisfy any such market need. Those issues are central to FERC's certificate decision. The presentation of conflicting testimony and cross examination by adverse parties is essential for FERC to effectively evaluate the credibility and reliability of the parties' evidence and witnesses. FERC's failure to grant an evidentiary hearing prevented it from adequately assessing the parties' conflicting contentions and rendered its Certificate Order arbitrary and capricious.

⁶⁷ Motion to Intervene and Protest of Appalachian Mountain Advocates et al. at 1, 18, 53, 55, 58.

⁶⁸ 15 U.S.C. § 717f(c).

⁶⁹ Cascade Nat. Gas Corp. v. FERC, 955 F.2d 1412, 1425 (10th Cir. 1992) (quoting United Gas Pipeline Co. v. McCombs, 442 U.S. 529, 538 (1979)).

⁷⁰ *Id.* at 1426.

II. FERC's Environmental Impact Statement Violates the National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires that federal agencies prepare a "detailed" environmental impact statement (EIS) for every "major federal action significantly affecting the quality of the human environment." The EIS is an information dissemination tool, allowing federal agencies and the public to understand the environmental impacts before they are commenced and, critically, before resources are irretrievably committed.⁷²

The EIS must include the full consideration of environmental consequences that may result from a proposed project, the alternative means that may be used to minimize those impacts, and the cumulative impact of the project with other foreseeable actions. This process has been described by the courts as one designed to bring "clarity and transparency" to federal decisions affecting the environment. Only if an EIS is "based on adequately compiled information, analyzed in a reasonable fashion . . . can the public

⁷¹ 42 U.S.C. § 4332(C); see, e.g., Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 757 (2004).

⁷² See, e.g., Ariz. Cattle Growers' Ass'n v. Cartwright, 29 F. Supp. 2d 1100, 1116 (D. Ariz. 1998) (quoting Or. Envtl. Council v. Kunzman, 817 F.2d 484, 492 (9th Cir. 1987)) (The NEPA requirement to issue an EIS serves two purposes: to "ensure[] that federal agencies have sufficiently detailed information to decide whether to proceed with an action in light of potential environmental consequences" and "to provide[] the public with information on the environmental impact of a proposed action and encourage[] public participation in the development of that information.").

⁷³ 40 C.F.R. § 1500.1; *see also Sierra Nevada Forest Prot. Campaign v. Weingardt*, 376 F. Supp. 2d 984, 990 (E.D. Cal. 2005) (These "mandatory" regulations "require that an agency give environmental information to the public and then provide an opportunity for informed comments to the agency.").

⁷⁴ N.C. Wildlife Fed'n v. N.C. Dep't of Transp., 677 F.3d 596, 603 (4th Cir. 2012) (citing Dep't of Transp. V. Pub. Citizen, 541 U.S. 752, 756-57 (2004)).

be appropriately informed and have any confidence that the decisionmakers have in fact considered the relevant factors and not merely swept difficult problems under the rug."⁷⁵

An EIS must provide a full and fair discussion and analysis of significant environmental information and impacts to foster informed decision-making and public participation. This analysis is required to ensure important environmental consequences will not be "overlooked or underestimated." A cursory reference to the impacts of an activity does "not satisfy the necessary 'hard look' at the project's environmental impact that is required by NEPA." The adequacy and accuracy of this impacts analysis will guide the sufficiency of the following alternatives, mitigation, and cumulative impacts analyses.

The alternatives analysis is the heart of the EIS.⁸⁰ This section mandates that the agency "rigorously explore and objectively evaluate all reasonable alternatives" in order to ensure the issues and choices are sufficiently defined and the agency and public have a clear basis for decisionmaking.⁸¹ The scope of "reasonable alternatives" should be guided by the underlying purpose and needs of the project; however, it should not be constrained

⁷⁵ Silva v. Lynn, 482 F.2d 1282, 1285 (1st Cir. 1973).

⁷⁶ 40 C.F.R. § 1502.1.

⁷⁷ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

⁷⁸ Sierra Club v. Austin, 82 F. App'x 570, 572 (9th Cir. 2003).

⁷⁹ *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 200 (4th Cir. 2005).

⁸⁰ 40 C.F.R. § 1502.14.

⁸¹ *Id.* § 1502.14.

by "those alternative means by which a particular applicant can reach *his* goals." Agencies must conduct a searching, independent review of the underlying purpose and need of a proposed project when considering alternatives and must demonstrate a degree of skepticism in evaluating the applicant's project statements. ⁸³ With respect to the alternatives an agency must consider in determining the scope of an EIS, Council on Environmental Quality (CEQ) regulations require evaluation of a "no action" alternative representative of the status quo, other reasonable courses of action, and mitigation measures not in the proposed action. ⁸⁴

In order to ensure agencies take a "hard look" at the environmental impact of their actions, CEQ regulations require a discussion of mitigation measures throughout the EIS. A sufficient mitigation analysis requires a detailed discussion of mitigation measures and a full consideration of each measure's effectiveness in minimizing the

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⁸² Van Abbema v. Fornell, 807 F.2d 633, 638 (7th Cir. 1986) (emphasis added) (finding alternatives analysis inadequate where Corps failed to substantially consider use of existing facility because the applicant did not own or have access to the land); *see also Simmons v. U.S. Army Corps of Eng'rs*, 120 F.3d 664, 669 (7th Cir. 1997) (finding underlying purpose and need to be supplying water to locality, *not* building, or finding, a single reservoir to supply that water).

⁸³ Webster v. U.S. Dep't of Agric., 685 F.3d 411, 423 (4th Cir. 2012); Van Abbema, 807 F.2d at 643 (vacating grant of permit and finding that when information is specifically and credibly challenged as inaccurate, the Corps has an independent duty to investigate the specific factual challenges made by plaintiffs).

⁸⁴ 40 C.F.R. § 1508.25(b).

⁸⁵ See 40 C.F.R. §§ 1502.14(f) (agency must discuss mitigation measures in discussing alternatives to proposed action), 1502.16(h) (agency must discuss mitigation in assessing consequences of the proposed action), 1508.25(b) (agency must discuss mitigation in defining scope of the EIS), 1505.2(c) (agency must discuss mitigation in explaining its ultimate decision); *Robertson*, 490 U.S. at 351–52 (recognizing that an agency must discuss mitigation when defining the scope of the EIS, discussing possible alternatives and impacts, and in explaining its final decision).

specifically identified project impacts. Courts have found a discussion of general best management practices to be inadequate where those BMPs were not evaluated in light of the unique concerns raised by the proposed project. ⁸⁶ While courts do not require agencies to develop specific implementation and planning criteria for each measure, a mere listing of mitigation measures without supporting analytical data has consistently been found to be inadequate in meeting an agency's NEPA duties. ⁸⁷

NEPA regulations also require agencies to discuss the cumulative impacts of proposed management activities. Cumulative impacts analysis must consider together the impacts of the project and all other past, present, and reasonably foreseeable actions planned by other federal and state agencies and activities on private land. 88 "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Future impacts must be considered in the context of the current condition of the affected environment. Cumulative impacts analysis cannot be deferred to future studies at the project level. 90 NEPA "cannot be fully served if

⁸⁶ Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1214 (9th Cir. 1998) (mitigation measures inadequate where BMPs designed to reduce erosion from logging on *unburned* areas but project proposed logging in severely burned areas).

⁸⁷ Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1381 (9th Cir. 1998) (Service's EIS inadequate where mitigation analysis lacked details of the proposed mitigation measures and consideration of each measure's level of effectiveness); S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of Interior, 588 F.3d 718, 727 (9th Cir. 2009) (finding EIS inadequate where BLM, due to uncertainty, failed to consider whether any of the listed mitigation measures would be effective in avoiding impact).

⁸⁸ 40 C.F.R. § 1508.7.

⁸⁹ *Id*.

⁹⁰ Kern v. Or. Natural Res. Def. Council, 284 F.3d 1062, 1075 (9th Cir. 2002) (citations omitted).

consideration of the cumulative effects of successive, interdependent steps is delayed until after the first step has already been taken." The analysis of cumulative impacts should "equip a decisionmaker to make an informed decision about alternative courses of action" and should be "useful to a decisionmaker in deciding whether, or how, to alter the program to lessen cumulative impacts." Agencies must analyze the "synergistic effects from implementation of the Plan as a whole."

The foregoing NEPA analysis is required to ensure agency decisionmakers consider accurate, high quality information about environmental impacts and to make this information available to the public and encourage involvement in decisionmaking. ⁹⁴ "[P]ublic scrutiny" is "essential to implementing NEPA," and a detailed EIS "serves as a springboard for public comment" ⁹⁵ An agency action is arbitrary and capricious where the agency has "entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the

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⁹¹ Thomas v. Peterson, 753 F.2d 754, 760 (9th Cir. 1985); Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372 (9th Cir. 1998).

⁹² Natural Res. Def. Council v. Hodel, 865 F.2d 288, 298-99 (D.C. Cir. 1988).

⁹³ Res. Ltd., Inc. v. Robertson, 35 F.3d 1300, 1306 (9th Cir. 1994).

⁹⁴ See 40 C.F.R. §§ 1500.1(b), 1500.2(b),(d); see also Nat'l Audubon Soc'y, 422 F.3d at 194 (agencies are required to disclose and address different scientific views, not sweep them under the rug); Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443, 446-48 (4th Cir. 1996); Kettle Range Conservation Grp. v. U.S. Forest Serv., 148 F.Supp.2d 1107, 1127 (E.D. Wash. 2001) (agencies' plans to complete surveys "sometime in the future" are insufficient to demonstrate that the agency has taken a "hard look" at impacts).

⁹⁵ 40 C.F.R. § 1500.1(b); *N. Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1540 (11th Cir. 1990).

product of agency expertise."⁹⁶ An uninformed, arbitrary and capricious decision to move forward with a proposed project is not consistent with the strict procedural duties mandated by NEPA. The Certificate Order and the EIS on which it rests do not meet these requirements, as discussed further below.

A. FERC's Failure to Meaningfully Evaluate the Need for the Project in the EIS Renders Its Alternatives Analysis Deficient

The CEQ regulations for implementing NEPA require that an EIS "specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The CEQ regulations also require the Commission to consider and evaluate the "no action" alternative. The alternatives analysis "is the heart of the environmental impact statement."

A properly drafted purpose and need statement is critical to "inform the agency's review of alternatives to the proposed action and guide its final selection." A purpose and need statement "will fail if it unreasonably narrows the agency's consideration of alternatives so that the out-come is preordained." Where, as here, a federal agency is

⁹⁶ Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)).

⁹⁷ 40 C.F.R. § 1502.13; *see also* FERC NEPA regulations at 18 C.F.R. Part 380.

⁹⁸ 40 C.F.R. § 1502.14(d).

⁹⁹ 40 C.F.R. § 1502.14.

¹⁰⁰ Protect Our Cmtys. Found. v. Jewell, 825 F.3d 571, 579 (9th Cir. 2016).

¹⁰¹ Id. (quoting Alaska Survival v. Surface Transp. Bd., 705 F.3d 1073, 1084 (9th Cir. 2013)); see also Citizens Against Burlington v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

reviewing an applicant-sponsored project, it "cannot restrict its analysis to those 'alternative means by which a particular applicant can reach his goals." An agency must "exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project." ¹⁰³

Despite the clear requirement to "specify the purpose and need" for the MVP Project, the FEIS "does not address in detail the need or public benefits" of the MVP and EEP. 104 FERC stated in the FEIS that it would "more fully explain its opinion on project benefits and need in its Orders for the MVP and the EEP." Without disclosing and discussing the need for the MVP Project, FERC fails to provide transparency in the decisionmaking process and thereby frustrates the public's opportunity to provide meaningful comments as part of the NEPA process. The public's right to weigh in on the assessment of need is particularly critical for a project such as MVP, which would impact both state and federal public lands and require the use of eminent domain for a private project over the objections of numerous landowners along the proposed route. In such instances, there must be even greater scrutiny of project need in the EIS.

The U.S. Environmental Protection Agency (EPA), in its comments on the draft EIS (DEIS) for the Project, explained why FERC's approach of putting off the need

Simmons v. U.S. Army Corps of Eng's, 120 F.3d 664, 669 (7th Cir. 1997) (quoting Van Abbema v. Fornell, 807 F.2d 633, 638 (7th Cir. 1986)); see also Nat'l Parks & Cons. Ass'n v. Bureau of Land Mgmt., 606 F.3d 1058, 1072 (9th Cir. 2009).

Simmons, 120 F.3d at 669 (7th Cir. 1997) (quoting Citizens Against Burlington, 938 F.2d at 209 (D.C. Cir. 1991) (Buckley, J., dissenting)).

FEIS at 1-9.

 $^{^{105}}$ Id

determination until *after* the NEPA process is improper. EPA stated that because the "purpose of NEPA is to inform decisionmaking, using relevant information and public engagement," the agency was "concerned that deferring evaluation of need may compromise the NEPA process." EPA recommended that "the EIS include a more thorough discussion of the purpose and need or public benefits of the project" and explained that "[i]ncluding this information in the EIS goes toward transparency and disclosure to the public, to afford the public the opportunity to provide comment; and to assess and compare alternatives' ability to meet project need." ¹⁰⁶

EPA explained that establishing need in the EIS is necessary for the NEPA alternatives analysis:

Establishing a project need is critical to help determine alternatives that should be studied and the degree to which the proposed action or other alternatives may meet the stated purpose and need. EPA recommends FERC assess and compare alternatives' ability to meet project need to address issues on the possibility of overbuilding, unnecessary disruption of the environment, and unneeded exercise of eminent domain. Although the EIS contains limited information that peripherally speaks to need or public benefits, such as expanding capacity, increasing system reliability, efficiency, and operational flexibility, EPA recommends expanding this discussion to explain, for example, how much reliability or efficiency is being sought. FERC could then provide information on how proposed alternatives meet these needs by examining how much reliability or efficiency is provided. This gives a much stronger basis on which to evaluate alternatives.

Establishing a project need is critical to help determine alternatives that should be studied and the degree to which the proposed action or other

¹⁰⁶ EPA, Comments on the Mountain Valley Project and Equitrans Expansion Project Draft Environmental Impacts Statement (Dec. 20, 2016) ("EPA MVP DEIS Comments") at 2; see also id., Enclosure-Technical Comments at 2 ("We recommend that FERC include available information in the EIS on the purpose and need or public benefits of the project, such as meeting unserved demand, eliminating bottlenecks, access to new supplies, lower costs to consumers, providing new interconnects that improve the interstate grid, providing competitive alternatives, increasing electric reliability, or advancing clean air objectives.").

alternatives may meet the stated purpose and need. EPA is concerned that the purpose to provide transport ability of 2.4 Bcf/d natural gas may be narrow and limit the range of available alternatives. Specific dekatherm capacities are provided, although it is unclear how these units were determined or generated. In the absence of this type of supporting documentation (markets, rates, gas supply, existing facilities and service, long-term feasibility information, unserved demand, bottlenecks, problems with interstate grid, high consumer costs, etc), it is unclear if the stated purpose and need is too narrow thereby limiting the available range of alternatives. If the additional information supports a broader purpose and need statement, a broader range of alternatives could be considered in the EIS. For example, alternatives which include a lesser diameter pipe, a different capacity, different corridor, share use of existing infrastructure or right-of-way (ROW), etc. 107, 108

FERC's failure to assess the public's need for the Project in the EIS prevented it from giving adequate consideration to the "no action" alternative. FERC briefly discusses the "need" for the MVP project in Section 1.2.3.1, but only in terms of the goals of the project proponent. FERC mentions that Mountain Valley has entered into five precedent agreements and that the project is fully subscribed. However, the EIS

¹⁰⁷ EPA MVP DEIS Comments, Enclosure-Technical Comments at 2 (emphasis added).

FERC has made similar statements in other recent DEIS documents for major greenfield pipelines. *See, e.g.*, Draft Environmental Impact Statement for the Atlantic Sunrise Project (Docket No. CP15-138-000) at 1-2 ("While this EIS briefly describes Transco's stated purpose, it will not determine whether the need for the Project exists, because this will later be determined by the Commission."). EPA there similarly expressed its concern that "project need will not be vetted in the [Atlantic Sunrise] EIS, but outside of the NEPA process by FERC." *See* Exhibit 1 of Intervenor's Oct. 19, 2016 Letter submitted in the MVP/EEP dockets (Accession No. 20161019-5061). Without assessing the need for the project *in the FEIS*, FERC undermines the development of alternatives to the proposed project, which is a "critical component of the NEPA process." EPA noted that without this information in the DEIS, FERC failed to "provide transparency in the decision-making process," thereby frustrating the public's "opportunity to provide comment" on the DEIS. *Id*.

¹⁰⁹ See FEIS at 3-4 (devoting five sentences to discussion of the "no action" alternative).

¹¹⁰ FEIS at 1-10. These agreements constitute the basis for FERC's ultimate need determination, *i.e.*, the finding of public convenience and necessity in the Certificate Order. Certificate Order, ¶¶33–64.

omits several critical facts regarding the timing, terms, and circumstances surrounding the precedent agreements underpinning the MVP project. These concerns—further detailed herein—call into question whether a bona fide market need exists for the project. 111 In addition to the self-dealing concerns raised by the affiliate precedent agreements, others have pointed out that supposed market need for the MVP is on shaky ground. For example, the West Virginia Supreme Court in a November 2016 decision refuted MVP's claim that the project will "provide opportunities to expand the use of natural gas and economic growth along the Project route in West Virginia..." The West Virginia Supreme Court's findings demonstrate that any benefits to West Virginia customers are illusory, finding that "there currently is no definitive evidence that any West Virginia consumers or non-MVP affiliated natural gas producers would benefit from MVP's pipeline" and "MVP has been unable to identify even a single West Virginia consumer, or a West Virginia natural gas producer who is not affiliated with MVP, who will derive a benefit from MVP's pipeline."113 The FEIS should have considered these issues and more fully addressed the "no action" alternative.

By not assessing the need for the MVP Project in the NEPA process beyond citing the existence of the subscription contracts, FERC undermined not only its consideration of the "no action" alternative, but also the development and assessment of other potential reasonable alternatives. Without meaningfully evaluating factors that indicate the public's

¹¹¹ In its final Certificate Order, FERC did not make the findings of actual market need, instead relying on the existence of the precedent agreements, as discussed in more detail herein.

¹¹² MVP Application at 12.

¹¹³ *Mountain Valley Pipeline, LLC v. McCurdy*, Case No. 15-0919 (W. Va. 2016), *available at* http://www.courtswv.gov/supreme-court/docs/fall2016/15-0919.pdf.

need for the project, such as "markets, rates, gas supply, existing facilities and service, long-term feasibility information, unserved demand, bottlenecks, problems with interstate grid, high consumer costs, etc.,"114 FERC could not determine if a differently configured project could meet any actual public need for the gas to be carried on the MVP. Had FERC determined the need for the projects in the EIS, it would have been able to evaluate whether other alternatives, such as "a lesser diameter pipe, a different capacity, different corridor, shared use of existing infrastructure or right-of-way (ROW), etc.,"115 would have been able to satisfy that need. Further, FERC could have assessed whether non-pipeline alternatives, such as energy efficiency or renewable energy sources—which are readily available, dropping in cost, and easily integrated into the grid—could meet any demonstrated demand for additional power generation. 116

¹¹⁴ EPA MVP DEIS Comments, Enclosure-Technical Comments at 2.

¹¹⁵ Id.: see also Appalachian Mountain Advocates Motion to Intervene and Protest at 42-

¹¹⁶ See Appalachian Mountain Advocates DEIS Comments at 28; Appalachian Mountain Advocates Motion to Intervene and Protest at 43-50. FERC 's refusal to consider such alternatives as "outside the scope" of its authority, Certificate Order ¶ 43, does not comport with NEPA. CEQ's regulations require agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives," including "reasonable alternatives not within the jurisdiction of the lead agency." 40 C.F.R. § 1502.14(a), (c) (emphasis added). It is well-established that Section 1502.14(c) is "intended to prompt agencies to consider otherwise appropriate alternatives that the agency lacks jurisdiction to authorize." WildEarth Guardians v. Nat'l Park Serv., 703 F.3d 1178, 1184 (10th Cir. 2013). "An agency's refusal to consider an alternative that would require some action beyond that of its congressional authorization is counter to NEPA's intent to provide options for both agencies and Congress." Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 235 F.Supp.2d 1143, 1154 (W.D. Wash., 2002); see also Milwaukee Inner-City Congregations Allied for Hope v. Gottlieb, 944 F.Supp.2d 656, 670 (W.D. Wis., 2013) ("agencies cannot simply assume that incorporating some form of [non-jurisdictional action] into the project to avoid or minimize adverse social and economic harm is out of the question").

In particular, FERC should have given greater attention to the alternative whereby any need for the MVP could have been satisfied through construction in the corridor of the concurrently-approved Atlantic Coast Pipeline ("ACP") Project. FERC only gave cursory attention to such alternatives in the FEIS and dismissed them based on its conclusions that the "co-location" options did not provide feasible means by which both applicants could transport their entire desired volumes of gas. Had FERC assessed the true market need for the projects, it likely would have found that any actual public demand for the projects could have been met through construction along a single pipeline corridor, thereby drastically reducing the combined impacts of both projects.

FERC's failure to more fully assess the feasibility of a "single corridor" alternative for the MVP and ACP led Commissioner LeFleur to dissent from the Commission's Certificate Order. As Commissioner LeFluer noted, "ACP and MVP are proposed to be built in the same region with certain segments located in close geographic proximity. Both projects appear to be receiving gas from the same location, and both deliver gas that can reach some common destination markets." After describing the "single corridor" alternatives, 121 she concluded that "these alternatives demonstrate that the regional needs that these pipelines address may be met through alternative approaches

¹¹⁷ FERC Docket No. CP15-554 and CP15-555.

¹¹⁸ FEIS at 3-14–3-16.

¹¹⁹ Certificate Order, Dissent at 2–3.

¹²⁰ *Id*.

¹²¹ The EIS for the ACP evaluated an alternative where the capacity for both pipelines would be met in a single corridor primarily along the ACP alignment. *Id.* at 3.

that have significantly fewer environmental impacts."¹²² Had FERC meaningfully considered the true public need for the MVP in the EIS, it could have found that the single corridor alternative satisfied that need and avoided substantial adverse impacts to the environment and human communities. ¹²³ Its failure to do so renders the EIS deficient.

B. FERC's Draft EIS Fails to Provide Adequate Information to Permit Meaningful Public Involvement

FERC's DEIS for the MVP was missing so much relevant environmental information that it precluded meaningful public participation in the NEPA process. As described in detail below, FERC published the DEIS without including critical information about landslide hazards, water resources impacts, karst impacts, harm to cultural resources, harm to listed species, and other critical topics of interest to the public. A substantial amount of information was added into the record, some of which was addressed in the FEIS, ¹²⁴ after the conclusion of the public comment period, depriving the public of any input. This failure appropriately drew sharp criticism from EPA and multiple agencies within the Department of the Interior, all of which observed that an FEIS may not be used – as FERC has done – to complete analysis that should have been presented in the DEIS. FERC's failure to provide an opportunity for meaningful public involvement in the NEPA process renders its EIS, and the Certificate Order that relies on that EIS, deficient.

 $[\]overline{}^{122}$ *Id*.

¹²³ See Appalachian Mountain Advocates Motion to Intervene and Protest at 52–53.

¹²⁴ As Intervenors explain in this request and in earlier comments in the docket, FERC's FEIS did not by any means address all of the deficiencies in the DEIS, either in terms of the information presented or the analysis thereof.

1. Complete information in a draft EIS is essential to fulfilling the purpose of NEPA

The opportunity for public input concerning environmental impacts is a core goal and value of NEPA. Thus, FERC's failure to include adequate information to enable full public comment on the Project's impacts undermines one of the statute's primary goals. NEPA's EIS requirement, and in particular its draft EIS requirement, is the means by which the public input goal is fulfilled. The EIS process "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." Information must be provided in a timely manner to ensure that the public can meaningfully participate in the decisionmaking process. Thus, as the CEQ's regulations and case law make clear, a draft EIS that fails to provide the public a meaningful opportunity to review and understand the agency's proposal, methodology, and analysis of potential environmental impacts violates NEPA.

These failures are in addition to the failure to establish need for the project in the EIS, but rather to only make the need determination in the Certificate Order. The procedures of the Natural Gas Act cannot replace the full and fair public participation in the decisionmaking process that NEPA mandates and FERC's lack of a well-considered need statement in the EIS hindered the public's ability to meaningfully comment on the need for the project as part of the NEPA process.

¹²⁶ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

¹²⁷ League of Wilderness Defenders/Blue Mountain Biodiversity Project v. Connaughton, 752 F.3d 755, 761 (9th Cir. 2014) ("Informed public participation in reviewing environmental impacts is essential to the proper functioning of NEPA.").

¹²⁸ See e.g., California ex rel. Lockyer v. U.S. Forest Service, 465 F. Supp. 2d 942, 948-50 (N.D. Cal. 2006); see also Idaho ex rel. Kempthorne v. U.S. Forest Service, 142 F. Supp. 2d 1248, 1261 (D. Idaho 2001) ("NEPA requires full disclosure of all relevant information before there is meaningful public debate and oversight.").

Accordingly, an agency performing NEPA review cannot fulfill the statute's requirements by belatedly including essential information in an FEIS that was omitted from the DEIS. When an agency publishes a draft EIS, it "must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act."129 "If a draft statement is so inadequate as to preclude meaningful analysis, the agency *shall* prepare and circulate a revised draft of the appropriate portion." 130 "The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action."¹³¹ Courts have explained that, when performing an EIS, an agency "should take to the public the full facts in its draft EIS and not change them after the comment period unless, of course, the project itself is changed."¹³² Data and analysis supporting the agency's decision must be included in the draft EIS, as opposed to supplied in the final EIS following public comments because "the purpose of the final EIS is to respond to comments rather than to complete the environmental analysis (which should have been completed before the draft was released)."133

¹²⁹ 40 C.F.R. § 1502.9(a).

¹³⁰ *Id.* (emphasis added).

¹³¹ *Id*.

¹³² Burkey v. Ellis, 483 F. Supp. 897, 915 (N.D. Ala. 1979) (emphasis added).

¹³³ Habitat Educ. Ctr. v. U.S. Forest Servs., 680 F. Supp. 2d 996, 1005 (E.D. Wis. 2010) (emphasis added), aff'd sub nom. Habitat Educ. Ctr., Inc. v. U.S. Forest Serv., 673 F.3d 518 (7th Cir. 2012).

While it is true, as FERC notes in its Certificate Order, that one "purpose of a draft EIS is to elicit suggestions for change," 134 very little of the information missing from the DEIS but added to the FEIS pertains to suggested Project changes. FERC simply failed to include substantial information pertinent to the project as proposed in the DEIS and, to a large degree, as approved by FERC. This information *could have been* included in the DEIS for the Project as proposed had FERC and the applicant simply taken the necessary time to gather and analyze it. Instead, FERC chose to rush through the NEPA process in an effort to meet the applicant's self-imposed deadlines for service, resulting in a DEIS that did not contain adequate information to permit the public to reasonably assess and comment on the impacts of the project.

2. The DEIS omitted extensive significant information

The DEIS lacked essential information regarding a wide variety of environmental impacts of concern to the public. The DEIS acknowledged the absence of information, and recommended that applicants submit it either by the end of the DEIS comment period or before construction begins. This purported solution – which the applicant adopted, submitting thousands of pages of additional information – did not and could not fix the fundamental problem that the public had no opportunity to comment on anything that was not in the DEIS.

¹³⁴ Certificate Order ¶¶132–43 (*citing City of Grapevine v. DOT*, 17 F.3d 1502, 1507 (D.C. Cir. 1994)).

 $^{^{135}}$ See DEIS at 5-20 – 5-24; See also Certificate Order Appendix C ¶¶12–38 (requiring additional information to be submitted prior to commencing construction).

The applicant did not provide information on some of the most crucial and concerning impacts -e.g., landslide risk, wetland fill, spill risk, noise pollution, sensitive species, and harm to cultural resources – until after issuance of the FEIS:

- A plan for the avoidance of active mines, or copies of agreements with coal companies regarding compensation for loss of coal resources;
- A revised Landslide Mitigation Plan that includes:
 - An analysis of the potential landslide hazards at the GCSZ, Peters Mountain, Sinking Creek Mountain, and Brush Mountain based on the results of investigations conducted by Schultz and Southworth (1989), and further identified and discussed in USGS Bulletin 1839-E;
 - An identification of landslide hazards where the pipeline routes through areas comprised of both steep slopes and red shale bedrock of the Conemaugh, Monongahela, Dunkard, and Mauch Chunk Groups;
 - An analysis of a potential debris flow zone within the Jefferson National Forest from MP 195.5 along the Kimballton Branch to the junction of Stoney Creek; and
 - Minor route adjustments as a method to avoid areas of potential slides and debris flows;
- Results of MVP's fracture trace/lineament analysis;
- Site-specific plans, including details regarding materials to be used and installation methods, for the use of permanent culverts and permanent fill in waterbodies and wetlands for access roads, including a detailed analysis of all reasonable alternatives to the use of culverts and permanent fill;
- HDD feasibility and geotechnical studies for the alternative alignments identified for the Pigg River crossing at MP 286.8 and the Blackwater River crossing at MP 262.8;
- Contingency plans outlining measures that would be taken to minimize and
 mitigate potential impacts on public surface water supplies with intakes within
 3 miles downstream of the crossing of the MVP pipeline, and ZCC within
 0.25-mile of the pipeline;
- Results of all remaining environmental surveys (water resources, wetlands, cultural resources, and threatened and endangered species) for all cathodic protection groundbeds;
- Evidence of landowner concurrence with the site-specific residential construction plans for all locations where construction work areas would be within 10 feet of a residence, as indicated in bold in table 4.8.2-1;

- Documentation of further coordination with TNC and VDCR of regarding the Mill Creek Springs Natural Area Preserve, including any impact avoidance, minimization, or mitigation measures developed;
- HDD noise mitigation plan to reduce the projected noise level increase attributable to the proposed drilling operations at the NSAs;
- The location of all water wells, springs, swallets, and other drinking water sources within 150 feet (500 feet in karst terrain) of the pipeline and aboveground facilities;
- All outstanding biological surveys for federally listed species (*i.e.*, Ellett Valley millipede, bog turtle, and running buffalo clover); and
- Remaining cultural resources survey reports, site evaluation reports, avoidance plans, or treatment plans. 136

The applicant produced extensive additional information at the close of the DEIS comment period, such that the public was precluded as a practical matter from reviewing and commenting on it:

- Documentation of continued coordination with the Forest Service and other Appalachian Trail stakeholders regarding the newly adopted pipeline crossing, including visual simulations modeling both "leaf-on" and "leaf-off" scenarios at the crossing;
- Results of on-site surveys for the Mount Tabor Route Alternative to assess constructability and identify karst features that shall be adopted if the alternative is adopted into the proposed pipeline route;
- Additional information on the proposed route variations involving the tracts identified in table 3.5.3-1 of the DEIS;
- A complete list of any locations not already found acceptable by FERC staff where the pipeline route or access road parallels a waterbody within 15 feet or travels linearly within the waterbody channel;
- Plans and maps that illustrate how permanent impacts on wetlands would be avoided at the WB Interconnect;

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 $^{^{136}}$ DEIS at 5-20 – 5-24.

- Site-specific justifications for each of the wetlands for which MVP requests a right-of-way greater than 75 feet;
- A plan that describes how long-term and permanent impacts on migratory bird habitat would be minimized, with an emphasis on high quality and/or larger intact core interior forest areas;
- The current status of easement negotiations for the Redhook Compressor Station and alternative sites and analysis if those negotiations have been unsuccessful; and
- Information regarding the potential construction feasibility of the Cline Route Alternative, including more detailed analysis of potential issues associated with either an open-cut or road crossing at Raccoon Creek and Raccoon Run Road.¹³⁷

In addition to the deficiencies listed above, FERC's DEIS (as well its FEIS) failed to include sufficient information regarding impacts to wildlife protected by the Endangered Species Act (ESA), ¹³⁸ such as the Roanoke logperch and Indiana and northern long-eared bats. Critically, FERC issued the DEIS, and later the FEIS, prior to substantially completing the ESA Section 7 consultation process with U.S. Fish and Wildlife Service (FWS). It is only through that process that the full impacts to listed species are determined. Disclosure of the impacts revealed through the consultation process in the DEIS was vital because the public does not have an opportunity for comment on the development of a Biological Assessment or Biological Opinion. ¹³⁹

¹³⁷ DEIS at 5-20 – 5-24.

¹³⁸ 16 U.S.C. 1531 et seq.

¹³⁹ While FERC contends that the Threatened and Endangered Species section of the DEIS "essentially summarizes our BA," this is insufficient to overcome the failure to provide sufficient information on impacts to listed species in the DEIS. Further, the information provided in the DEIS did not even come close to fulfilling the requirements of a BA, which must not only identify the species that may be impacted, but for each species must describe the current habitat conditions and status trends, and how the action

Inclusion of this information in the DEIS is particularly important to determining and inviting input on cumulative impacts to listed species, because the analyses resulting from the consultation process will only assess the direct impacts of the project. FERC's failure to gather and reveal this information in the DEIS thus violated both the spirit and the letter of 40 C.F.R. § 1502.25(a), which requires that, "[t]o the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analysis and related surveys and studies required by . . . the Endangered Species Act."

The information described above clearly belonged in the DEIS, and could have been included had FERC taken the time to do so. The DEIS lacked not only the information itself, but also FERC's analysis of that information that would permit the public to level a meaningful critique of the agency's position. The agency thus did not "make every effort to disclose and discuss at appropriate points *in the draft statement* all major points of view on the environmental impacts of the alternatives including the proposed action." By publishing the DEIS without this information, FERC failed to "guarantee[] that the relevant information will be made available to the larger audience

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may affect those species. The FWS Guidance for the development of BAs further states that this must be supported with documentation that indicates "what, when and how the protected resource will be exposed to and how such individuals or habitats are likely to respond to this exposure." None of this information has been provided in the DEIS. Moreover, if FERC is able to "summarize" its BA, it is entirely unclear why the actual BA was not provided along with the DEIS, as required by 40 C.F.R. § 1502.25(a), so that the public could provide comment.

¹⁴⁰ 40 C.F.R. § 1502.9(a) (emphasis added).

that may also play a role in both the decisionmaking process and the implementation of that decision."¹⁴¹

As explained in the previous section, the fact that some (but by no means all) of the missing information was included in the FEIS does not remedy the infirmity of FERC's NEPA process. In the absence of a complete DEIS in the first instance, only the issuance of a revised DEIS that thoroughly analyzes the missing information could have satisfied NEPA's public comment requirements, which "[encourage] public participation in the development of information *during the decision making process*." Simply adding this missing information to the FEIS is insufficient, as it does not allow the same degree of meaningful public participation. FERC thus failed to fulfill its NEPA duty by issuing a draft EIS that was incomplete; and by not issuing a revised, complete DEIS in response to the numerous comments highlighting the DEIS's informational deficiencies.

3. Sister federal agencies strongly criticized FERC's omissions from the DEIS

FERC failure to include adequate information provoked stern criticism from EPA and the multiple agencies within the Department of the Interior (DOI). Those agencies made clear that FERC's deficient record severely undercut the informational and public

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

¹⁴² Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci, 857 F.2d 505, 508 (9th Cir. 1988) (emphasis added).

¹⁴³ *Id.* (*citing California v. Block*, 690 F.2d 753, 770-71 (9th Cir. 1982)) ("It is only at the stage when the draft EIS is circulated that the public and outside agencies have the opportunity to evaluate and comment on the proposal…No such right exists upon issuance of a final EIS."); 40 C.F.R. § 1500.1(b).

participation purposes of NEPA. The problem appears to be endemic at FERC, as EPA has repeatedly criticized FERC's deficient NEPA records in the past.

EPA stated as follows regarding the informational deficiencies in its DEIS comments:

Much of the data and analysis [regarding impacts to the environment and public health] remain incomplete; including endangered species surveys, wetland, and stream resources, landslide vulnerabilities, karst topography. . . . The DEIS references and relies heavily on construction, management, restoration and mitigation plans (plans listed in Table 2.4-1) many of which are not included in the EIS. . . . Without having access to these and other information, EPA finds the information provided insufficient to determine if impacts, particularly to surface water and aquatic life, are temporary and minimal. 144

EPA explained how this lack of critical information in the DEIS undermines the required public participation opportunities in the NEPA process:

EPA understands that FERC has requested the applicants file materials at various points after the release of the DEIS. Although this information has been or will be posted to the docket which is publicly accessible, EPA is concerned that without official notification, the public may not have had an opportunity to fully comment on this material. It is not apparent within the EIS how FERC intends to include public participation and comment on these subsequent filings. . . . Without this process clearly articulated, it appears that the EIS is a 'rolling' document providing just a snapshot in time. The creates a significant challenge for stakeholders and members of the public to follow the documentation provided, or know which material is most current in order to provide the most relevant comments. 145

Likewise, DOI, including the National Park Service (NPS), Bureau of Land Management (BLM) and United States Geological Survey (USGS), faulted FERC for failing to include adequate information to support meaningful public comment on the

¹⁴⁴ EPA, Comments on the Mountain valley project and Equitrans Expansion project draft Environmental Impacts Statement (Dec. 20, 2016) ("EPA MVP DEIS Comments") at 3.

¹⁴⁵ *Id.* at 2 (emphasis added).

DEIS. DOI explained that "bureau review has resulted in the conclusion that the current DEIS lacks sufficient information to perform adequate analysis of impacts to DOI resources." NPS stated that the extensive missing information rendered release of the DEIS premature:

[T]he DEIS was released for public comment prematurely and without the information necessary to complete a meaningful analysis of impacts. NPS noted numerous instances throughout the DEIS describing additional important information that FERC ordered the applicant to provide before the DEIS comment period ended. This information was critical to analyzing the impacts of the proposed MVP pipeline. Three large supplemental filings were made on October, 14, 21, and 28, 2016. We believe some of the FERC ordered information is still outstanding. This late provision of critical information in effect significantly shortened the comment period and made commenting on this project a significant challenge. Information submissions to the FERC docket without additional public notification require an exceptional level of diligence to ensure that all materials are found and included in one's analysis.

. .

The schedules set for EIS development and public comment should align with CEQ regulations stating that, "The draft EIS must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." The DEIS should include all updates from the applicant that are necessary for a meaningful analysis prior to opening up the comment period. The approach of this project has not allowed for adequate public input as it circumvents the timeframes to review information provided and makes it extremely challenging to understand what is proposed, what the potential impacts are, and how the various alternatives compare against each other.

This lack of information also precludes a meaningful analysis of cumulative impacts. 147

¹⁴⁶ DOI, Comments on the Federal Energy Regulatory Commission (FERC) Draft Environmental Impact Statement (DEIS) for the Proposed Mountain Valley Project (MVP) by the Mountain Valley Pipeline Company, LLC and proposed Equitrans Expansion Project by the Equitrans LP (Dec. 22, 2016) at 1.

¹⁴⁷ *Id.* at 2–3 (emphasis added).

The Bureau of Land Management echoed those concerns, stating that

the DEIS for MVP lacks the information and analysis necessary under the National Environmental Policy Act for BLM to adequately consider the project's effects. Because the DEIS lacks information, it precludes meaningful analysis of the potential impacts discussed herein. As explained in the attached comments, the analyses of alternatives, cumulative effects, and cultural, visual, aquatic, geological, and biological resources are deficient because information has not been provided, was provided after the release of the DEIS, or was not incorporated in the DEIS. ¹⁴⁸

BLM concluded that

The DEIS fails to analyze much of the information listed above because the applicant did not provide it despite multiple requests, the applicant provided the information after the close of the comment period, or the process had not been completed before the release of the DEIS. As noted above, in some cases, the applicant had been advised of the need for this information over a year before FERC released the DEIS. In order to give cooperating agencies and the public an opportunity to meaningfully consider and comment on such new information, we are considering submitting a formal request to FERC to complete a Revised Supplemental Draft Environmental Impact Statement. 149

This is not the first time FERC has failed to include significant essential information in a draft EIS for a proposed pipeline. EPA has repeatedly called out FERC for this same failing with respect to other pipeline projects:

Constitution Pipeline. In draft EIS comments regarding the Constitution Pipeline,
 EPA stated that a substantial amount of information was omitted from the DEIS,
 including information regarding impacts to geology and soils, waterbodies,
 wetlands, wildlife and vegetation, air emissions, and cumulative impacts. ¹⁵⁰ EPA

¹⁴⁸ *Id.* at 13.

¹⁴⁹ *Id.* at 16.

¹⁵⁰ EPA, Comments on the Constitution Pipeline DEIS at 3-9 (Apr. 9, 2014) (Docket No. CP13-499-000, Accession No. 20140409-5120).

repeatedly explained that the lack of information prevented other agencies and the public from meaningfully participating in the NEPA process.¹⁵¹

• Atlantic Sunrise Pipeline. In comments regarding the Atlantic Sunrise Pipeline draft EIS, EPA stated it was "concerned about the amount of detailed information that has yet to be filed and is not evaluated in the DEIS." This missing information included "surveys for land, rare, species, historic resources, water supplies, air modeling, mitigation measures to manage and dispose of contaminated groundwater, proposed mitigation measures for source water protection areas, geotechnical feasibility studies for HDD crossing locations and mitigation measures to minimize drilling risks, and a detailed aquatic resource compensatory mitigation plan. EPA explained that this information is both "relevant and critical to evaluation of potential impacts" and that "a fully informed decision may not be made without this information." EPA also stressed that this missing information needs to be "disseminated and appropriately evaluated with the resource agencies and public stakeholder participation

¹⁵¹ See, e.g., id. at 3 (The lack of information "negates the ability of agency specialists and the public to review the analysis and comment on it.").

¹⁵² EPA Atlantic Sunrise Comments at 2.

¹⁵³ *Id*.

¹⁵⁴ Id

prior to the issuance of any certificates by FERC."¹⁵⁵ EPA specifically recommends that FERC do this "through the use of a revised DEIS."¹⁵⁶

- Sabal Trail pipeline. In draft EIS comments regarding the Sabal Trail Pipeline, EPA said that it had "very significant concerns over the FERC's process and full and objective compliance with the NEPA regulations at 40 CFR Part 1500." EPA even suggested that FERC "appear[ed] to be justifying decisions made prior to implementing the NEPA process." 158
- *PennEast pipeline*. In draft EIS comments regarding the PennEast pipeline, EPA had "significant concerns regarding the alternatives analysis, a number of important topics for which *information is incomplete*, and the direct, indirect and cumulative impacts of the proposed action on the environment and public health, including impacts to terrestrial resources, including interior forests, aquatic resources, and rare, threatened and endangered species." EPA emphasized that "[a] significant amount of information is omitted from the DEIS and is proposed to be filed by the project proponent at a future date." EPA

¹⁵⁵ *Id*.

¹⁵⁶ *Id*.

¹⁵⁷ EPA, Comments on the Southeast Market Pipeline Project DEIS at 1 (Oct. 26, 2015) (Docket No. CP15-17-000, Accession No. 20151102-0219).

¹⁵⁸ *Id*. at 9.

¹⁵⁹ EPA, *Comments on the PennEast Pipeline DEIS*, at 1 (Sept. 16, 2016) (Docket No. CP15-558-000, Accession No. 20160916-0013) (emphasis added).

¹⁶⁰ *Id*. at 3.

stressed that "[f]ailing to consider this information in the DEIS leads to gaps in the data and lack of potentially important information for the decision maker." As it did in comments on the Atlantic Sunrise DEIS, EPA specifically requested that FERC prepare a "revised DEIS" for the PennEast Pipeline to account for these significant deficiencies.

It is thus clear that FERC's omissions of critical information from the DEIS is not a onetime error, but a consistent practice. FERC's failure to include sufficient information and analysis in the DEIS to support meaningful public involvement in the NEPA process renders its EIS deficient.

C. FERC Failed to Adequately Analyze the Project's Climate Impacts

FERC failed to adequately analyze the climate change impacts of the end use of the gas transported by the Project, as required by NEPA. NEPA requires agencies to assess not only the direct effects of a proposed action, but also the indirect and cumulative effects. Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." "Indirect effects are defined broadly, to 'include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." "Cumulative impacts are "impact[s] on the environment which result[] from the incremental impact of

¹⁶² 40 C.F.R. § 1508.8(b).

¹⁶¹ *Id*.

¹⁶³ Natural Res. Def. Council v. U.S. Army Corps of Eng'rs, 339 F. Supp. 2d 386, 404 (S.D.N.Y. 2005) (quoting 40 C.F.R. § 1508.8(b)).

the action when added to other past, present, and reasonably foreseeable future actions."¹⁶⁴

The Court of Appeals for the D.C. Circuit's recent decision in *Sierra Club v*.

FERC¹⁶⁵ recognizes a bar for assessing indirect and cumulative impacts under NEPA that FERC failed to meet here. In *Sierra Club*, the court agreed with the petitioners that FERC must meaningfully assess the downstream greenhouse gas ("GHG") emissions and climate impacts of natural gas pipelines. The D.C. Circuit vacated the orders under review and remanded the matter to FERC for the preparation of an EIS that is consistent with its opinion. Similarly, as in *Sierra Club*, FERC's environmental review of the MVP failed to assess and disclose the Project's climate impacts.

The *Sierra Club* court explained that "[a]n agency conducting a NEPA review must consider not only the direct effects, but also the *indirect* environmental effects, of the project under consideration." Greenhouse gas emissions from end use of natural gas are causally related and reasonably foreseeable indirect effects of permitting a pipeline intended to deliver that natural gas. Burning of the gas transported by a pipeline thus "is not just 'reasonably foreseeable,' it is the project's entire purpose." The court explained that not only could FERC foresee the likely emissions from combustion of gas carried on the pipeline, it also had authority to mitigate those

¹⁶⁴ 40 C.F.R. § 1508.7.

¹⁶⁵ Sierra Club v. FERC, 867 F.3d 1357 (D.C. Cir. 2017).

¹⁶⁶ *Id.* at 1371 (citing 40 C.F.R. § 1502.16(b)) (emphasis in original).

¹⁶⁷ *Id.* at 1371–74.

¹⁶⁸ *Id.* at 1372.

emissions.¹⁶⁹ Accordingly, the "EIS … needed to include a discussion of the significance of this indirect effect … as well as the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions."¹⁷⁰ The Court found that FERC's EIS did not satisfy NEPA because it failed to adequately assess downstream greenhouse-gas effects.

NEPA requires a more searching analysis than merely disclosing the amount of pollution. Rather, FERC must examine the "ecological[,]... economic, [and] social" impacts of those emissions, including an assessment of their "significance." 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). In the MVP FEIS, FERC declined to consider downstream GHG emissions as indirect effects of the project. ¹⁷¹ In addressing cumulative impacts, FERC includes only one short paragraph to attempt to disclose the actual estimation of the downstream GHG emissions that would result from burning the gas that the Project would carry. ¹⁷² Although FERC attempted to estimate downstream GHG emissions, ¹⁷³ it

¹⁶⁹ *Id.* at 1373–74.

¹⁷⁰ *Id.* at 1374.

¹⁷¹ FEIS at §4.11.3 (discussing only GHG emissions from construction of Project and operation of compressor stations); *id.* at 516 ("The downstream use of natural gas in the market areas . . . is beyond the scope of this EIS.").

¹⁷² FEIS at 4-620; *see also* Certificate Order ¶¶287–96.

Intervenors have previously highlighted problems with FERC's estimate, methodology, and analysis. *See, e.g.*, Appalachian Mountain Advocates DEIS Comment at 91–93; Sierra Club VA Chapter DEIS Comment at 8. Among the deficiencies identified there, which Intervenors incorporate into this Request, are FERC's failure to: use the most up-to-date values for methane global warming potential (GWP); disclose the methodologies used to calculate GHG emissions; quantify projected upstream and downstream direct and indirect GHG emissions where possible and conducting a strong qualitative assessment if quantitative analysis is not possible; fully analyze all of the direct, indirect, and cumulative GHG emissions resulting from the MVP project and using this analysis to compare alternatives and develop mitigation measures to address

failed to provide an analysis of the ecological, economic, and social impacts of those emissions, including an assessment of their significance that would meaningfully inform the public or decision-makers about the indirect impact of those emissions—including their scope, significance, and potential mitigation and alternatives.¹⁷⁴. Here, FERC failed to perform this analysis.¹⁷⁵ Instead, FERC articulated unsubstantiated assertions about why it cannot determine the projects' incremental physical impacts on the environment

such emissions; and assess the impacts of the quantified direct, indirect, and cumulative GHG emissions resulting from the full lifecycle of the MVP and EEP projects.

¹⁷⁴ See Sierra Club, 867 F.3d at 1375 (quantification not sufficient).

¹⁷⁵ The omission is notwithstanding FERC's acknowledgement of the dire consequences of climate change. In the FEIS, FERC listed some typical climate change impacts generally expected to burden the Project's geographic areas, such as flooding, heat waves, and sea level rise. FEIS at 4-618. Petitioners note, in addition, that while listing these anticipated regional climate change impacts is insufficient for evaluating the *Project's* climate impacts, FERC failed even in this regard by inexplicably omitting some of the severe impacts that it has cited in past environmental reviews. For example, in the EIS for the Atlantic Sunrise Project (issued in December 2016), FERC wrote that the U.S. Global Change Research Program's 2014 climate change report noted that the "observations of environmental impacts that may be attributed to climate change in the Northeast region" include: 1) "areas that currently experience ozone pollution problems are projected to experience an increase in the number of days that fail to meet the federal air quality standards," 2) "an increase in health risks and costs for vulnerable populations due to projected additional heat stress and poor air quality," 3) rising sea levels that will "stress[] infrastructure (e.g. communications, energy, transportation, water, and wastewater)," 4) "heat stress negatively affect crop yields; invasive weeds are projected to become more aggressive," 5) "an increase in carrier habitat and human exposure to vector-borne diseases (e.g. Lyme disease or West Nile)." Atlantic Sunrise Project Final EIS at 4-317. While the MVP EIS similarly purports to list "observations of environmental impacts that may be attributed to climate change in the Northeast" region per the same U.S. Global Change Research Program report, FEIS at 4-618, FERC has inexplicably omitted or downplayed (e.g., by reducing specificity and describing the risks in more general terms) these enumerated impacts that were included in the Atlantic Sunrise Project EIS just six months earlier. Similarly, while the invalidated Sabal Trail EIS lists ten bullet points detailing impacts that the USGCRP report notes may be attributed to climate change in the Southeast region, Sabal Trail EIS at 3-296 to 3-297, the MVP EIS lists only three bullet points for the Southeast region, FEIS at 4-618.

caused by climate change .¹⁷⁶ Specifically, the FEIS concludes that FERC "cannot determine whether the projects' contribution to cumulative impacts on climate change would be significant."¹⁷⁷ FERC makes no real effort to assess significance, instead merely stating that it cannot do so because it "cannot determine the projects' incremental physical impacts on the environment caused by climate change...."¹⁷⁸ FERC repeats much of the same rationale in its Certificate Order.¹⁷⁹

The *Sierra Club* court firmly rejected this rationale and found that FERC was required to do more to estimate incremental climate impacts. In the EIS that the D.C. Circuit invalidated in *Sierra Club*, FERC had similarly maintained that its hands were tied because "there is no standard methodology to determine how the proposed [pipelines'] incremental contribution to GHGs would translate into physical effects on the global environment." The D.C. Circuit stated unequivocally that the EIS "needed to include a discussion of the 'significance' of this indirect effect." It continued, stating that "quantification would permit the agency to compare the emissions from this project to emissions from other projects, to total emissions from the state or the region, or to regional or national emissions-control goals. Without such comparisons, it is difficult to see how FERC could engage in 'informed decision making' with respect to the

¹⁷⁶ See FEIS at 4-620.

¹⁷⁷ FEIS at 4-620

¹⁷⁸ *Id*.

¹⁷⁹ See Certificate Order \P ¶293–96.

¹⁸⁰ Sabal Trail FEIS at 3-297.

¹⁸¹ Sierra Club, 867 F.3d at 1374 (citing 40 C.F.R. § 1502.16(b).

greenhouse-gas effects of this project, or how 'informed public comment' could be possible." The MVP EIS thus also "needed to include a discussion of the 'significance' of this indirect effect, *see* 40 C.F.R. § 1502.16(b), as well as 'the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions,' *see WildEarth Guardians*, 738 F.3d at 309 (quoting 40 C.F.R. § 1508.7)." Here, FERC simply provided a flawed estimate of combustion emissions with no corresponding analysis or discussion of its significance.

FERC's inadequate analysis also impermissibly downplayed the Project's downstream GHG emissions by stating that "burning natural gas emits less CO₂ compared to other fuel sources (e.g., fuel oil or coal)." The D.C. Circuit rejected this approach in *Sierra Club*:

The effects an EIS is required to cover "include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial." 40 C.F.R. § 1508.8. In other words, when an agency thinks the good consequences of a project will outweigh the bad, the agency still needs to discuss both the good and the bad. In any case, the EIS itself acknowledges that only "portions" of the pipelines' capacity will be employed to reduce coal consumption. *See* J.A. 916. An agency decisionmaker reviewing this EIS would thus have no way of knowing whether total emissions, on net, will be reduced or increased by this project, or what the degree of reduction or increase will be. In this respect, then, *the EIS fails to fulfill its primary purpose*. ¹⁸⁵

The MVP EIS suffers from a similar defect, stating that "[b]ecause coal is widely used as an alternative to natural gas in the region in which the projects would be located, it is

¹⁸² 867 F.3d at 1374.

¹⁸³ *Id.*; Certificate Order ¶295.

¹⁸⁴ FEIS at 4-620.

¹⁸⁵ Sierra Club, 867 F.3d at 1375 (emphasis added).

anticipated that the projects would result in the displacement of *some* coal use, thereby *potentially* offsetting *some* regional GHG emissions."¹⁸⁶ As with the invalidated Sabal Trail EIS, the MVP EIS makes no attempt to assess whether total emissions would be reduced or increased, or the degree of reduction or increase.¹⁸⁷

The *Sierra Club* court further instructed FERC to explain its refusal to use the social cost of carbon methodology to assess project-specific impacts:

The EIS explained that there is no standard methodology for making this sort of prediction.... FERC has argued in a previous EIS that the Social Cost of Carbon is not useful for NEPA purposes.... We do not decide whether those arguments are applicable in this case as well, because FERC did not include them in the EIS that is now before us. On remand, FERC should explain in the EIS, as an aid to the relevant decisionmakers, whether the position on the Social Cost of Carbon that the agency took in *EarthReports* still holds, and why. ¹⁸⁸

Here, FERC failed to provide this explanation in the MVP EIS. In its Certificate Order, issued outside the NEPA process, FERC claims that the social cost of carbon is not appropriate for project-level NEPA review. FERC, however, allows that the tool "may be useful for rulemakings or comparing regulatory alternatives using cost-benefit analyses where the same discount rate is consistently applied." FERC does not explain why this could not be used to compare the "social cost" of the Project's emissions with those of reasonable alternatives, while keeping the discount rate constant. Neither the

¹⁸⁶ FEIS at 4-620 (emphasis added).

¹⁸⁷ Sierra Club, 867 F.3d at 1374 (explaining that "some educated assumptions are inevitable in the NEPA process").

¹⁸⁸Sierra Club, 867 F.3d at 1375; see also Appalachian Mountain Advocates DEIS Comment at 96 (to assess impacts of the Project's GHG emissions, FERC "should have utilized available tools such as the 'social cost of carbon'").

¹⁸⁹ Certificate Order ¶296.

FEIS nor the Certificate Order contains a comparison of the downstream GHG emission of the Project to the emissions of any reasonable alternatives. FERC thus undermines the FEIS's alternatives analysis, which is the "is the heart of the environmental impact statement." 191

As a consequence of FERC's failure to engage in a serious analysis of downstream greenhouse gas emissions, including their significance, the cumulative impacts analysis also fails. The FEIS simply states that end-use "emissions would increase the atmospheric concentration of GHGs, in combination with past and future emissions from all other sources, and contribute incrementally to climate change that produces the impacts previously described." This unsupported statement fails to constitute an adequate analysis of the MVP's incremental impact when added to other past, present, and reasonably foreseeable future actions – including existing, currently

¹⁹⁰ The deficiency in the FEIS is not remedied by FERC's cursory comparisons of the Project's downstream GHG emissions to regional or national emissions levels in the Certificate Order. *See* Certificate Order ¶294. EPA has criticized FERC for comparing the estimated emissions of another major interstate gas pipeline, the Leach Xpress Project, "to state GHG emission levels." EPA explained that "[c]omparing one project's direct and indirect emissions to aggregated totals is not an appropriate way to consider the impact of emissions." EPA, *Comments on the Leach Xpress Pipeline DEIS*, at 7 (June 6, 2016) (Docket No. CP15-514-000, Accession No. 20160613-5177).

¹⁹¹ 40 C.F.R. § 1502.14.

¹⁹² FERC also makes conflicting statements regarding cumulative impacts. *Compare* MVP EIS at 4-617 ("The cumulative impact analysis described below does not focus on a specific cumulative impact area because climate change is a global phenomenon.") to *id*. at 4-618 ("Although climate change is a global concern, for this cumulative analysis, we will focus on the cumulative impacts of climate change in the Northeast (includes Pennsylvania and West Virginia) and Southeast (includes Virginia) regions."). Ultimately, the MVP EIS fails to examine the *Project's* direct, indirect, or cumulative impact on either a regional or global scale.

¹⁹³ *Id.* at 4-620.

proposed, and reasonably foreseeable regional natural gas infrastructure. FERC does not quantify the project's downstream GHG emissions in combination with other past, present, and reasonably foreseeable future projects in the region, despite many of those projects being directly under FERC's review. The EIS impermissibly downplays the cumulative climate impacts of the gas infrastructure build-out now occurring in Pennsylvania, West Virginia, Virginia, and other surrounding states, which could result in the transport of gas to other regions. For example, the FEIS does not quantify the combined GHG emissions caused by the FERC-jurisdictional natural gas interstate transportation projects listed in section 4.13.1.2. FERC must consider the broader impacts of the proposed pipelines, including the cumulative impacts of the natural gas extraction system, well pads, more pipelines, and access roads, which are all an inevitable result of this project. FERC's failure to meaningfully assess the significance of the total direct, indirect, and cumulative emissions resulting from the project, including upstream and downstream emissions combined with emissions from past, present, and reasonably foreseeable future projects in the region, renders its FEIS deficient under NEPA.

Additionally, as a consequence of its failure to take a hard look at the downstream GHG and climate impacts, FERC also failed to adequately seek public input regarding possible mitigation measures. ¹⁹⁵ In order to satisfy NEPA's mandate of informed decision-making, FERC must meaningfully consider and analyze impacts from

¹⁹⁴ FEIS at 4-595– 4-598

¹⁹⁵ See Sierra Club, 867 F.3d at 1374. To the extent FERC relies on the existence of air permitting requirements to excuse its shoddy analysis (see, e.g., MVP EIS at 4-488, 4-492, 4-499), that is improper because "the existence of permit requirements overseen by another federal agency or state permitting authority cannot substitute for a proper NEPA analysis." *Id.* at 1375 (citing *Calvert Cliffs' Coordinating Comm. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1122-23 (D.C. Cir. 1971)).

downstream combustion – and assesses mitigation measures and feasible alternatives accordingly (including the no-action alternative, and alternatives involving renewable energy and energy efficiency). ¹⁹⁶ FERC's unsupported statements in the MVP EIS undermined the ability of the public and decision-makers to fully compare alternatives and develop mitigation measures. FERC must fully analyze all of the direct, indirect, and cumulative GHG emissions resulting from the project and use this analysis to compare alternatives and develop mitigation measures to address such emissions. ¹⁹⁷

D. FERC's Conclusion in the EIS That Impacts to Aquatic Resources Will Be Adequately Minimized and Will Not Have Significant Impacts Is Not Supported

FERC's EIS failed to take a "hard look" at the direct and indirect effects of the Project on waterbodies and wetlands. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). Construction of the MVP and EEP would cross 1,146 waterbodies, including 407 perennial waterbodies, and would disturb over 5,200 acres of soils that are classified as having the potential for severe water erosion. The vast majority of those waterbodies provide habitat for aquatic life and support fisheries. The MVP would clear a 150 foot wide corridor along the length of the pipeline route during construction, which would "remove[] the protective cover and expose[] the soil to the effects of wind

¹⁹⁶ See Sierra Club, 867 F.3d at 1374–75; see also Appalachian Mountain Advocates DEIS Comment at 95 (FERC must fully evaluate lifecycle GHG emissions impacts and "compare alternatives and develop mitigation measures to address such emissions") (internal citation omitted). FERC has authority to deny or approve a project with conditions. See 15 U.S.C. § 717f;see also Sierra Club VA Chapter DEIS Comment at 16 (listing conditions that FERC could impose in the certificate to mitigate climate impacts).

¹⁹⁷ See, generally, Appalachian Mountain Advocates' DEIS Comments.

¹⁹⁸ FEIS at 4-118, 5-2.

¹⁹⁹ *Id.* at 4-212–4-216.

and rain, which increases the potential for soil erosion and sedimentation."²⁰⁰ Additionally, the project would convert a significant amount of forested land to herbaceous cover in the 50-foot wide permanent right-of-way, much of which follows steep slopes with highly erodible soils. The impacts of the MVP and EEP will occur in the same region and, indeed, often in the same watershed, as impacts from numerous other recently approved natural gas pipelines.

FERC acknowledges that "[i]mpacts on waterbodies could occur as a result of construction activities in stream channels and on adjacent banks." Those impacts include "local modifications of aquatic habitat involving sedimentation, increased turbidity, and decreased dissolved oxygen concentrations." Additionally, FERC states that the

clearing and grading of stream banks could expose soil to erosional forces and would reduce riparian vegetation along the cleared section of the waterbody. The use of heavy equipment for construction could cause compaction of near-surface soils, an effect that could result in increased runoff into surface waters in the immediate vicinity of the proposed construction right-of-way. Increased surface runoff could transport sediment into surface waters, resulting in increased turbidity levels and increased sedimentation rates in the receiving waterbody. Disturbances to stream channels and stream banks could also increase the likelihood of scour after construction. 203

Those impacts would harm the aquatic organisms that rely on the affected streams for their survival. As FERC states,

²⁰⁰ *Id.* at 4-81.

²⁰¹ *Id.* at 4-136.

 $^{^{202}}$ *Id*.

²⁰³ *Id.* at 4-137.

[i]ncreased sedimentation and turbidity resulting from in-stream and adjacent construction activities would displace and impact fisheries and aquatic resources. Sedimentation could smother fish eggs and other benthic biota and alter stream bottom characteristics, such as converting sand, gravel, or rock substrate to silt or mud. These habitat alterations could reduce juvenile fish survival, spawning habitat, and benthic community diversity and health. Increased turbidity could also temporarily reduce dissolved oxygen levels in the water column and reduce respiratory functions in stream biota. Turbid conditions could also reduce the ability for biota to find food sources or avoid prey. 204

Despite generally acknowledging these impacts, FERC nonetheless concludes that "[n]o long-term or significant impacts on surface waters are anticipated as a result of the projects" and that "[t]emporary impacts would be avoided or minimized" primarily because the applicants will use dry open-cut crossing methods and will adhere to Best Management Practices when performing clearing and grading in riparian areas. Following from that conclusion, FERC finds that "constructing and operating the MVP and the EEP would not significantly impact fisheries and aquatic resources." ²⁰⁶

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²⁰⁴ *Id.* at 4-216–4-217. *See also id.* at 4-221 ("Sedimentation resulting from the construction, restoration, and operation portions of the MVP would likely be transported into downstream waterbodies").

²⁰⁵ *Id.* at 4-149. *See also id.* at 4-143 ("Mountain Valley would minimize impacts on first-order streams by adhering to its Procedures and its project-specific *Erosion and Sediment Control Plans* and *Stormwater Pollution Prevention Plans* for West Virginia and Virginia including mitigation measures such as reducing the construction corridor, implementing dry-crossing methods, limiting the timeframe allowed to complete the crossing, restoring bank and contours, and limiting the maintained areas of the right-of-way in the riparian zone.")

²⁰⁶ *Id.* at 4-224. In reaching that conclusion in the FEIS, FERC relies in part on the West Virginia Department of Environmental Protection's (WVDEP) March 23, 2017 issuance of a Clean Water Act Section 401 water quality certification and the conditions contained therein. *Id.*; *see also id.* at 4-138, 5-4. That certification, however, was vacated by the U.S. Court of Appeals for the Fourth Circuit in response to a challenge by some of the Intervenor groups. On remand, WVDEP elected to waive its authority under CWA Section 401, thereby eliminating any of the claimed protections. *See* WVDEP, Notice to FERC of Section 401 Waiver (November 1, 2017) (Accession No. 20171106-0009). FERC's reliance on WVDEP's certification is thus arbitrary and capricious.

The EIS's conclusion that the projects would not have significant adverse impacts on fisheries and aquatic resources is flawed for several reasons. First, FERC unjustifiably relies on the use of Best Management Practices to conclude that clearing and trenching within the relevant watersheds during pipeline construction will not significantly contribute to sedimentation and related impacts of turbidity. FERC provides no evidence to justify its conclusion that those measures would successfully minimize sedimentation impacts, and past experience with similar projects demonstrates that they would be inadequate. Second, FERC completely fails to account for the increased sedimentation that would result from the conversion of mature forest to herbaceous cover within the 50foot wide permanent right-of-way along much of the pipeline route. As expert analysis submitted to FERC confirms, that land use change would cause significant increases in sedimentation. 207 Finally, FERC failed to adequately analyze the cumulative water quality impacts of the projects when combined with other past, present, and reasonably foreseeable future actions. FERC's failure to analyze those impacts renders its conclusion that the projects would not significantly impact aquatic resources unsupportable. Because of those shortcomings, FERC's DEIS does not comply with NEPA.

mose shortcomings, TERC's DEIS does not compry with NEFA.

1. FERC's conclusion that mitigation measures will adequately minimize impacts to aquatic resources is not supported

FERC must support with substantial evidence its conclusion that proposed mitigation measures would protect water resources during construction and operation of the projects. *See New York v. U.S. Nuclear Reg. Comm'n*, 589 F.3d 551, 555 (2d Cir.

²⁰⁷ See Appalachian Mountain Advocates DEIS Comments, Exhibit D (*Mountain Valley Pipeline Sediment Modeling Methodology*, Prepared for Appalachian Mountain Advocates by Jason Clingerman and Evan Hansen of Downstream Strategies, LLC) (hereinafter "Downstream Strategies Report").

2009). Insufficient mitigation measures, even if longstanding in their use, are still insufficient. *See Summit Petroleum Corp. v. U.S. E.P.A.*, 690 F.3d 733, 746 (6th Cir. 2012). FERC's failure to support its conclusions regarding the efficacy of sediment control measures renders the EIS deficient.

The proposed projects would impact aquatic life due to increased sedimentation not just from the stream crossings themselves, but also from the runoff from the significant land disturbance that would occur in the watersheds upstream from the crossings during construction. As mentioned above, construction of the MVP would disturb over 5,200 acres of soils that are classified as having the potential for severe water erosion. Moreover, much of the proposed pipeline route follows very steep slopes, with the MVP crossing 22.3 miles of slopes between 15 and 30 percent grade and 75.4 miles of slopes greater than 30 percent, many of which exceed 60 percent. Through the course of construction, "clearing and grading would remove trees, shrubs, brush, roots, and large rocks from the construction work area" and heavy machinery would be used to dig a trench to a depth of 5.5 feet to 9 feet for the MVP and 5 feet to 6 feet for the EEP. Such disturbance would undoubtedly lead to increased sedimentation in waterbodies downstream from the disturbed area. The such as a sedimentation in waterbodies downstream from the disturbed area.

Despite the steep slopes and highly erodible soils that would be traversed by the MVP, FERC concludes that erosion and sedimentation from these areas would not result

²⁰⁸ FEIS at 5-2.

²⁰⁹ *Id.* at 2-49, Appendix K-2.

²¹⁰ *Id.* at 2-37, 2-38.

²¹¹ See, e.g., Appalachian Mountain Advocates DEIS Comments at 44–49.

in significant impacts because the applicants would adhere to their Erosion and Sedimentation Plans. The FEIS does not, however, in any way evaluate the effectiveness of, or even discuss in any detail, the measures included in those plans. Indeed, the plans are not included in the FEIS. FERC appears to simply assume that the plans would successfully minimize sedimentation impacts. FERC's conclusion is thus unsupported and, indeed, conflicts with available evidence of the impacts of pipeline construction through areas of steep slopes and highly erodible soils.

Studies show that erosion and sedimentation controls for pipelines have been known to fail under heavy rain events and sedimentation risk is higher under steeper conditions and near bodies of water.²¹³ Intervenors provided FERC with numerous examples of significant sedimentation impacts that have occurred during pipeline construction despite the use of industry-standard erosion and sedimentation controls nearly identical to those on which FERC relies.²¹⁴ Since the close of the DEIS Comment period, there have been other major incidents of sediment pollution occurring on FERC-approved Section 7 pipelines despite the presence of those same conditions.²¹⁵ None of those incidents involved construction of a pipeline as large as the MVP traversing such steep and highly-erodible areas.

²¹² See, e.g., FEIS at 5-2; Certificate Order at ¶185.

²¹³ See, .e.g., Appalachian Mountain Advocates DEIS Comments at 45, n.148.

²¹⁴ *Id.* at 46–49.

²¹⁵ See, e.g., Shane Hoover, "Ohio sues Rover Pipeline over spills," TimesReporter.com (Nov. 3, 2017 (explaining that the Ohio EPA has sued the developers of the FERC-approved Rover pipeline and sought \$2.3 million dollars in civil penalties and restitution for water quality violations in more than a dozen counties, including violations associated with discharge of sediment-laden runoff)), available at http://www.timesreporter.com/news/20171103/ohio-sues-rover-pipeline-over-spills.

FERC has simply not demonstrated that the plans and mitigation measures on which MVP relies will successfully minimize impacts to aquatic resources. The body of the FEIS itself does not provide any analysis of the efficacy of the proposed BMPs or mitigation. Indeed, reviews of those plans and associated analyses by Intervenors and others indicate that they will not reduce sedimentation impacts to the extent claimed by MVP and FERC. Page 177

For example, the U.S. Forest Service in its comments on the draft EIS explained that "[i]t is unacceptable to say everything will be mitigated through the [erosion and sediment control] Plan. Literature has shown proven [sic] that BMPs have limited success, even when properly installed and maintained. This is a challenging project over

²¹⁶ See FEIS Appendix AA CO105-18 (responding to Intervenors' comment on this issue by citing the entirety of FEIS sections 4.2 and 4.3).

²¹⁷ See, e.g., Appalachian Mountain Advocates DEIS Comments at 49 n.159 (citing Kirk Bowers, P.E., Draft Environmental Impact Statement review comments on behalf of the Virginia Chapter of the Sierra Club (hereinafter "Bowers Report") at 5–7); see also Virginia Department of Game and Inland Fisheries, Letter re Mountain Valley Pipeline FEIS (July 20, 2017) (Accession No. 20170721-5055) at 3 ("[W]hile we recognize the applicant's experience with pipeline construction and attendant sediment and erosion controls, and we recognize that some site-specific construction details are best resolved during post-NEPA permit review, we are nonetheless concerned regarding potential for serious events including slope failures, instream sedimentation, washout of fill materials, and compromise or contamination of sensitive biological or hydrogeological features such as trout streams, Endangered or Threatened Species Waters, major stream crossings, publically-owned conservation lands, or sensitive karst resources. Construction accidents, unanticipated geological conditions, or severe weather can, and have, precipitated catastrophic impacts upon sensitive fish and wildlife resources in the past: it is the applicant's responsibility to ensure that they not only are prepared to minimize adverse environmental impacts under anticipated construction conditions, but that they have seriously considered and prepared for 'unanticipated' severe weather or other project conditions that may be encountered. These contingency plans should be submitted for public review as part of the NEP NFERC project review process.").

rugged terrain."²¹⁸ At the request of the Forest Service, MVP performed a *Hydrologic Analysis of Sedimentation* for the portion of the pipeline crossing the Jefferson National Forest, which FERC uncritically adopted in the FEIS.²¹⁹ That document's conclusion that erosion and sedimentation control measures are likely to be 79% effective²²⁰ is unsupported and arbitrary, as evidenced by the Forest Service's previous statements. In commenting on MVP's Biological Evaluation under the Endangered Species Act, the Forest Service explained that

the hydrological analysis clearly demonstrates the wide variety of effectiveness, even citing as low as 10% (EPA 1993). Yet the assumption chosen for the practice factor is very high. p=0.21 such that containment is 79%. Since many of the literature citations are laboratory based and proper installation is widely understood in the industry to be a limiting factor for effectiveness in the field, I believe *this is a vast overestimate of containment*. It is more appropriate to err on the side of the worst case scenario, rather than the best case (equal to or less than 48% containment). As such, for this section (and similar sections) in the BE and Table 4, erosion containment is likely over-estimated and sedimentation underestimated.²²¹

In addition to flaws in FERC and MVP's assumptions about the effectiveness of the Project's BMPs, major flaws remain in the plans themselves that FERC has not addressed. For example, MVP's erosion and stormwater control plans for Virginia are

²¹⁸ United States Forest Service Comments on the Draft Environmental Impacts Statement (December 20, 2016) (Accession No. 20161221-5281) at 7.

²¹⁹ FEIS at Appendix O-3; *id.* at 4-146, 4-221. FERC did not explain why a similar analysis, which is clearly feasible, was not performed for the portions of the pipeline not on national forest land. Such an analysis, if properly performed, is critical to assessing the sedimentation impacts of the project. Further, Because this report was not included in the DEIS, Intervenors did not have a formal opportunity to comment on the substance of the report, or the appropriateness of FERC's reliance thereon.

²²⁰ FEIS at Appendix O3-13

²²¹ Forest Service Comment on Biological Evaluation at 2 (Apr. 24, 2017) (Accession No. 201704245097).

still pending before the Virginia Department of Environmental Quality. A review of those plans performed for DEQ by EEE Consulting, Inc. ("3e") shows that the plans are currently woefully inadequate. In a July 10, 2017 letter to DEQ, 3e stated that it had determined that the "plans submitted do not constitute a complete plan package with sufficient information to move forward to the plan review phase."²²² 3e found MVP's submission severely lacking in numerous ways. For example, the review found that MVP's "Water Quality calculations are not consistent with the Virginia Stormwater Management Act (§ 62.144.15:24), the Virginia Stormwater Management Program Regulations (9VAC25-870), nor the guidance documentation for the Virginia Runoff Reduction Method (VRRM) Compliance Spreadsheet (Guidance Memo No. 16-2001);"223 that MVP's "Water Quantity calculations are not consistent with the Virginia Stormwater Management Act (§ 62. 144.15:24) and the Virginia Stormwater Management Program Regulations (9VAC25-870);"224 that MVP failed to "demonstrate that the permanent water bars are releasing drainage in a sheet flow condition or they are released into an adequate conveyance;"225 that MVP failed to demonstrate the effectiveness of its proposed water bars;²²⁶ that MVP failed to provide plan "sheets for all stream crossings which provides [sic] a detailed explanation and location of all control

²²² EEE Consulting, Inc. Letter, appended as **Attachment B**, at 1.

²²³ *Id.* at 2.

²²⁴ *Id*.

²²⁵ *Id.* at 3.

²²⁶ *Id.* at 4.

measures that will be implemented to protect the water quality of the stream;"²²⁷ that MVP failed to demonstrate how streams will be protected from sediment tracked onto timber mats by construction equipment and vehicles; that MVP failed to include any additional erosion and sediment control measures to reduce impacts in "sensitive environmental resource areas;"²²⁹ that MVP's proposed three mile open trench length "is over 30 times the current allowable limit;"²³⁰ and that MVP's proposed "exemption/deviation request to VADEQ Standard 3.09 for Temporary Diversion Dikes to utilize silt fence to 'minimize upslope runoff' and 'to control the velocity of upslope runoff, and allow for infiltration' . . . does not meet the intent or the specifications relating to the design and function of silt fence."²³¹ These criticisms of the severe inadequacies of the plans submitted by MVP to the VADEQ undermine FERC's conclusions that the mitigation measures contained therein will prevent significant impacts to aquatic resources.

2. FERC failed to consider increased sedimentation from land cover change in sensitive areas

In addition to unreasonably relying on unproven best management practices, FERC's EIS also entirely fails to account for the increase in sedimentation that would result from the conversion of upland forest to herbaceous cover within vulnerable segments of the pipeline right-of-way. Although FERC to some extent evaluates the

²²⁷ *Id.* at 5.

²²⁸ *Id*.

²²⁹ *Id*.

²³⁰ *Id*.at 6.

²³¹ *Id*.

temporary impacts from in-stream crossings and construction-related clearing of riparian vegetation at the site of crossings, it does not consider the permanent changes in runoff and sedimentation associated with land cover change.

"Fragmented forests have been directly linked to lower water quality and condition (Lee et al. 2009, Shandas and Alberti 2009) and infrastructure development including pipelines and access roads are known to increase fine sedimentation due to reduced vegetation and associated habitat fragmentation (Entrekin et al. 2011, Drohan et al. 2012, Wood et al. 2016)."²³² Intervenors in their comments on FERC's draft EIS included a report by consulting firm Downstream Strategies that analyzed the sedimentation impacts of the long-term land cover change associated with clearing and maintenance of the permanent right-of-way.²³³ The authors used computer models to predict the change in annual sedimentation post-construction that would result from conversion of land cover from forest to the herbaceous cover that would need to be maintained in the permanent pipeline right-of-way. Although the study found that streams in watersheds with low slopes and stable soils would not experience significant, long-term increases in sedimentation, the opposite was true for "high risk" areas, *i.e.*, those with steep slopes and highly erodible soils.²³⁴ In the high risk modeling scenario,

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²³² Appalachian Mountain Advocates DEIS Comments at 50 (citing expert report by Dr. Douglas Becker, "Potential Effects of Forest Fragmentation from the Proposed Mountain Valley Pipeline on Forest Birds")

²³³ See Mountain Valley Pipeline Sediment Modeling Methodology, Prepared for Appalachian Mountain Advocates by Jason Clingerman and Evan Hansen of Downstream Strategies, LLC, (hereinafter "Downstream Strategies Report"), attached as Exhibit D to Appalachian Mountain Advocates DEIS Comments.

²³⁴ As explained above, a significant portion of the proposed route of the MVP is characterized by the steep slopes and highly erodible soils that would contribute to such long-term impacts.

sedimentation increased by 15 percent due to the permanent land use change associated with keeping the right-of-way clear.²³⁵ Such an increase would threaten aquatic life in streams that are already experiencing stress from other activities such as mining, development, and oil and gas extraction.

Furthermore, that 15 percent figure likely underestimates the long-term increase in sedimentation in steep slope areas. Downstream Strategies' methodology assumes that the right-of-way would be converted to a land cover with equal sediment attenuating properties as "hav/pasture." However, once steep slopes, particularly those with shallow soils, are disturbed, they are unlikely to regain plant cover equivalent to hay/pasture. Despite efforts to revegetate steep, mountainous slopes after construction, slopes between 33% and 50% have a poor chance of revegetating, and slopes over 50% have an improbable chance of revegetating. ²³⁷ The MVP would traverse 75.4 miles of slopes greater than 30 percent. 238 These findings undermine FERC's conclusion that the Project would not have any long-term impacts to aquatic resources. In order to satisfy NEPA's mandate that agencies take a "hard look" at the impacts of proposed actions, FERC should have analyze the potential for long-term increases in sedimentation associated with the permanent maintenance of the pipeline right-of-way, particularly in sensitive areas with steep slopes and highly erodible soils. Its failure to do so renders the EIS deficient.

²³⁵ Downstream Strategies Report at 3.

²³⁶ *Id.* at 2

²³⁷ Bowers Report at 3.

²³⁸ FEIS at 2-49, Appendix K-2.

3. FERC did not sufficiently assess the cumulative impacts to water quality

The FEIS's cumulative impacts assessment is wholly inadequate and fails to meet the requirements of NEPA. It lists certain projects "in the geographic scope of analysis considered for cumulative impacts," including a number of FERC-jurisdictional projects, and states that "some of these other projects could result in impacts on surface waters." Yet, the FEIS makes no effort to meaningfully assess the combined impacts of all of these projects, instead merely listing the number of wetlands and waterbodies crossed by each. Further, FERC's conclusion that the "the cumulative effect on surface waterbody resources would be minor" is based on the same flawed assumptions that undermine its assessment of the projects' direct and indirect impacts to water resources, namely, that any impacts will be largely minimized through the use of unproven BMPs. 243

FERC acknowledges that the projects identified in one watershed will combine to disturb approximately eleven percent of the land area, which it uses as a "proxy for overall land disturbance for purposes of this analysis with implications for sedimentation and turbidity due to runoff," but offers no analysis of how that disturbance would impact

²³⁹ FEIS, Appendix W.

²⁴⁰ *Id.* at 4-605.

²⁴¹ *Id.*, Appendix W.

²⁴² *Id.* at 4-605.

²⁴³ *Id.* That conclusion is particularly unsupported in regard to the impacts of non-jurisdictional facilities, which FERC merely presumes "would likely be required to install and maintain BMPs similar to those proposed by the MVP and the EEP as required by federal, state, and local permitting requirements so as to minimize impacts on waterbodies," with no further support. *Id.*

water quality, either in the short or long term.²⁴⁴ As EPA explained in its comments on the DEIS, "[b]eyond presenting the percent of each watershed affected by other identified projects and by the proposed MVP, it does not appear that cumulative impacts were analyzed at the watershed or otherwise specified geographic scope."²⁴⁵ EPA faulted FERC for failing to utilize available methodologies that can translate "thresholds/percent disturbance" to estimates of water quality degradation, objecting that "[w]ithout any context the statements made [in the EIS] have little meaning."²⁴⁶ FERC's unreasonable reliance on unproven (and, for non-jurisdictional projects, potentially non-existent) BMPs and its failure to otherwise meaningfully assess the impacts of other projects within the geographic scope of the MVP and EEP prevents its cumulative impacts analysis from satisfying NEPA's "hard look" requirement.

III. FERC's Grant of a Conditional Certificate is Statutorily and Constitutionally Flawed

A. Granting Conditional Certificates Like the Certificate Order Violates the NGA

15 U.S.C. § 717f(e) provides that "the Commission shall have the power to attach to the issuance of the certificate . . . such reasonable . . . conditions as the public convenience and necessity may require." FERC often uses this language to grant

²⁴⁴ *Id*.

²⁴⁵ EPA MVP DEIS Comments, Enclosure-Technical Comments at 28; *see also id.* at 30 ("EPA is concerned about cumulative impacts to aquatic resources and water quality. . . . We recommend that the cumulative impact analysis of surface water be expanded, including cumulative impacts to water quality, headwater streams, high quality and/or sensitive aquatic resources. Aquatic resources have the potential to be cumulatively impacted by many factors, including waterbody crossings, change in recharge patterns, clearing, erosion, landslides, and other geohazards, blasting, and water withdraws for hydrostatic testing.").

 $^{^{246}}$ *Id*

certificates before a project is fully permitted by all relevant authorities. In other words, some FERC certificates are "conditional on" the applicant's eventually obtaining those permits. But legislative history and case law indicate that this is the wrong way to interpret FERC's conditioning power under §717f(e). These sources indicate that the statute empowers FERC to impose "conditions" on pipeline activity in the sense of "limitations," not to make certificates "conditional" in the sense of needing to satisfy prerequisites before pipeline activity can commence.

An analogy illustrates the difference between conditions as prerequisites and conditions as limitations. Suppose a teenager wants to use her parents' car. The parents can impose two sorts of "conditions":

- "You can use the car if you finish your homework first." This sort of "condition" is a *prerequisite* to using the car.
- "You can use the car, but you must be home by 10 P.M." This sort of "condition" is a *limitation* on the use of the car.

When FERC grants a "conditional" certificate before an applicant has obtained all necessary permits, it is acting like the parents in the first (prerequisite) sense. In contrast, when FERC grants a "conditional" certificate by imposing restrictions on how a fully permitted applicant can operate, FERC is acting like the parents in the second (limitation) sense.

The problem with granting "conditional" certificates in the prerequisite sense is that Congress never intended "conditions" in § 717f(e) to be interpreted that way. Rather, it intended "conditions" to mean "conditions on the terms of the proposed service

itself"—i.e., *limitations*, not prerequisites.²⁴⁷ Historically, the cases considering §717f(e) "conditioning power" concern "rates and contractual provisions for the services to be certificated," not whether those services can begin acquiring property via condemnation before they are fully permitted.²⁴⁸

The Supreme Court has observed that the "conditions" clause in "Section 7(e) vests in the Commission control over the conditions *under which gas may be initially dedicated to interstate use*" so that "the consuming public may be protected while the justness and reasonableness of the price fixed by the parties is being determined under other sections of the Act." "Section 7 procedures in such situations thus act to hold the line awaiting adjudication of a just and reasonable rate." This purpose is clearly one of imposing limitations on pipeline activity, not of allowing pipelines to commence operations before they are fully permitted. "[T]he Commission may not use its §7 conditioning power to do indirectly . . . things that it cannot do at all."

Despite these considerations, some district courts have issued opinions and orders that seem to bless FERC's use of "conditional" certificates in the prerequisite sense. ²⁵²

²⁴⁷ N. Nat. Gas Co., Div. of InterNorth, Inc. v. F.E.R.C., 827 F.2d 779, 782 (D.C. Cir. 1987) (emphasis added).

²⁴⁸ Panhandle E. Pipe Line Co. v. F.E.R.C., 613 F.2d 1120, 1131-32 (D.C. Cir. 1979).

²⁴⁹ Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y., 360 U.S. 378, 389, 392 (1959) (emphasis added).

²⁵⁰ *Id.* at 392.

²⁵¹ Am. Gas Ass'n v. F.E.R.C., 912 F.2d 1496, 1510 (D.C. Cir. 1990).

²⁵² See, e.g., Transcon. Gas Pipe Line Co., LLC v. Permanent Easement for 2.14 Acres, No. CV 17-1725, 2017 WL 3624250, at *6 (E.D. Pa. Aug. 23, 2017); Constitution Pipeline Co., LLC v. Permanent Easement for 0.42 Acres, No. 114-CV-2057, 2015 WL 12556145, at *2 (N.D.N.Y. Apr. 17, 2015).

FERC should not rely on those opinions and orders to justify the practice. First, none of those opinions and orders considered the argument made here—namely, that Congress intended "conditions" in § 717f(e) to mean "limitations" rather than "prerequisites." Rather, the opinions and orders were only considering the argument that pipelines companies could not commence eminent-domain activities until certain conditions (prerequisites) were met. Second, and more important, those opinions and orders came from district courts, which have extremely limited jurisdiction to review Commission orders. Lack of jurisdiction appeared to be the primary driver behind district courts' refusal to second-guess Commission practices. First, none of the primary driver behind district courts consider whether its conditional-certificate practices are consistent with congressional intent which, as explained above, they are not.

B. Granting Conditional Certificates Like The Certificate Order Violates the Fifth Amendment.

Issuing certificates before applicants are fully permitted creates problems not just under the NGA but also under the Fifth Amendment. As soon as FERC issues a certificate, even a "conditional" one, the certificated pipeline entity can arguably start acquiring property by condemnation. ²⁵⁶ But if the entity still has additional permits to

²⁵³ See Transcon. Gas Pipe Line Co., 2017 WL 3624250 at *3 ("District Courts... are limited to jurisdiction to order condemnation of property in accord with a facially valid certificate. Questions of the propriety or validity of the certificate must first be brought to FERC upon an application for rehearing and the Commissioner's action thereafter may be reviewed by a United States Court of Appeals.") (internal punctuation and citation omitted).

²⁵⁴ See id.

²⁵⁵ *Id*.

²⁵⁶ 15 U.S.C. § 717f(h).

obtain, there is a chance it will fail to obtain those permits. If that happens, the entity will never be allowed to begin operations—and it will have taken private property for no reason (i.e., without a public necessity) in violation of the Fifth Amendment.

This concern—that an applicant with a conditional certificate may never become fully permitted—is not merely theoretical here. The applicant is far from obtaining all necessary permits, including: final authorizations by the Forest Service and Department of the Interior for permission to cross federal lands; authorization from the U.S. Army Corps of Engineers for all stream and wetland crossings; and multiple Clean Water Act authorizations from the Commonwealth of Virginia. All of those permits require compliance with substantive standards that cannot be presumed by the FERC's grant of a certificate of convenience and necessity.

With such uncertainty that the MVP project will ever commence construction, let alone complete construction and begin transporting gas, there is simply no public necessity for it to begin taking private property. Yet FERC's grant of a "conditional" certificate empowers the applicant to do just that—at least according to the applicant, which, in district court, has already cited its conditional certificate in seeking summary judgment on its right to begin condemning property.²⁵⁷

C. By Allowing Conditional-Certificate Holders to Exercise Eminent Domain Before They Have Obtained All Necessary Approvals, FERC Interprets the NGA in a Manner That Violates the Constitution

Civ. No. 2:17-cv-04214 (S.D. W. Va.); Mountain Valley Pipeline, LLC v. Easements to Construct, Operate, and Maintain a Natural Gas Pipeline Over Tracts of Land in Giles County, Craig County, Montgomery County, Roanoke County, Franklin County, and Pittsylvania County, Virginia et al., Civ. No. 7:17cv492-EKD (W.D. Va.).

²⁵⁷ Mountain Valley Pipeline, LLC v. An Easement to Construct and Maintain a 42-inch Gas Transmission Line Across Properties in the Counties of Nicholas, Greenbrier, Monroe, Summers, Braxton, Harrison, Lewis, Webster, and Wetzel, West Virginia et al.,

The NGA provides that once FERC issues a certificate, the applicant is immediately invested with the power of eminent domain. 15 U.S.C. § 717f(h). As explained above, it is constitutionally problematic to extend this rule to conditional certificate holders that have not yet obtained all necessary state and federal approvals. FERC could obviate these problems by imposing conditions (of the "limitation" variety) prohibiting applicants from exercising eminent domain until after they obtained all necessary approvals. Indeed, under the doctrine of constitutional avoidance, FERC should do so. ²⁵⁹ But it does not, running afoul of that doctrine.

IV. FERC's Grant of a Blanket Certificate Is Statutorily and Constitutionally Flawed

A. Granting Blanket Certificates Like The Certificate Order Exceeds FERC's Statutory Authority

The Certificate Order cannot stand as issued for additional reasons. The eminent-domain authority it purports to confer exceeds statutory limits insofar as it grants the applicant's request for "a blanket certificate under Part 157, Subpart F of FERC's regulations to perform certain routine construction activities and operations," including "future facility construction, operation, and abandonment."²⁶⁰

The blanket authority that the certificate purports to confer under FERC's regulations is impermissibly broad. Without any need for further FERC approval, the

²⁵⁸ See Mid-Atlantic Express, LLC v. Baltimore Cty., Md., 410 Fed. App'x 653, 657 (4th Cir. 2011) (holding that, as a certificate condition, Commission could validly prohibit applicant from exercising eminent domain).

²⁵⁹ See F.C.C. v. Fox Television Stations, Inc., 556 U.S. 502, 516 (2009).

²⁶⁰ Certificate Order ¶1, 6.

certificate holder is allowed, subject only to a per-project cost limitation just shy of \$12 million, to do any of the following, among other "automatically authorized" acts:

- "acquire, construct, replace, or operate any eligible facility," defined to mean any facility within FERC's statutory jurisdiction "that is necessary to provide service within existing certificated levels," subject to certain narrow exceptions;²⁶¹
- "make miscellaneous rearrangements of any facility," including "relocation of existing facilities" for various reasons including highway construction, erosion, or "encroachment of residential, commercial, or industrial areas[;]" 262
- "acquire, construct, replace, modify, or operate any delivery point[;]" 263
- "acquire, construct, modify, replace, and operate facilities for the remediation and maintenance of an existing underground storage facility[;]",264 and
- "acquire, construct and operate natural gas pipeline and compression facilities...
 for the testing or development of underground reservoirs for the possible storage of gas[.]"²⁶⁵

The "facilities" to which these activities apply include both "auxiliary" ones installed to "obtain[] more efficient or more economical operation" and replacements—but only to the extent that such "auxiliary" or replacement facilities are *not* located within the certificated pipeline right-of-way or an already authorized facility site. ²⁶⁶ That is, the grant of blanket authority is expressly—almost exclusively—directed toward projects about which the most FERC presently knows, to a virtual certainty, will *not* be where the applicant describes the pipeline as being. And, in connection with any of these activities,

²⁶¹ 18 C.F.R. §§ 157.208(a), 157.202(b)(2)(i).

²⁶² *Id.* §§ 157.208(a), 157.202(b)(6).

²⁶³ *Id.* § 157.211(a)(1).

²⁶⁴ *Id.* § 157.213(a).

²⁶⁵ *Id.* § 157.215.

²⁶⁶ See id. § 157.202(b)(3).

the certificate holder has effectively unrestricted authority to exercise eminent-domain power to force sales of private property, including of properties outside the areas described in the applicant's application.²⁶⁷

Practically speaking, this authority gives the applicant free rein to use eminent-domain authority to acquire and construct pipeline facilities well outside the footprint considered and approved by FERC. So long as the applicant spends only \$11.8 million on construction for any given "project," it need never again ask permission from FERC to add small-diameter lateral or gathering lines, delivery or receipt points, or interconnection facilities, no matter where they are located. Likewise, the applicant, under the guise of "replacement" or even "rearrangement," can move even segments of its main line to different property than the project footprint FERC has approved. And whenever it does so, the applicant can seize whatever property it wants from nearby landowners through eminent domain, without any oversight by FERC.

Such a remarkable degree of laissez-faire is incompatible with the statutory requirements imposed by the NGA. Section 7(c) of the NGA bars "the construction or expansion of any facilities" for the transportation or sale of natural gas, or the acquisition or operation of any such facilities or extensions, unless FERC issues a certificate specifically "authorizing such acts or operations." Moreover, FERC's authority to

²⁶⁷ 15 U.S.C. § 717f(h).

²⁶⁸ Under 18 C.F.R. § 157.202(b)(8)'s narrow definition of "project cost," only "the total actual cost of constructing the jurisdictional portions of a project" is taken into account, thereby excluding both the costs of eminent-domain property acquisition and any nonjurisdictional portions of a project in determining whether an activity is automatically authorized. Moreover, Commission practice demonstrates that even this limited restraint is merely nominal, as the cost cap can be, and regularly is, waived.

²⁶⁹ 15 U.S.C. § 717f(c)(1)(A).

grant a certificate under Section 7(c) is limited to approval of an "operation, sale, service, extension, or acquisition *covered by the application*"—that is, the activity in question must have actually been "proposed" by the applicant and so considered by FERC. ²⁷⁰

Approval of particular activities is further restricted to those that, upon FERC's finding, are or "will be required by the present or future public convenience and necessity."²⁷¹

In light of those application and finding requirements, FERC's authority does not extend to blanket approvals of unknown future extensions, expansions, rearrangements, or replacements, at least where such actions are not limited to the pipeline footprint actually proposed by an applicant and considered and approved by FERC. ²⁷²

B. Granting Blanket Certificates Violates FERC's Statutory Mandate to Evaluate the Economic and Environmental Impacts of Proposed Projects

FERC has a statutory mandate to evaluate the economic and environmental impacts of proposed pipeline projects. ²⁷³ By definition, however, whenever FERC grants a "blanket" certificate that authorizes construction outside a project footprint FERC has expressly evaluated and approved, FERC is authorizing the applicant to undertake construction that FERC has not evaluated for economic and environmental impact. FERC's practice of granting "blanket" certificates—at least those that authorize

²⁷⁰ *Id.* § 717f(e) (emphasis added).

²⁷¹ *Id*.

²⁷² See Williston Basin Interstate Pipeline Co. v. Exclusive Gas Storage Leasehold & Easement, 524 F.3d 1090, 1099 (9th Cir. 2008) ("[A] CPCN holder's power of eminent domain 'extends only to the property located within the geographic area designated on the map or maps attached to the application for the certificate." (quoting Columbia Gas Transmission Corp. v. Exclusive Gas Storage Easement, 578 F.Supp. 930, 932 (N.D. Ohio 1984), aff'd, 776 F.2d 125 (6th Cir. 1985))).

²⁷³ See 15 U.S.C. § 717f(a) (projects must be in the public interest).

construction outside evaluated and approved project footprints—violates FERC's statutory mandate to consider the economic and environmental impacts of proposed pipeline projects.

C. Granting Blanket Certificates Violates the NGA's Notice-and-Hearing Requirements

Except in cases of emergency, an application for authority to engage in acts requiring a certificate of public convenience and necessity requires FERC to "set the matter for hearing" and to give "reasonable notice of the hearing . . . to all interested persons." That requirement—and the statutory due-process rights conferred on "interested persons"—is impermissibly evaded by the purported grant of "blanket authorization" for "future facility construction" contemplated but not specified by a certificate application.

D. Permitting the Blanket Certificates Here Would Violate the Due Process Clause of the Fifth Amendment

The fact that blanket authorization also allows private exercise of the sovereign power of eminent domain for previously unconsidered project expansions or "rearrangements" creates significant constitutional concerns. As the Fifth Circuit recently explained, "when private parties have the unrestrained ability to decide whether another citizen's property rights can be restricted, any resulting deprivation happens without 'process of law.'"²⁷⁵ That is why, "when the power of eminent domain is partially delegated to a private company, that delegation must be as limited as possible to protect

²⁷⁴ 15 U.S.C. § 717f(c)(1)(B).

²⁷⁵ Boerschig v. Trans-Pecos Pipeline, L.L.C., __ F.3d __, 2017 WL 4367151, at *5 (5th Cir. Oct. 3, 2017).

landowners from abusive takings under the Fifth Amendment."²⁷⁶ FERC's overly broad blanket-certificate practices violate this principle.

E. Granting the Blanket Certificates Here Would Violate the Constitutional Separation of Powers, Including by Violating the Private Nondelegation Doctrine

By statute, "[a] natural gas company may not condemn additional property that is not specifically described in its existing CPCN, even if the natural gas company seeks to acquire such property in order to operate and maintain an existing [pipeline] facility."²⁷⁷ That limit must be rigorously enforced, because the failure to do so transmogrifies the NGA's partial delegation of eminent-domain power to a private entity into an unchecked abdication of sovereign authority. As the Supreme Court explained long ago, "[a] distinction exists" between provisions that "authorize officials to exercise the sovereign's power of eminent domain on behalf of the sovereign itself" and "statutes which grant to others, such as public utilities, a right to exercise the power of eminent domain on behalf of themselves."²⁷⁸ The latter type, such as Section 7(h) of the NGA, "are, in their very nature, grants of limited powers."²⁷⁹

Because the certificate's "blanket authorization," coupled with Section 7(h)'s conferral of eminent-domain authority, grants to a private entity precisely the type of

²⁷⁶ Columbia Gas Transmission, LLC v. 1.01 Acres, More or Less, 768 F.3d 300, 328 (3d Cir. 2014) (Jordan, J., dissenting); accord United States v. Certain Parcels of Land, 215 F.2d 140, 148 (3d Cir. 1954) ("the eminent domain power delegated to private groups has always been more closely limited than that inherent in sovereignty").

²⁷⁷ Williston Basin, 524 F.3d at 1099.

²⁷⁸ United States v. Carmack, 329 U.S. 230, 243 n.13 (1946).

²⁷⁹ *Id.* (emphasis added).

"unrestrained ability to decide" to take another citizen's property that the private nondelegation doctrine condemns, ²⁸⁰ the certificate cannot stand as issued.

V. Conditional and Blanket Certificates Both Violate Fifth-Amendment Just-Compensation Requirements

The Takings Clause requires the payment of "just compensation" when private property is taken for public use.²⁸¹ Because the duty to pay just compensation is "inseparable from the exercise of the right of eminent domain," any act granting condemnation power "must provide for compensation" with absolute certainty.²⁸²

It is not enough for a statute simply to say that just compensation will be paid.

Rather, "the owner is entitled to reasonable, certain, and adequate provision before his occupancy is disturbed." Proving "adequate provision" of just compensation requires showing that "the means for securing indemnity [are] such that the owner will be put to no risk or unreasonable delay." And a statute that "attempts to authorize the appropriation of public property for public uses, without making adequate provision for compensation, is unconstitutional and void and does not justify an entry on the land of the owner without his consent." 285

To satisfy the Takings Clause, "compensation must be either ascertained and paid to [the landowner] before his property is thus appropriated, or an appropriate remedy

²⁸⁰ *Boerschig*, 2017 WL 4367151 at *5.

²⁸¹ U.S. CONST. amend. V.

²⁸² Sweet v. Rechel, 159 U.S. 380, 400-01 (1895) (citation omitted).

²⁸³ *Id.* at 403.

²⁸⁴ *Id.* at 401 (citation omitted).

²⁸⁵ *Id.* at 402 (citation omitted).

must be provided, *and upon an adequate fund*, whereby he may obtain compensation through the courts of justice."²⁸⁶ In other words, if the taker wants to take the property before compensation is finally decided by the court, the taker must have an "adequate fund" for the payment of compensation awards.

Different rules apply to government takers and private entities in proving an "adequate fund" for just-compensation awards. When the taker is a governmental entity, the pledge of "the public faith and credit" is enough to ensure just compensation. But when, as here, the taker is a private entity, the taker "has neither sovereign authority nor the backing of the U.S. Treasury to assure adequate provision of payment." Thus, a private taker must do more than just promise to pay to "satisf[y] the constitutional requirements" of the "just compensation' guarantee." In *Washington Metropolitan Area Transit Authority v. One Parcel of Land*, the taker met that burden by showing that it (1) "ha[d] the ability to be sued" and (2) owned "very substantial assets" such that "just compensation [was], to a virtual certainty, guaranteed."

Here, the applicant has not met that test. While the applicant may be sued, it has not shown that it has such "substantial assets" that just compensation is guaranteed "to a

²⁸⁶ *Id.* at 406 (emphasis added).

²⁸⁷ Wash. Metro. Area Transit Auth. v. One Parcel of Land in Mortgomery County, 706 F.2d 1312, 1320-21 (4th Cir. 1983).

²⁸⁸ Transwestern Pipeline Co. v. 17.19 Acres of Prop. Located in Maricopa County, 550 F.3d 770, 775 (9th Cir. 2008).

²⁸⁹ *Id.* at 1321.

²⁹⁰ *Id.*; see also E. Tenn. Nat. Gas Co. v. Sage, 361 F.3d 808, 824 (4th Cir. 2004) (finding adequate assurance that landowners would receive just compensation because taker's parent company reported earnings of \$1.17 billion from its natural-gas transmission division in year before taking).

virtual certainty."²⁹¹ FERC never required such a showing before delegating eminent-domain power to the applicant, which means there is no record of the applicant's assets—whether encumbered or unencumbered—in FERC's docket.

Moreover, there is ample reason to worry that the applicant lacks sufficient assets to guarantee just compensation. The applicant is a Delaware limited-liability company and is a special-purpose, joint-venture entity set up in 2015 for the sole purpose of this particular pipeline project.²⁹² As FERC recognizes in its Order, the applicant "does not currently own or operate any interstate pipeline facilities" and has "no existing customers."

As FERC further recognizes, "greenfield pipelines undertaken by a new entrant in the market" like the applicant "face higher business risks than existing pipelines proposing incremental expansion projects." Even disregarding its greenfield status, the applicant is inherently at risk of going bust because it is a private company. Indeed, its owner-operator has already admitted in an SEC filing that the applicant "has insufficient equity to finance its activities during the construction stage of the project." ²⁹⁵

Given all this, the landowners facing condemnation by this fledgling venture do not have "adequate provision" or an "adequate fund" to ensure that "just compensation is,

²⁹¹ *Id*.

²⁹² Amended and Restated Certificate of Formation of Mountain Valley Pipeline, LLC (filed Mar. 11, 2015), appended as **Attachment C**.

²⁹³ Certificate Order at 2, 11.

²⁹⁴ Certificate Order at 35.

²⁹⁵ EQT Midstream Partners, LP 2016 Annual Report (Form 10-K) at 78, appended as **Attachment D**.

to a virtual certainty, guaranteed."²⁹⁶ The applicant cannot overcome this problem by arguing that potential earnings from the project "would probably be sufficient to meet and extinguish claims for damages for lands taken."²⁹⁷ As the Supreme Court has explained, such arguments and expectations "f[all] short of the constitutional requirement that the owner of property shall have prompt and certain compensation, without being subjected to undue risk or unreasonable delay."²⁹⁸ Because the applicant has not proven it has an "adequate fund" to pay just-compensation awards, FERC cannot allow the applicant to exercise the power of eminent domain under a certificate of convenience and necessity.

VI. FERC Violates the NGA by Failing to Make Findings About Applicants' Ability to Pay Just Compensation

Questions about whether an applicant will ultimately be able to pay just compensation do not implicate only the Fifth Amendment; they implicate the NGA, too. 15 U.S.C. § 717f(e) provides that an applicant can obtain a certificate only "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." One of the "acts" contemplated by "this chapter" of the NGA is eminent domain, ²⁹⁹ and the only way "properly to do" eminent domain is to pay just compensation. Thus, to comply with 15

²⁹⁶ Wash. Metro., 706 F.2d at 1320-21.

²⁹⁷ Sweet, 159 U.S. at 402.

²⁹⁸ *Id*.

²⁹⁹ See 15 U.S.C. § 717f(h).

U.S.C. § 717f(e), FERC must make a finding that an applicant "is able and willing properly to" pay just compensation. Its failure to do so in a given certificate is fatal.³⁰⁰

VII. "Quick-Take" Under the Natural Gas Act is Unconstitutional

A. By Failing to Preclude Applicants From "Quick-Taking" Property, FERC Interprets the NGA in a Manner That Violates the Constitution

Once FERC issues a certificate, the applicant is immediately invested with the power of eminent domain. But to begin actually taking property, it must first file suit in federal district court. By statute, "[t]he practice and procedure in any action or proceeding for that purpose" is supposed to "conform as nearly as may be with the practice and procedure in similar action or proceeding in the courts of the State where the property is situated. In reality, though, district courts in the Fourth Circuit (where these takings will occur) have created a "quick-take" procedure whereby they allow pipelines to take property through an abridged procedure that mirrors the rule of civil procedure that governs injunctions (Rule 65). On the state of the state of

As explained in the following sections, the judicially-created quick-take procedure causes constitutional problems. FERC could obviate these problems by imposing conditions (of the "limitation" variety) prohibiting applicants from using the

³⁰⁰ See Steere Tank Lines, Inc. v. I.C.C., 714 F.2d 1300, 1314 (5th Cir. 1983) ("[T]he absence of required findings is fatal to the validity of an administrative decision regardless of whether there may be in the record evidence to support proper findings.") ((internal punctuation and citation omitted).

³⁰¹ 15 U.S.C. § 717f(h).

 $^{^{302}}$ *Id*.

³⁰³ *Id*.

³⁰⁴ See E. Tennessee Nat. Gas Co. v. Sage, 361 F.3d 808, 822 (4th Cir. 2004).

quick-take procedure.³⁰⁵ Indeed, under the doctrine of constitutional avoidance, FERC *should* do so.³⁰⁶ But it does not, running afoul of that doctrine.

B. By Failing to Preclude Applicants From "Quick-Taking" Property, FERC's Order Violates Constitutional Separation-of-Powers Doctrine.

Only Congress has the power to delegate eminent-domain authority; the Judicial Branch cannot do it, and neither can the Executive Branch.³⁰⁷ Pursuant to that power Congress has expressly imbued governmental agencies with quick-take power,³⁰⁸ and has occasionally granted to power to nongovernmental entities. But, critically, the NGA contains no such quick-take provision for private pipeline companies.

Even so, certificate holders have frequently—and oftentimes successfully—invoked their FERC certificates as a ground for courts to authorize "quick-take" (rather than "straight") condemnations. This invocation is not baseless, as the certificates implicitly bless quick-take by authorizing construction to begin once all project permits have issued—even if a final judicial determination of just compensation has not yet occurred.

FERC could prevent this state of affairs by imposing conditions expressly limiting the applicant's exercise of eminent domain until after the court system has finally determined the proper amount of just compensation for the affected properties.

³⁰⁵ Cf. Mid-Atlantic Express, LLC v. Baltimore Cty., Md., 410 Fed. App'x 653, 657 (4th Cir. 2011) (holding that, as a certificate condition, Commission could validly prohibit applicant from exercising eminent domain).

³⁰⁶ See F.C.C. v. Fox Television Stations, Inc., 556 U.S. 502, 516 (2009).

³⁰⁷ Berman v. Parker, 348 U.S. 26, 32 (1954).

³⁰⁸ See 40 U.S.C. § 3114.

C. By Failing to Preclude Applicants From "Quick-Taking" Property, FERC Facilitates Due-Process Problems

When a pipeline company avails itself of the quick-take procedure, the landowner has no opportunity to conduct discovery, obtain its own appraisal of just compensation, or avail itself of any of the other procedural protections inherent in traditional judicial proceedings. This violates the due-process guarantee of the Fifth Amendment. Again, FERC could prevent this due-process violation by prohibiting applicants from utilizing quick take.

D. By Failing to Preclude Applicants From "Quick-Taking" Property, FERC Violates the Just Compensation Clause of the Fifth Amendment

As explained above, every time a private, for-profit entity takes property, there is a real risk that it will ultimately be unable to pay just compensation. (As also explained above, that risk is especially apparent in this case.) That risk is mitigated when the entity does not take property until after (1) a full and final judicial determination of just compensation and (2) a guarantee of payment (deposit or bond) based on that figure. That is what happens in a "straight" condemnation proceeding. But with the quick-take procedure, a pipeline company is able to take property based on only its own, self-serving appraisal of what just compensation will ultimately be. This poses constitutionally unacceptable risk that the landowner will not ultimately receive just compensation if it

³⁰⁹ In contrast, there is no such risk when the federal government takes property, which is why the federal government's quick-take power (40 U.S.C. § 3114) is constitutionally unproblematic.

³¹⁰ See Sage, 361 F.3d at 821.

³¹¹ See id. at 823-27 (citing FED. R. CIV. P. 71.1).

proves to be more than the pipeline company estimated.³¹² Again, FERC could obviate that risk by prohibiting applicants from using "quick take," which Congress has not authorized under the NGA.

VIII. FERC's Refusal to Consider Constitutional Challenges Violates Landowners' Fifth Amendment Due-Process Rights

FERC contends that review under Section 7r does not extend to determinations of the constitutionality of the Natural Gas Act and the exercise of eminent domain thereunder. FERC claims that such matters are outside the scope of its jurisdiction. As a result, unless allowed to raise such arguments in a separate suit (i.e., in federal district court), landowners cannot raise constitutional challenges to proposed pipeline projects in FERC. Further, if FERC lacks jurisdiction to adjudicate such claims, it seems unlikely the federal appellate courts could review arguments that were not properly before FERC. And even if the appellate courts could review such arguments, the damage would have already been done by the time the appellate courts get the case, as certificated pipeline companies have often long since taken property and commenced construction, irreversibly altering the landowners' property. By denying landowners any opportunity to raise constitutional challenges until after their property is already taken and irreversibly altered, FERC denies those landowners the due process of law required by the Fifth Amendment.

IX. FERC Denied Landowners Due Process By Refusing Them Access to Key Documents

³¹² See Sweet, 159 U.S. at 400-04.

³¹³ See Certificate Order at 61.

In granting the Certificate Order FERC relied on privileged and confidential information submitted by the applicant in its application—specifically, the applicant's precedent agreements and Exhibit G flow diagrams—to find project need. ³¹⁴ Despite landowners' repeated demands for disclosure, FERC denied them access to this evidence, thus preventing them from meaningfully responding to or rebutting FERC's conclusions in the Certificate Order.

The precedent agreements and Exhibit G diagrams were clearly critical to FERC's assessment of project need. FERC's Certificate Order characterizes the precedent agreements as "the best evidence" of project need and relies on them heavily, over the dissent of Commissioner LaFleur, to justify a grant of the certificate. Similarly, the Exhibit G diagrams are central to FERC's analysis because (1) they can be used to independently verify need and (2) they reflect capacity with and without the proposed facilities in place, the utilization of each component of the facility, and the maximum allowable operating pressure (MAOP) of each line, which in turn informs whether each line can accommodate additional capacity. In past cases, experts have used Exhibit G diagrams to show that a pipeline has been segmented. In overbuilt, that system

³¹⁴ The precedent agreements were included in the application heavily redacted, while the Exhibit G filings did not appear on FERC's public docket at all.

³¹⁵ See 18 C.F.R. §157.14 (a)(8) (describing Exhibit G requirements).

 $^{^{316}}$ Algonquin Gas Transmission, 154 FERC ¶61,048 at 68 (referring to expert findings of segmentation based on Exhibit G diagrams).

³¹⁷ See Tennessee Gas Pipeline, 158 FERC ¶ 61,110 (2017) at 37 (noting that expert, relying on Exhibit G diagrams, found that 36-inch pipeline could be reduced to 16 inches); Algonquin Gas Transmission, 154 FERC ¶ 61,048 (2016) at 68 (referencing expert report concluding, based on Exhibit G Diagrams that pipeline is overbuilt to compensate for anticipated expansion), Comments of Delaware Riverkeeper Network,

alternatives are feasible, ³¹⁸ or that, contrary to the project sponsor's claims, the gas was bound for export. ³¹⁹

In May 2017, shortly after intervening in the proceeding, the Bold Alliance filed with FERC's FOIA and CEII Office a CEII Request to obtain the applicant's Exhibit G diagrams and precedent agreements. Bold Alliance explained that it was an intervenor in the proceeding and that it sought the Exhibit G diagrams and precedent agreements to enable it to meaningfully participate in the certificate proceeding on behalf of its landowner members. Yet neither FERC nor the applicant ever produced the Exhibit G diagrams.

Bold's inability to obtain the CEII information is not for lack of trying. In May 2017, counsel for Bold sent at least five emails to staff inquiring about the status of its CEII requests, and spent several hours discussing its requests with staff during four phone conversations during that period. With no success, Bold complained about staff's non-disclosure directly to FERC by letter dated September 27, 2017.

Bold Alliance's lack of access to the Exhibit G diagrams severely compromised its ability to meaningfully participate in the proceeding. FERC presumably relied on Exhibit G diagrams to evaluate and subsequently reject as infeasible several project alternatives, including the MVP–ACP single-pipeline option endorsed by

Millennium Eastern Upgrade, CP16-486 (March 26, 2017) (Accession No. 20170329-5228) (submitting expert testimony showing that proposed pipeline is unnecessary).

³¹⁸ See Millennium Pipeline, 141 F.E.R.C. ¶ 61,198 at 77 (2012)(agreeing with expert finding based on Exhibit G diagrams that system alternative is viable).

Dominion Gas LLC, 148 FERC ¶ 61,244 at 255 (2014) (acknowledging expert's analysis based on Exhibit G that facilities that company claimed would not support gas export showed that facility would support delivery to Cove Point).

Commissioner LaFleur in her dissent. Without access to the Exhibit G diagrams, the intervenors cannot meaningfully challenge the Certificate Order or rebut FERC's conclusions. Additionally, FERC relied on precedent agreements in the Certificate Order, referring to them multiple times and characterizing them as "the best evidence" of need.

The opportunity to review and timely rebut evidence in support of a decision that will result in deprivation of property rights is a "fundamental requirement of due process." With opportunity to respond to evidence upon which FERC relied in making a decision, due process is satisfied. 321

FERC has not satisfied those minimal due-process requirements here. Because intervenors, including Bold Alliance, were denied access to Exhibit G diagrams submitted by the applicants, they can neither evaluate nor verify the information contained in the applicant's submissions or meaningfully challenge FERC's conclusions that the undisclosed documents undergird. This proceeding stands in stark contrast those challenged in *Minisink* and *Myersville Citizens*, where the court found no due-process violations because the impacted parties had access to all record evidence filed by the applicants and relied on by FERC—including confidential filings—and an opportunity to rebut the evidence in advance of the deadline for rehearing.

Moreover, FERC cannot cure its violation of the intervenors' due-process rights by disclosing the Exhibit G diagrams after this rehearing request is filed. By that time, the deadline for rehearing will have passed, and Bold's arguments based on the previously

³²⁰ See Cleveland Board of Education v. Loudermill, 470 U.S. 532, 546 (1985).

³²¹ See Minisink Residents for Envtl. Pres. v. FERC, 762 F.3d 97, 115 (D.C. Cir. 2014); Myersville Citizens for Rural Cmt. v. FERC, 783 F.3d 1301 1328 (D.C. Cir. 2014).

undisclosed information will be untimely under § 717f(a) of the NGA. The only way for FERC to rectify these due-process violations is to stay the proceeding and either vacate the certificate entirely or reopen the record to allow for full and timely consideration of the intervenors' arguments.

MOTION FOR STAY

In addition to their request for rehearing, Intervenors also hereby expressly move FERC to issue a stay of the Certificate Order pending resolution of Intervenors' request for rehearing. FERC has the authority to issue such a stay under 5 U.S.C. § 705, and should do so where "justice so requires." Intervenors recognize that FERC has announced that its "general policy is to refrain from granting stay to ensure definiteness and finality in our proceedings." FERC, however, routinely argues that its orders are not final but are subject to modification at any time prior to conclusion of the rehearing process. To prevent impacts during the pendency of the rehearing process that are indeed final with respect to Intervenors' members, FERC should stay the Certificate Order based on the three factors that it considers in determining whether justice requires a stay. Those factors are "(1) whether the party requesting the stay will suffer irreparable injury without a stay, (2) whether issuing a stay may substantially harm other parties; and

³²² Intervenors note that because their request for rehearing is paired with a motion for stay, the request for rehearing is not a "stand alone" request and, therefore, FERC has not delegated authority to the Secretary to toll the time for action on Intervenors' request for rehearing. *See* 60 Fed. Reg. 62,326, 62,327 (Dec. 6, 1995).

³²³ 154 FERC ¶ 61,092 at P. 9.

³²⁴ See, e.g., Order Denying Stay of Atlantic Sunrise project, 160 FERC ¶ 61,042 P. 18.

(3) whether a stay is in the public interest."³²⁵ FERC has repeatedly stated that "[e]conomic loss, without more, does not constitute irreparable harm."³²⁶

The totality of the circumstances surrounding the Mountain Valley Pipeline require a stay in the interest of justice. Absent a stay, irreparable harm will befall the forests and streams along the MVP right-of-way, including to forests and streams treasured, owned, and managed by Intervenors' members. Moreover, any harm from a stay to the applicant would merely be economic, and the public interest favors a stay.

I. Construction of the MVP Will Cause Irreparable Harm to the Environment, Intervenors, and their Members

Construction of the MVP would result in permanent, irreparable harm. As its 303.5-mile long path snakes up and over the Appalachian mountains and through forests and streams, the MVP will require a 125-foot wide construction right-of-way and a 50-foot permanent right of way. Construction would disturb approximately 5,119.6 acres of land, and leave 1846.1 acres in the permanent right-of-way. During overland construction, the applicant will survey the right-of-way, clear it of vegetation, and grade it. Heavy machinery will traverse the corridor, digging a trench up to nine-feet deep in which to bury the 3.5 diameter pipe. At waterbody crossings, the applicant will

³²⁵ 154 FERC ¶ 61,263 at P. 4.

³²⁶ 154 FERC ¶ 61,092 at P. 10 (citing *Wisconsin Gas Co. v. FERC*, 758 F.2d 669, 674 (D.C. Cir. 1985).

³²⁷ FEIS at 2-23 to 2-24.

³²⁸ *Id.* at 2-21.

³²⁹ *Id.* at 2-37.

³³⁰ *Id.* at 2-38.

dewater a work area within the stream and dig a trench in the streambed.³³¹ The applicant will bury the pipeline at a depth of two to four feet below the streambed, depending on whether consolidated rock is encountered.³³² If the applicant cannot reach easement agreements with the owners of the properties on which it intends to build the pipeline, it will seize the easements it needs through the power of eminent domain under 15 U.S.C. § 717f(h).³³³ The deforestation, effects on surface and groundwaters, visual impacts, and condemnation of private property through eminent domain that would result from right-of-way construction constitute irreparable harm justifying a stay of the Certificate Order.

A. Timbering the MVP Right-of-Way During Construction, and Maintaining the Easement During Operation, Will Fragment Important Core Forests and Irreparably Harm The Environment, Intervenors, and Their Members

FERC concluded in its FEIS that, "in considering the total acres of forest affected, the quality and use of forest for wildlife habitat, and the time required for full restoration in temporary workspaces, . . . the projects would have significant impacts on forest. ³³⁴ The MVP will cross about 235 miles of forest and its construction will affect 4,435.1 acres of upland forest. ³³⁵ Nearly 2,500 of those disturbed acres, or approximately 55%, are in Large Core (greater than 500 acres) contiguous interior forest areas in West Virginia, and approximately 58 acres of impacted forests are High to Outstanding quality

³³¹ *Id.* at 2-43 to 2-44.

³³² *Id.* at 2-43.

³³³ *Id.* at 4-309.

³³⁴ *Id.* at 5-6.

³³⁵ *Id.* at 4-178, 5-5.

forest in Virginia.³³⁶ That would result in the "conversion of about 17,194 acres of interior forest in West Virginia and 5,579 acres of interior forest in Virginia into edge habitat."³³⁷ FERC also concluded that "[t]he clearing of vegetation would affect forest interiors, increase edge effects, and increase the potential for the introduction and spread of noxious and invasive plant species."³³⁸

Detailing the environmental consequences of deforesting the pipeline corridor, FERC explained:

Trees would be cut across the entire construction right-of-way. The permanent 50-foot-wide operational pipeline easement would be kept clear of trees in uplands. In forested areas, the operational right-of-way would result in the permanent conversion of forest to scrub-shrub lands and grasslands. This conversion would affect interior forests where the removal of trees would fragment forests and create new edges. Following construction, temporary workspaces would be allowed to regenerate. However, in forest the regeneration of trees would take many years, resulting in a long-term effect on forested vegetation. 339

Regarding the effects of the large-scale forest fragmentation that would result from the construction and operation of the MVP, FERC stated

Constructing the MVP and EEP would create a new, cleared corridor in areas of interior forest where the rights-of-way would not be collocated with existing linear corridors. Clearing or fragmentation of interior forests creates more edge habitat and smaller forested tracts, which can impact characteristics of vegetation communities including their suitability for wildlife.

The removal of interior forest in order to create the necessary rights-ofway would result in the conversion of forest area to a different vegetation type. This would contribute to forest fragmentation and the creation of

³³⁶ *Id.* at 5-5.

³³⁷ *Id*.

³³⁸ *Id.* at 4-177.

³³⁹ *Id.* at 4-177.

forest edges. The pipeline right-of-way through forest would result in the removal of habitat for interior species. The creation of a new corridor and forest edges could impact micro-climate factors such as wind, humidity, and solar exposure which could lead to a change in species composition. Forest edges also play a role in ecosystem functions, including the dispersal of plants and wildlife, the spreading of fire, movement of wildlife, and vegetation composition and structure. The new pipelines rights-of-way could also introduce non-native invasive species.

As previously noted, edge effects are estimate to extend from the edge of the open spaces up to 300 feet into the forested areas, on both sides of the right-of-way. Within this distance, forest impacts could include a change in available habitat for some species due to an increase in light and temperature levels on the forest floor and the subsequent reduction in soil moisture; such changes may result in habitat that would no longer be suitable for species that require these specific habitat conditions, such as salamanders and many types of plants. An alteration of habitat could affect the fitness of some species and increase competition both within and between species, possibly resulting in an overall change to the structure of the forest community. 340

Because of its long-term and large-scale effects on forests, FERC has concluded that the MVP would have a significant and long-term effect on the forests through which it will cut.³⁴¹ Those significant effects alone constitute sufficient irreparable harm to require a stay of the Certificate Order pending FERC's rehearing.

Petitioners' members will suffer irreparable harm if construction in the MVP right-of-way is permitted prior to rehearing by FERC or judicial review. James Gore is a member of Sierra Club and owns two parcels of land on which the MVP right-of-way is located.³⁴² One of the parcels—a 116-acre tract of land—is mostly forested.³⁴³ As Mr.

³⁴⁰ *Id.* at 4-181 to 4-182.

³⁴¹ *Id.* at 4-191, 5-6.

³⁴² Declaration of James Gore at ¶¶ 2–3. All declarations discussed in this motion are appended, in the order in which they are introduced, as **Attachment E**.

 $^{^{343}}$ *Id.* at ¶ 6.

Gore explains in his declaration, "[t]he forest on that parcel is part of an inventoried interior core forest of greater than 500 acres, identified as WV Core-20 on page 4-167 of the Final Environmental Impact Statement," and "[s]everal hundred feet of the MVP right-of-way will cut through mature, large core forest on the 116-acre parcel." In other words, Mr. Gore's forest will be among the acres converted from large, interior core forest into edge habitat.

Such a conversion would visit irreparable harm on Mr. Gore. He and his cotenants had intended to preserve those forests without timbering, and use the forest for game hunting, wildlife observation, and forest product gathering.³⁴⁵ The irreparable harm would result from both construction and operation of the MVP. In Mr. Gore's words

Timbering the MVP right-of-way on my property would result in a permanent scar through these forests that have meant so much to me throughout my life. Timbering land that I had intended to remain unspoiled will diminish my enjoyment of my time in the woods. Timber on the construction easement will not mature in my lifetime (I am 73 years old), so it might as well be forever. Moreover, if the permanent right-of-way is timbered, and the Certificate does not survive judicial review, then that land too will not produce mature forest within my lifetime.

I am concerned that timbering the MVP right-of-way and the resulting fracturing of the forest will harm the wildlife that I hunt and the non-game wildlife that I enjoy seeing while in the woods. Those concerns diminish my enjoyment of living here.

Accordingly, timbering on my property will cause harm to my property, recreational, and aesthetic interest in those forests that will not be remedied in my lifetime. 346

 $^{^{344}}$ *Id.* at ¶¶ 6–7.

 $^{^{345}}$ *Id.* at ¶ 8, 10.

 $^{^{346}}$ *Id.* at ¶¶ 11–14.

The irreparable harm that would be fall Mr. Gore and his forests is precisely the type of harm that a stay "when justice so requires" is designed to prevent.

Mr. Gore is not alone among Intervenors' members. Charles Chong and his wife Rebecca Eneix-Chong are members of West Virginia Rivers Coalition and co-own approximately 220 acres in Harrison County, West Virginia, on which the MVP right-of-way would be constructed. The MVP right-of-way will cross thousands of linear feet of forest on the ridge above their home, threatening them with increased risk of flooding and destroying their goal to "leave the forest undisturbed and to allow it to grow naturally." They estimate that the MVP right-of-way will destroy more than 13% of their forests. They estimate that "[t]he construction of this pipeline will be a violation, in the worst sense of the word, of our property and our persons." Ms. Eneix-Chong describes her farm as "my faith and my friend," stating that "[t]his land, this piece of earth sustains me. It is my soul, and now the MVP right-of-way slaughters both."

Sierra Club member Robert Jarrell owns a 90.5-acre parcel of land in Summers County, West Virginia, that he purchased to fulfill his lifelong dream of retiring to a mountainside in West Virginia. Approximately 65 acres of Mr. Jarrell's property is forested, and the MVP right-of-way runs over 3,000 feet of his property, almost

³⁴⁷ Declaration of Charles Chong at $\P\P$ 2–3; Declaration of Rebecca Eneix-Chong at $\P\P$ 2–3.

³⁴⁸ Chong Declaration at \P 7; Eneix-Chong Declaration at \P 7.

 $^{^{349}}$ Chong Declaration at \P 8; Eneix-Chong Declaration at \P 8.

³⁵⁰ Chong Declaration at \P 9.

³⁵¹ Eneix-Chong Declaration at \P 9.

³⁵² Declaration of Robert Marcus Jarrell at \P 2–3.

exclusively in the forested portion.³⁵³ Mr. Jarrell is "absolutely sick about the imminent construction of the MVP on [his] property," which will diminish his enjoyment of his time on his forested ridgeline he describes as "the most peaceful place."³⁵⁴

In sum, the deforestation of more than 4,400 hundred acres of forests and the conversion of more than 17,000 acres of interior core forest to edge habitat will bring about irreparable harm to the forests along the MVP right-of-way and to Intervenors' members. That is precisely the type of harm that justifies a stay pending rehearing. Intervenors' showing here is more than just a "mere recitation that it has an issue regarding deforestation [that] fails to show how irreparable harm will occur absent a stay." Rather, it is an injury "both certain and great" that would be "actual and not theoretical." FERC conceded that the impacts of the MVP on forests will be long-term and significant. Such harm is cognizable irreparable harm the supports issuance of a stay.

³⁵³ *Id.* at 3–4.

 $^{^{354}}$ *Id.* at ¶ 6.

³⁵⁵ 112 FERC ¶ 61,172 at P. 13 (2005).

³⁵⁶ Wisconsin Gas Co., 758 F.2d at 674.

³⁵⁷ FEIS at 4-191, 5-6.

³⁵⁸ See, e.g., Amoco Prod. v. Village of Gambell, 480 U.S. 531, 545 (1987) ("Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable."); Alliance for the Wild Rockies v. Cottrell, 632 F.3d 1127, 1135 (9th Cir. 2011) (finding timbering and loss of use of enjoyment of forested areas to constitute irreparable harm); Cronin v. U.S. Dep't of Agriculture, 919 F.2d 439, 445 (7th Cir. 1990) (recognizing timbering as an irreparable harm); Environmental Defense Fund v. Tenn. Valley Authority, 468 F.2d 1164, 1183–84 (6th Cir. 1972) (holding that cutting and burning of timber is the type of "permanent defacing [of] the natural environment" to constitute irreparable harm supporting an injunction); Sierra Club v. Bosworth, Civ. No. C-04-02588-CRB, 2005 WL

B. Construction and Operation of the MVP Will Cause Irreparable Harm to Surface and Ground-Waters, Intervenors, and Their Members

Construction and operation of the MVP also threatens imminent harm to the environment, Intervenors, and their members through its effects on surface- and ground-waters. The MVP right-of-way requires 1,108 waterbody crossings. The MVP right-of-way also crosses vast swaths of karst terrain, and "[k]arst areas are susceptible to a greater range of environmental impact because of the highly developed subterranean network and associated fragile ecosystems."

Moreover, surface waters will receive sedimentation from construction and operation of the MVP as a result of stream crossings and construction in areas adjacent to streams. FERC downplayed these impacts, relying in large part on best management practices ("BMPs"). But the erosion and sediment controls that are part and parcel of those BMPs will not and cannot prevent all sedimentation effects. 363

As FERC acknowledged in the FEIS, "construction of the MVP would disturb about 5,053 acres of soils that are classified as having the potential for severe water erosion." FERC also recognized that "[a]bout 152 miles (77 percent) of the MVP

³⁰⁹⁶¹⁴⁹ at *11 (N.D. Cal. Nov. 14, 2005) ("Timber cutting that has an environmental impact always has a strong potential of causing irreparable harm justifying preliminary relief.").

³⁵⁹ FEIS at ES-6.

³⁶⁰ *Id.* at 4-105 & 4-93.

³⁶¹ *Id.* at 4-136 to 4-137.

³⁶² *Id.* at 4-149.

³⁶³ See Section II.D, supra.

³⁶⁴ *Id.* at 5-2.

pipeline route in West Virginia is considered to have a high incidence of and high susceptibility to landslides. In Virginia, about 51 miles (48 percent) of the proposed alignment has a high incidence of and high susceptibility to landslides "365 FERC further concluded that soil compaction from construction could "increase[] surface runoff into surface waters in the immediate vicinity of the proposed construction right-of-way . . . resulting in increased turbidity levels and increased sedimentation rates in the receiving waterbody." Accordingly, the risk of sedimentation from construction and operation of the MVP is high.

But, as presented by MVP's own consultant, even "assum[ing] strict adherence to the FERC 2013 Upland Erosion Control, Revegetation, and Maintenance Plan and the Project Erosion and Sediment Control Plan during construction," many miles of stream segments downstream of the MVP right-of-way would experience an increase in sediment loads of 10 percent or greater. Importantly, MVP's consultant only quantified sedimentation for a small subset of the streams affected by construction and operation of the pipeline and its quantification significantly underestimates impacts because of its unreasonable and unsupported assumptions regarding the efficacy of MVP's proposed erosion and sediment control practices. There is no reason to assume

³⁶⁵ *Id.* at 4-28.

³⁶⁶ *Id.* at 4-137.

³⁶⁷ FEIS App. O-3 at O3-28, O3-24. As Intervenors explained above, that estimate is likely significantly low because of the unreasonable, unsupported assumptions regarding the efficacy of MVP's proposed erosion and sediment control practices.

³⁶⁸ See Section II.D.1, supra.

that this type of significant effect would be limited to the subset of streams assessed by MVP.

The construction and operation of the MVP also threatens the Greenbrier River with sedimentation, blasting, and interference with recreation at the location at which it would cross that important stream. As FERC acknowledged in its FEIS, "[t]he Greenbrier River supports many types of recreational activities, including fishing and boating. Additionally, scenic trails and roadways follow beside the river." FERC also acknowledged that "[p]eople participating in recreational activities on the river or along the [Greenbrier River] banks may be affected during construction."³⁷⁰ The clearing of the MVP right-of-way will affect the view from the Greenbrier River Crossing.³⁷¹ The Greenbrier River is listed in the Nationwide River Inventory because of its status as a "free-flowing river segment in the United States that possess[es] outstandingly remarkable natural or cultural values, which are considered to be of national significance."372 Indeed, the Greenbrier River potentially qualifies as a national wild. scenic, or recreational river.³⁷³ Additionally, the Greenbrier River is protected under the Natural Streams Preservation Act of West Virginia and is a Section 10 water under the Rivers and Harbors Act. 374

³⁶⁹ FEIS at 4-281.

³⁷⁰ *Id.* at 4-317.

³⁷¹ *Id.* at 4-323.

³⁷² *Id.* at 4-126.

³⁷³ *Id*.

³⁷⁴ *Id.* at 4-127.

Intervenors' members will experience the above-described irreparable injuries in a personal way. Sierra Club member Maury Johnson owns property in Monroe County, West Virginia, across which the MVP right-of-way will be constructed. The Johnson's property contains karst-like geography, and surface and groundwater hydrologic connections to the extent that his drinking water is threatened by the construction and operation of the MVP. MVP's surveyors gave Mr. Johnson the sense that it would be hard for the pipeline to be constructed and operated without affecting the water on his property.

Construction and operation of the MVP right-of-way also threatens the surface waters of Sierra Club member James Gore, ³⁷⁸ as well as West Virginia Rivers Coalition members Charles Chong and Rebecca Eneix-Chong. ³⁷⁹ That imminent threat of irreparable harm supports a stay of the Certificate Order.

Finally, Sierra Club member Tammy Capaldo owns the property on the south side of the Greenbrier River at the location that the MVP right-of-way crosses the river. 380 Ms. Capaldo purchased that property to fulfill her lifelong dream of living on the Greenbrier River because of her connection to that river. 381 She uses her property for

³⁷⁵ Declaration of Maury Johnson at \P ¶ 2–3.

 $^{^{376}}$ *Id.* at ¶ 7–8.

 $^{^{377}}$ *Id.* at ¶ 8.

³⁷⁸ Gore Declaration at $\P\P$ 4–5.

³⁷⁹ Chong Declaration at $\P\P$ 3–6; Eneix-Chong Declaration at $\P\P$ 3–6.

³⁸⁰ Declaration of Tammy Capaldo at ¶¶ 1–36.

 $^{^{381}}$ *Id.* at ¶ 4–6.

recreation, and the construction of the MVP right-of-way will severely harm that use, if not eliminate it entirely.³⁸² Indeed, she may have to abandon her dream of living on the property full-time.³⁸³

In sum, the environmental damage that will result from construction and operation of the MVP right-of-way on water resources near and in its path threatens irreparable harm to streams, Intervenors, and their members. That sort of irreparable harm is sufficient to support a stay of the Certificate Order.³⁸⁴

C. The Impacts on Visual Resources Will Cause Irreparable Harm to Intervenors' Members

As FERC conceded in the FEIS, "the pipeline corridor itself may be a significant visual feature, especially in mountainous terrain with multiple viewpoints." In a discussion of the visual impacts of the MVP in the Jefferson National Forest, which is similar to terrain and landscape to much of Monroe County, FERC stated

Where visible in foreground and middleground distance zones (up to 4 miles) and where the project would be on moderate to steep slopes, the project during the construction period and after would either dominate or begin to dominate the characteristic landscape depending on the angle and aspect of view, the relative size of the project within the overall viewshed from the viewer's location, and the duration of view (in a moving car, hiking, stopping at an overlook). Where visible in the background distance zone, the project could begin to dominate the characteristic landscape, particularly in fall, winter and spring seasons when air quality is typically clear, and also when the corridor becomes covered in frost or snow. The clearing of trees from the right-of-way would have a long-term

 $^{^{382}}$ *Id.* at ¶¶ 17–22.

 $^{^{383}}$ *Id.* at ¶ 18.

³⁸⁴ See, e.g., Sierra Club v. U.S. Forest Serv., 843 F.2d 1190, 1194–95 (9th Cir. 1988) (concluding that harm related to stream sedimentation from logging was sufficient to support preliminary injunction).

³⁸⁵ FEIS at 4-321.

impact on the visual resources because of the time it takes for trees to mature and reinstate the textures and colors of trees and reduce the visibility of the lines along each edge of the construction corridor.³⁸⁶

These long term visual effects will permanently harm the scenic nature of the rural areas through which the MVP right-of-way will pass.

Intervenors members will suffer irreparable harm to their recreational and aesthetic interests as a result of the visual impacts of construction of the MVP. For example, Sierra Club member Naomi Cohen lives in Monroe County, West Virginia, and frequently hikes to the Hanging Rock Observatory on Peters Mountain in Monroe County. Based on her knowledge of the area and her review of maps of the MVP right- of-way, Ms. Cohen "has little doubt that the construction of the pipeline, as well as the right-of-way that remains after construction, will interrupt the magical view from the Observatory and several other vistas along the Allegheny Trail that I hike, including at Neel's Rocks and Cole's Cabin." Ms. Cohen describes the harm that would befall her from the visual impacts of right-of-way construction this way:

As of right now, the view from the Observatory is superior in many way to other vistas in this region to which I hike because of the absence of the sight of human impacts, beyond farming, such as utility rights-of-way. I am disturbed by the knowledge that my view from the Observatory and the Allegheny Trail will be marred by a wide swath of deforested land, in the form of the Mountain Valley Pipeline right-of-way marching and snaking over the ridges and through the forests of Monroe County.

... If the Mountain Valley Pipeline were constructed as proposed, the view of its right-of-way through Monroe County and into Virginia would diminish my enjoyment of my hikes along the Allegheny Trail and of my time at the Hanging Rock Observatory. I anticipate that the peace,

³⁸⁶ *Id.* at 4-335.

 $^{^{387}}$ Declaration of Naomi Cohen at ¶¶ 1–13.

 $^{^{388}}$ *Id.* at ¶ 9.

inspiration, and rejuvenation that I find there would be marred by frustration, sadness, and sorrow. ³⁸⁹

The harm to Ms. Cohen's and other hikers' recreational and aesthetic interests is irreparable because it cannot be remedied by money and because of its long-lasting, if not permanent, character. Accordingly, the visual impacts of the MVP justify a stay of the Certificate Order.

D. The Applicants Use of Eminent Domain Based on the Certificate Order Will Irreparably Harm Intervenors' Members Absent a Stay

Absent a stay of the Certificate Order, Intervenors' members are threatened with irreparable injury resulting from condemnation proceedings to seize easements across their land that may be based on an unlawful Certificate Order. The applicant has commenced condemnation actions in federal district court in the United States District Court for the Southern District of West Virginia and in the United States District Court for the West District of Virginia. In both actions, MVP has moved for summary judgment and for preliminary injunctions for early possession to begin construction of the MVP right-of-way prior to the conclusion of those actions. Consequently, defendants in

 $^{^{389}}$ *Id.* at ¶¶ 10–11.

³⁹⁰ Amoco Prod., 480 U.S. at 545; Anglers of the AU Sable v. U.S. Forest Serv., 402 F. Supp. 2d 826, 838 (E.D. Mich. 2005) (finding irreparable harm based in part on visual impacts).

³⁹¹ 15 U.S.C. § 717f(h).

³⁹² Mountain Valley Pipeline, LLC v. An Easement to Construct and Maintain a 42-inch Gas Transmission Line Across Properties in the Counties of Nicholas, Greenbrier, Monroe, Summers, Braxton, Harrison, Lewis, Webster, and Wetzel, West Virginia et al., Civ. No. 2:17-cv-04214 (S.D. W. Va.); Mountain Valley Pipeline, LLC v. Easements to Construct, Operate, and Maintain a Natural Gas Pipeline Over Tracts of Land in Giles County, Craig County, Montgomery County, Roanoke County, Franklin County, and Pittsylvania County, Virginia et al., Civ. No. 7:17cv492-EKD (W.D. Va.).

those actions are threatened with premature entry of their property, premature timbering of their forests, and premature trenching on their property before FERC acts on Interveners' request for rehearing and before judicial review of the Certificate Order is available. Such premature destruction of private property under the color of a legally deficient Certificate of Public Convenience and Necessity threatens those landowners with irreparable injury. ³⁹³

Sierra Club members Tammy Capaldo, Maury Johnson, Robert Jarrell, and James Gore, and West Virginia Rivers Coalition members Charles Chong and Rebecca Eneix-Chong are defendants in the condemnation action in the United States District Court for the Southern District of West Virginia.³⁹⁴ If their forests are timbered and their riverfront beaches excavated under the color of FERC's legally deficient Certificate Order, those forests will not mature and those streambanks will not be restored in their lifetimes.

Those irreparable harms can only be avoided through a stay of the Certificate Order.

II. Any Harm to the Applicant Would Not Be Irreparable and is Outweighed by the Imminent Irreparable Harm to the Environment, Intervenors, and Their Members

The injury to Intervenors, the public, and the environment outweighs any harm that a stay may cause the applicant or FERC. Any delay in construction that would result from a stay would be, at most, merely economic harm, no matter how the applicant may

Neb. 1978) (holding condemnation of land can result in irreparable injury).

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³⁹³ See Carpenter Technology Corp. v. City of Bridgeport, 180 F.3d 93, 97 (2d Cir. 1999) (finding threat of irreparable injury presented by potentially wrongful exercise of eminent domain); *Tioronda, LLC v. New York*, 386 F. Supp. 2d 342, 350 (S.D.N.Y. 2005) (holding that deprivation of an interest in real property, and damage to sensitive vegetation and wetlands that would result from wrongful condemnation, constitutes irreparable harm); *Monarch Chemical Works, Inc. v. Exon*, 452 F. Supp. 493, 502 (D.

³⁹⁴ Capaldo Declaration at ¶ 36; Johnson Declaration at ¶ 24; Jarrell Declaration at ¶ 11; Gore Declaration at ¶ 14; Chong Declaration at ¶ 12; Eneix-Chong Declaration at ¶ 12.

try to spin it. Any harm that will befall the applicant stems directly from the fact that it entered into contracts and shipping agreements *in anticipation of a Certificate Order to which it had no guarantee*. Accordingly, the applicant, from the beginning of this venture, assumed the risk to its outlays in time and capital.³⁹⁵

Moreover, it is well established that economic harm is not irreparable. The D.C. Circuit has explained that "monetary loss may constitute irreparable harm only where the loss threatens the very existence of the movant's business." No matter how costly, the applicant cannot seriously contend that a stay would jeopardize its very existence without undermining its argument that it is sufficiently capitalized to undertake this endeavor, purportedly in the public convenience and necessity. Accordingly, economic harm to the applicant is not irreparable and does not provide an adequate basis for denying a stay, particularly when balanced against the irreparable harm to the environment, Intervenors, and their members. Even FERC acknowledges that principle.

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³⁹⁵ Sierra Club v. U.S. Army Corps of Eng'rs, 645 F.3d 978, 997 (8th Cir. 2011) (finding where permittees "jump the gun or anticipate a pro forma result in permitting application they become largely responsible for their own harm," even where company spent \$800 million on plant construction before a permit was issued).

³⁹⁶ Wisconsin Gas Co., 758 at 674.

³⁹⁷ See Sampson v. Murray, 415 U.S. 61, 90 (1974) (potential monetary injury is not irreparable); San Louis Valley Ecosystem Council v. U.S. Fish & Wildlife Serv., 657 F. Supp. 2d 1233, 1242 (D. Colo. 2009) ("delay in drilling the exploratory wells is not irreparable"); Ohio Valley Envtl. Coalition v. U.S. Army Corps of Eng's, 528 F. Supp. 2d 625, 632 (S.D. W. Va. 2007) ("Money can be earned, lost, and earned again; a valley once filled is gone."); Alaska Ctr. for the Env't v. West, 31 F. Supp. 2d 714, 723 (D. Alaska 1998) (longer permit processing time was "not of consequence sufficient to outweigh irreversible harm to the environment"); Citizen's Alert Regarding the Env't v. U.S. Dep't of Justice, Civ. No. 95-1702 (GK), 1995 WL 748246 at *11 (D.D.C. Dec. 8, 1995) (potential loss of revenue, jobs, and monetary investment that would be cased by project delay did not outweigh "permanent destruction of environmental values that, once lost, may never again be replicated").

III. A Stay of the Certificate Order is in The Public Interest

Because Intervenors seek to compel compliance with federal laws designed by Congress to protect the environment, and because a stay would prevent permanent environmental damage, the public interest weighs heavily in favor of granting a stay. The public interest is protected by preventing irreparable harm to the environment that will result from the construction activities. ³⁹⁹ Moreover, the public interest is served by ensuring that federal agencies scrupulously comply with their statutory duties. ⁴⁰⁰ The public "has a strong interest in maintaining the balance Congress sought to establish between economic gain and environmental protection." Congress instructed federal agencies to comply with NEPA "to the fullest extent possible." Congressional intent and statutory purpose are statements of the public interest. ⁴⁰³ Accordingly, there "is no

³⁹⁸ See, e.g., 154 FERC ¶ 61,263, at P 6.

³⁹⁹ See Nat'l Wildlife Fed'n v. Burford, 676 F. Supp. 271, 279 (D.D.C. 1985) ("a preliminary injunction would serve the public by protecting the environment from any threat of permanent damage").

⁴⁰⁰ See N.D. v. Haw. Dep't of Educ., 600 F.3d 1104, 1113 (9th Cir. 2010); Apotex, Inc. v. U.S. F.D.A., 508 F. Supp. 2d 78, 88 (D.D.C. 2007) ("When administrative agencies fail to follow statutory procedures, the public suffers."); Citizen's Alert, 1995 WL 748246 at *11 (compliance with the law "is especially appropriate in light of the strong public policy expressed in the nation's environmental laws" (citation omitted)); Fund for Animals v. Espy, 814 F. Supp. 142, 152 (D.D.C. 1993) (finding "meticulous compliance with the law by public officials" as relevant to the public interest).

⁴⁰¹ Ohio Valley Envtl. Coalition, 528 F. Supp. 2d at 633.

⁴⁰² 42 U.S.C. § 4332.

⁴⁰³ Johnson v. U.S.D.A., 734 F.2d 774, 788 (11th Cir. 1984).

question that the public has an interest in having Congress' mandates in NEPA carried out accurately and completely."

Indeed, the alternatives analysis is "the heart of the environmental impact statement." Allowing construction to continue while the Certificate Order is under rehearing dilutes the availability of a "no-action" and other potential alternatives to the MVP if FERC ultimately reconsiders its NEPA analysis. In that event, the applicant would be able to ram its preferred alternative through via construction without NEPA compliance, by maintaining that neither the "no action" alternative nor other alternatives are viable once the pipeline is finished. Such an outcome is most certainly not in the public interest. If construction is allowed to continue it would defeat the purpose and intent of NEPA, in contravention of the public's congressionally recognized interest in fully informed environmental decision-making.

Moreover, the MVP will cause or contribute to increased upstream gas production through hydraulic-fracking and infrastructure development, including all adverse environmental impacts associated therewith, and result in major adverse downstream environmental impacts from combustion of the natural gas. NEPA requires FERC to consider those adverse impacts, including the effects of burning gas that will produce tons of greenhouse gas emissions ("GHGs"), NO_x, VOCs, and HAPs. The pollutants that

⁴⁰⁴ Brady Campaign to Prevent Gun Violence, 612 F. Supp. 2d 1, 26 (D.D.C. 2009).

⁴⁰⁵ 40 C.F.R. § 1502.14.

⁴⁰⁶ See Davis v. Mineta, 302 F.3d 1104, 1115 n.7 (10th Cir. 2002) (once a part of a project proceeds "before environmental analysis is complete a serious risk arises that the analyses of alternatives required by NEPA will be skewed toward completion of the entire [p]roject").

result from the combustion of natural gas are known to cause serious adverse health effects. Thus, there is a strong interest in protecting the public from those effects.

Additionally, a stay is in the public interest in light of FERC's use of so-called "tolling orders" on requests for rehearing, which FERC maintains preclude judicial review. The public has an interest in judicial review of an agency action at a time that matters. If FERC follows its normal practice of tolling the time to act on the merits of Intervenors' request for rehearing, yet allows the applicant to construct the MVP, it will deprive the public of meaningful administrative and judicial process. For FERC to treat the Certificate Order as "final" for one purpose (allowing the applicant to construct the pipeline), yet insist that it is not final others (including for purposes of judicial review) violates the public's trust in this nation's administrative bodies to execute the laws of this Nation in a fair and equitable manner. Without a stay, FERC will essentially be stacking the deck for the applicant, and leaving the public, the environment, and affected landowners with no opportunity for meaningful relief.

The public interest also lies in affording parties due process of law under the Fifth Amendment to the United States Constitution. Intervenors and their members will be deprived of constitutionally-protected procedural due process rights. Construction of the pipeline will begin, private property will be condemned, and irreparable environmental harm will occur before FERC acts on the merits of Intervenors' request for rehearing. FERC will oppose judicial review of its NEPA and NGA analysis prior to action on the merits of Intervenors' request for rehearing, and condemnees (who number in the hundreds and, as described above, are currently defendants in two pending condemnation

actions in federal district court) may not be able to collaterally challenge the validity of the Certificate Order in the condemnation proceedings. 407

Procedural due process guarantees an "opportunity to be heard . . . at a meaningful time and in a meaningful manner." As the Supreme Court of the United States has observed, "[t]he basic guarantees of our Constitution are warrants for the here and now . . ." Without a stay, the environment, Intervenors, their members, and the public will be cast into administrative limbo. Without a stay, pipeline construction will proceed and FERC will insist that it maintains jurisdiction indefinitely over Intervenors' rehearing request.

For procedural due process, that will not suffice. Without a stay, FERC will insist that Intervenors sit on the sidelines and wait for the Commission to act on the merits of their request for rehearing; meanwhile, it will allow the applicant to proceed with construction of the MVP under the challenged Certificate Order. The only solution to protect the public's interest in the Constitutional exercise of FERC's administrative authority is a stay of the Certificate Order. "[I]t is always in the public interest to prevent violation of a party's constitutional rights."

Finally, given the high stakes, a stay of the Certificate Order and construction pending a final decision on the merits is clearly in the public interest. A stay will help

⁴⁰⁷ See, e.g., Williams Natural Gas Co. v. City of Oklahoma City, 890 F.2d 255, 262 (10th Cir. 1989).

⁴⁰⁸ Armstrong v. Manzo, 380 U.S. 545, 552 (1965).

⁴⁰⁹ Watson v. City of Memphis, 373 U.S. 526, 533 (1963).

⁴¹⁰ Déjà Vu of Nashville, Inc. v. Metro, Gov't of Nashville & Davidson Cty., 274 F.3d 377, 400 (6th Cir. 2001) (quoting G & V Lounge, Inc. v. Mich. Liquor Control Comm'n, 23 F.3d 1071, 1079 (6th Cir. 1994)).

ensure that a full and complete analysis of the impacts, and potential mitigation, occurs before alternatives are foreclosed by construction. Furthermore, given the level of interest demonstrated by the public in this controversial pipeline project, the public interest lies in maintaining the status quo until the pending request is considered fully on the merits.⁴¹¹ Accordingly, the public interest favors a stay.

IV. Based on the Three Factors, Justice Requires a Stay of the Certificate Order

For the foregoing reasons, justice requires a stay of the Certificate Order pending resolution of Intervenors' request for rehearing. Construction of the MVP threatens irreparable harm to the environment, Intervenors, and their members that far outweighs the exclusively economic harm that the applicant might incur from a stay. Moreover, the public interest lies with the protection of the environment, compliance with federal laws, proper administrative procedure, and the protection of Constitutional rights.

Accordingly, Intervenors respectfully request that FERC grant their motion for a stay pending resolution of their request for rehearing.

CONCLUSION AND REQUESTED RELIEF

For the foregoing reasons, Intervenors respectfully request the following relief:

- 1. Grant Intervenors' Request for Rehearing;
- 2. Immediately stay the Applicants from taking any action authorized by the Certificate Order including, but not limited to, any construction of the projects (including tree clearing) and any attempt to use the power of eminent domain pending final action on the Request for Rehearing;

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⁴¹¹ See San Luis Valley Ecosystem Council v. U.S. Fish & Wildlife Serv., 657 F. Supp. 2d 1233, 1242 (D. Colo. 2009) (holding that voluminous public comments indicate a public interest in maintaining status quo pending proper review).

- 3. Conduct an evidentiary hearing into the need for the projects, permitting discovery and cross-examination of witness;
- 4. Upon completion of the rehearing process, rescind the Certificate Order;
- 5. Before making any new certificate ruling, conduct a NEPA analysis that fully assesses the direct, indirect, and cumulative impacts of the Projects, as set out in this request and Intervenors' previous comments in these dockets;
- 6. Grant any and all other relief to which Intervenors are entitled.

Dated: November 13, 2017.

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CERTIFICATE OF SERVICE

I hereby certify that on November 13, 2017, I caused the foregoing document to be served by electronic mail upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Benjamin A. Luckett____

Ben Luckett, Senior Attorney Appalachian Mountain Advocates P.O. Box 507 Lewisburg, WV 24901 304.645.0125 bluckett@appalmad.org

Attachment A



Ratepayer Impacts of ConEd's 20-Year Shipping Agreement on the Mountain Valley Pipeline

Prepared for the Environmental Defense Fund

Authors:

Rachel Wilson
Tyler Comings
Elizabeth A. Stanton, PhD

September 2017



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Executive Summary

The Mountain Valley Pipeline is a proposed new natural gas pipeline in West Virginia and Virginia, and is intended to bring low-cost natural gas out of the Marcellus and Utica Shales to markets in the Southeast and Mid-Atlantic. In January 2016, three months after the certificate application for the project was filed at the Federal Energy Regulatory Commission, Con Edison Gas Midstream, a non-utility subsidiary of corporate parent Consolidated Edison, Inc., announced that it was acquiring a 12.5 percent ownership interest in Mountain Valley Pipeline. At the same time, Consolidated Edison Company of New York, Inc., a regulated gas and electric utility owned by the same corporate parent, entered into a 20-year transportation agreement for 250,000 dekatherms per day of firm natural gas capacity on the proposed pipeline.

ConEd ratepayers will pay the costs to transport natural gas, while shareholders in Consolidated Edison, Inc. would benefit from any profits earned by the pipeline.

Prior to late-2016, an oversupply of natural gas from the Marcellus/Utica region, combined with constraints on pipeline infrastructure, kept prices in the region reliably cheaper than at Henry Hub in Louisiana—historically the benchmark price for U.S. natural gas. This glut of natural gas in the region has eased over the past year, however, as new pipelines and pipeline expansion projects have enabled this surplus natural gas to reach consumers and led to increasing prices in the Marcellus and lower prices in regions that had not previously had access to this natural gas. This difference in prices between regional pricing hubs is known as the "basis differential." As additional natural gas pipeline capacity became available, basis differentials between regional pricing hubs narrowed appreciably as prices in Appalachia rose and prices at other hubs declined.

Given that the MVP project had already been filed with FERC, ConEd customers would benefit from the diminishing basis differentials resulting from the project, whether or not the utility signed a 20-year transportation contract. Rather than contracting for firm transportation service, ConEd could purchase gas out of the MVP and into Transco Zone 5, using its existing transportation rights on the Transco pipeline to bring that gas to its City Gate. However, because Con Ed has committed its ratepayers to a 20-year transportation contract, the costs of this transportation capacity must be considered when assessing the value to ratepayers. Applied Economic Clinic was asked by the Environmental Defense Fund to determine whether ConEd's transportation contract on the MVP would result in unjust and unreasonable costs to ratepayers. We find that the expected benefit of the MVP was quickly disappearing at the time ConEd signed the transportation contract due to the falling basis differentials between the MVP supply and market regions, which erode the benefits of shipping agreements.

Narrowing basis differentials turned a net present value ratepayer benefit of more than \$1 billion into an anticipated \$630 million cost given current natural gas pricing.

The nominal costs of ConEd's MVP contract and associated gas supply, which in total will be \$1.2 billion over the course of the 20-year agreement, will be shouldered by New York ratepayers, whether or not the pipeline capacity is actually used. As the New York State Public Service Commission evaluates these transportation costs, it should consider Con Ed's ownership interest in this pipeline and the burden of risk that this contract shifts from shareholders to ratepayers.



I. Shipping Costs on the Mountain Valley Pipeline Will Be Paid for by ConEd Ratepayers

The Mountain Valley Pipeline (MVP) is a proposed new natural gas pipeline that would stretch 303 miles from the Equitrans transmission system in Wetzel County, West Virginia to connect to the Transco natural gas pipeline at the Transco Zone 5 compressor station in Pittsylvania County, Virginia. The proposed pipeline route is shown in Figure 1, below.



Figure 1. Mountain Valley Pipeline Route

Source: Wood Mackenzie. 2017. Mid-Atlantic Natural Gas Demand in Support of the Mountain Valley Pipeline Project.

On January 22, 2016, Con Edison Gas Midstream, a non-utility subsidiary of corporate parent Consolidated Edison, Inc., announced that it was acquiring a 12.5 percent ownership interest in Mountain Valley Pipeline, LLC, which is a joint venture between EQT Midstream Partners, LP; NextEra US Gas Assets, LLC; WGL Midstream; and RGC Midstream, LLC.² This was Con Edison Gas Midstream's first investment in natural gas infrastructure.³ On the same day, Consolidated

¹ Mountain Valley Pipeline. 2017. Overview. Available at: https://www.mountainvalleypipeline.info/overview

² Mountain Valley Pipeline, LLC. 2016. Mountain Valley Pipeline Secures New Shipper Commitment with Con Edison. News Release.

³ Con Edison Transmission. 2017. Projects. Available at: http://www.conedtransmission.com/projects.asp



Edison Company of New York, Inc. (ConEd), a regulated utility (owned by the same corporate parent) that provides electric, gas, and steam service in New York City and Westchester County, entered into a 20-year transportation agreement with Mountain Valley Pipeline, LLC for 250,000 dekatherms per day (Dthd) of firm natural gas capacity on the MVP.⁴

These long-term natural gas transportation agreements are important to pipeline developers for two reasons:

- First, pipeline developers typically use these agreements as evidence to the Federal Energy Regulatory Commission (FERC) that there is a need for the project, which must be demonstrated before FERC will grant its approval to build the pipeline. In its application, Mountain Valley Pipeline, LLC stated that "...the increasing natural gas demand by local and regional markets, and the Project shippers' contractual commitments for the entire capacity of the project, are clear evidence of the need for the Mountain Valley Project."5
- Second, long-term contracts with shippers, called "anchor" or "foundation" shippers, are
 also important to pipeline developers as a way to attract financing to fund the project, as
 they facilitate lenders' confidence that the project's costs will be recovered from shippers
 and that lenders will be paid the interest on their loaned money.

The existence of long-term transportation agreements for firm natural gas capacity thus aids directly in the construction of new natural gas pipelines by increasing the likelihood of securing both regulatory approval and project financing.

When natural gas begins to travel on a new pipeline, the cost of shipping that gas becomes an operating cost for the capacity purchasing utility. A regulated utility passes that cost, which includes both the actual cost of moving the natural gas as well as a FERC-approved rate of return to the pipeline owners, on to its customers. Pending approval by the New York Public Service Commission, ConEd ratepayers will pay the costs associated with the 20-year transportation agreement on the Mountain Valley Pipeline. Shareholders in Consolidated Edison, Inc., the parent company of ConEd and Con Edison Gas Midstream, would benefit from any profits earned by the pipeline. Any analysis of ConEd's interest in this project must be viewed in light of this affiliate relationship and the potential shifting of risk from shareholders to ratepayers.

II. New Pipeline Capacity Lowers Differences in the Cost of Natural Gas between Regions

In the absence of other significant influences, the construction of new natural gas pipelines would be driven by market demand for, and supply of natural gas, with new pipelines being constructed along paths that would bring large volumes of natural gas supply to areas of high demand. Market inefficiencies or constraints on pipeline capacity lead to regional differences in natural gas prices, which are typically expressed as the difference in natural gas prices between two locations or "hubs." The difference in natural gas prices between two regional hubs is known as the "basis

⁴ Mountain Valley Pipeline, LLC. 2016. Mountain Valley Pipeline Secures New Shipper Commitment with Con Edison. News Release.

⁵ Mountain Valley Pipeline, LLC. 2015. Application of Mountain Valley Pipeline, LLC for Certificate of Public Convenience and Necessity and Related Authorizations. Docket No. PF15-3-000. Page 10.



differential." The greater the basis differential between regions, the greater the incentive for pipeline developers to construct new capacity to move natural gas from a lower price region into a higher price region. When that new capacity comes online, natural gas prices should both become less volatile and equilibrate as the basis differentials between the supply and the demand regions diminishes. According to the U.S. Department of Energy, shippers that contract for firm transportation service can rely on their contracts "to capture the resulting basis differential. Basis differentials, and how the captured revenues compare to the cost of constructing pipelines, largely determine how much and in which locations pipeline capacity is likely to be added."

This dynamic can be observed in Appalachia, where prices in the region depend on production rates and the availability of natural gas transportation infrastructure. Shippers on the Mountain Valley Pipeline justify their long-term contracts with the argument that they will make it possible to take advantage of cheaper natural gas from the Marcellus and Utica shales once the pipeline is operational. Indeed, an oversupply of natural gas from the region, combined with constraints on pipeline infrastructure, has kept prices in the region reliably cheaper than at Henry Hub in Louisiana—historically the benchmark price for U.S. natural gas. This glut of natural gas in Appalachia has eased over the past year, however, as new pipelines and pipeline expansion projects have enabled this surplus natural gas to reach consumers and led to increasing prices in the Marcellus and lower prices in regions that had not previously had access to this natural gas.

According to the U.S. Energy Information Administration (EIA), the difference between the price of natural gas at Henry Hub and the prices at the various hubs in Appalachia has narrowed as new pipeline projects and expansions have been completed. Prices at Dominion South (in southwestern Pennsylvania) averaged \$0.76 per MMBtu lower than Henry Hub in the first seven months of 2016. Between July and December of 2016, more than 3.0 Bcf/d of interregional capacity was added, and the average basis differential between the two hubs dropped to a difference of \$0.53 per MMBtu during the first seven months of 2017.⁷

Figure 2, below, presents daily natural gas prices for two price hubs—Dominion South and Henry Hub—from October 2013 through May 2017 and shows a notable tightening of the difference between prices at these hubs, with an obvious convergence of these price points starting in October 2016 following the completion of the Ohio Valley Connector Expansion and the Rockies Express Pipeline Zone 3 expansion.⁸ There are 25 additional pipeline projects in development that are scheduled to be completed by the end of 2017, which would add an additional 7.2 Bcf/d of natural gas transportation capacity.⁹ If the pipeline capacity expansion keeps pace with, or exceeds, the production of shale gas then one would expect the basis differentials between regions to disappear and the prices of natural gas to equilibrate between regions.

⁶ US Department of Energy. 2015. Natural Gas Infrastructure Implications of Increased Demand from the Electric Power Sector. Page 3. Available at:

https://energy.gov/sites/prod/files/2015/02/f19/DOE%20Report%20Natural%20Gas%20Infrastructure%20V_02-02.pdf

⁷ US Energy Information Administration. 2017. Natural gas pipeline projects lead to smaller price discounts in Appalachian region. Available at: https://www.eia.gov/todayinenergy/detail.php?id=32512

⁸ *Id*.

⁹ *Id.*



Figure 2: Historical Natural Gas Prices for Dominion South and Henry Hub (\$/MMBtu)10



The change in annual average basis differentials from 2014 to 2017 (partial year) between Dominion South and Henry Hub is shown in Figure 3.

¹⁰ Natural Gas Intelligence, Historical Daily Prices. (http://www.naturalgasintel.com/)



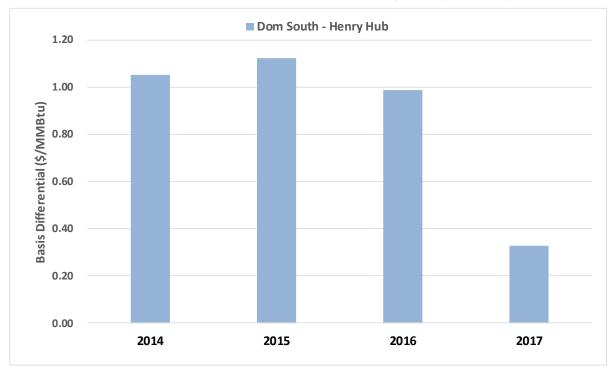


Figure 3: Basis Differential between Dominion South and Henry Hub (\$/MMBtu)¹¹

As shown in Figure 3, Dominion South natural gas was more than \$1 per MMBtu cheaper than at Henry Hub in 2014, and this basis differential persisted for the next two years. However, with the new pipeline capacity that came online in late 2016 and early 2017, the annual average basis differential between these regions fell by 67 percent. This means that much of Dominion South's previous discount (relative to Henry Hub) for shale gas resulting from oversupply conditions has disappeared.

III. The Value of the Mountain Valley Pipeline Has Declined Over Time

The non-binding open season for the MVP project was announced in June 2014, inviting commitments for contracts for firm transmission capacity. By September, the project had received firm capacity commitments totaling 1.5 Bcf/d—a milestone that an EQT officer stated "confirms that we have an economically viable project." Indeed, natural gas production in 2014 in the Marcellus Shale had outpaced growth in the natural gas pipeline capacity in the region, leading

¹¹ *Id.* Note that the data presented for 2017 include January 1 through May 19 only. Basis differentials between Dominion South and Henry Hub increased slightly in June and July, which accounts for the \$0.53 per MMBtu difference reported by EIA and discussed on page 6 of this report.

¹² EQT. June 2014. EQT and NextEra Energy Announce Southeast Pipeline Project. Available at: http://media.eqt.com/press-release/eqt-and-nextera-energy-announce-southeast-pipeline-project

¹³ EQT. September 2014.



to an oversupply of natural gas and declining prices at regional hubs and a basis differential of more than \$1.00 per MMBtu between Dominion South and Henry Hub. 14 Based on these 2014 price differentials, the Mountain Valley Pipeline appeared to be a reasonable project to undertake, as foundation shippers contracting for firm transmission capacity would have had access to lower cost natural gas from the surrounding region.

The value of these 20-year foundation transportation agreements on the MVP has diminished over time, however, with the addition of new and expanded pipeline capacity that came online at the end of 2016 and the beginning of 2017, as discussed in Section II above.¹⁵ The diminishing value is evidenced through the dissipating basis differentials between Transco Zone 5, Dominion South, and TETCO M2 hubs versus Henry Hub. Transco Zone 5 was selected for this analysis because it is the point at which the MVP connects to the Transco pipeline, and is the area in which ConEd would buy gas in the absence of the MVP. The Dominion South and TETCO M2 hubs were selected because they are the pricing hubs at which ConEd would purchase natural gas that would then be shipped on the MVP under the 20-year contract.¹⁶ The locations of those pricing hubs are shown in Figure 4, below.

14 **I**

¹⁴ US EIA. 2014. Some Appalachian natural gas spot prices are well below the Henry Hub national benchmark. Available at: https://www.eia.gov/todayinenergy/detail.php?id=18391

¹⁵ During this timeframe, the ownership structure of the Mountain Valley Pipeline project changed, with Vega Midstream MVP LLC, WGL Midstream, and RCG Midstream joining EQT Corporation and NextEra Energy Inc. as owners of the project. WGL Midstream purchased Vega Midstream MVP LLC's ownership interest on October 31, 2016. Business Wire, "WGL Midstream Acquires Additional 3 Percent in Mountain Valley Pipeline," (October 31, 2016), http://www.businesswire.com/news/home/20161031005163/en/WGL-Midstream-Acquires-Additional-3-Percent-Interest.

¹⁶ In 2018, the difference is taken between the average basis differentials from 2014-2017 from TCO (Columbia Gas) and Transco Zone 4 in order to represent the change in basis differential that might be expected when the MVP begins operation.



Figure 4. Map of natural gas pricing hubs



Figure 5, below, shows the shrinking basis differentials between Transco Zone 5 and Dominion South from 2014 to 2017 (partial year). This means that customers are already receiving the benefits of lower natural gas prices due to expanding pipeline capacity, as prices are equilibrating across regions and hubs.



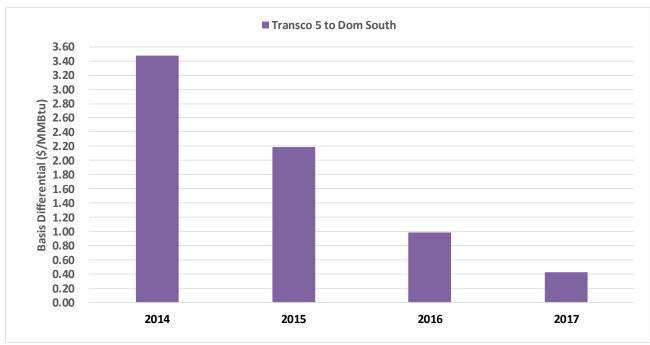


Figure 5: Basis Differential between Transco Zone 5 and Dominion South (\$/MMBtu)¹⁷

Additional analysis of these regional basis differentials¹⁸ demonstrates the diminished value of the MVP pipeline over time, which is arrived at by subtracting the supply area basis differential (i.e., average of the differentials from Dominion South to Henry Hub and TETCO M2 to Henry Hub) from the Transco Zone 5 to Henry Hub basis. This represents the difference between the costs of:

- (1) Natural gas that could be procured from the Marcellus and delivered via the Mountain Valley Pipeline, and
- (2) Natural gas purchased at Transco Zone 5.

¹⁷ *Id.* After July 1, 2016, Transco 5 is represented by Transco 5 North.

¹⁸ This analysis was prepared by Greg Lander of Skipping Stone, and provided to us by EDF. Under these given assumptions, we calculated the basis differential change as follows. The basis of TETCO M2 from the Henry Hub, (a negative number), and the basis of Dominion South from the Henry Hub, (also a negative number), were averaged to calculate a composite basis supply area. Then the basis of Transco Zone 5 from the Henry Hub (a positive number in the years and in 2017, alternating between slightly negative and slightly positive numbers) was calculated to arrive at the market area basis. To calculate the value of the basis differential between the supply area and the market area, the supply area basis is subtracted from the market area basis. Subtraction of the supply area basis (a negative number) from the market area basis (recently sometimes slightly negative and sometimes slightly positive) yields the basis differential, which represents the value of holding capacity to connect those two regions. Subtracting a negative number in a supply area is the same as adding the absolute value of that number to the market area value.



This difference does not include the cost of shipping. The difference between these basis differentials is the value of the MVP; it diminishes over time as shown in Table 1. The timeline begins in 2015, the first full year in which foundation shipping agreements were available for contract on the MVP.

 Year
 Value of MVP Capacity (Dth/d)

 2015
 \$2.17

 2016
 \$0.99

 2017
 \$0.42

\$0.08

2018 and forward

Table 1: Value of MVP Capacity over Time¹⁹

IV. Con Ed's MVP Contract Will Result in Higher Costs to Ratepayers

The Mountain Valley Pipeline developers filed an application for a certificate of public convenience and necessity with FERC on October 23, 2015. Three months later, on January 22, 2016, ConEd announced its decision to become a shipper and Con Edison Gas Midstream an owner of the project. ConEd's stated rationale for signing up for service on the project was to gain access to lower cost natural gas supply for its customers.²⁰ The New York Public Service Commission evaluates the prudency of utilities' decisions at the time they enter into transactions,²¹ noting that "[c]ompetitive conditions and market prices and proper provision for the future must be taken into account."²² It is, therefore, imperative that the pricing dynamics are analyzed with a view to the time at which Con Ed made the decision to enter into this agreement (i.e., January 2016), taking into account the forecasts and projections of future trends with respect to natural gas supply, demand, and pricing that were available at that time.

¹⁹ 2015 through 2017 values are actuals. The 2018 and forward value is calculated based upon long-term dynamics at work in the relevant supply and market areas. We assumed that the completion of projects already under construction would relieve over-supply issues in the supply area and increase supply to the market area such that those respective area prices would equilibrate to their adjacent pricing hubs. In the case of the MVP supply area, those prices are assumed to converge with the Columbia Gas Transmission supply pool (TCO Pool) while the Transco Zone 5 prices would converge with the Transco Zone 4 pricing point. The result is a lower basis differential across MVP over the long term.

²⁰ See Consolidated Edison 2016 Rate Case, Case 16-G-0061, Ivan Kimball Gas Supply Testimony at page 21.

²¹ Long Island Lighting Co. v. Pub. Serv. Comm'n., 134 A.D.2d 135 (N.Y. App. Div 3d Dep't 1987) (explaining that the legal test for prudence is whether the utility acted reasonably, under the circumstances at the time, "considering that the company had to solve its problems prospectively, rather than in reliance on hindsight.").

²² In the Matter of Republic Light, Heat and Power Co., Inc. v. Pub. Serv. Comm'n of N.Y., 265 A.D. 74 (N.Y. App. Div 3d Dep't 1942).



With this framework in mind, Applied Economics Clinic was asked by Environmental Defense Fund to perform an assessment of whether ConEd's subscription of capacity on the Mountain Valley Pipeline would result in unjust and unreasonable costs to ratepayers. Given that the project had already been filed at FERC, ConEd could benefit from the diminishing basis differentials resulting from the project, irrespective of whether it signed a 20-year transportation contract. In short, ConEd could purchase gas out of MVP and into Transco Zone 5 and use its existing transportation rights on Transco to bring that gas to its City Gate.

Because Con Ed has already committed its ratepayers to a 20-year transportation contract, however, the costs of this transportation capacity must be considered in assessing the value to ratepayers. We estimated the ratepayer impact of the 20-year transportation agreement over time using EDF's assumption of a \$29.60 per Dthd monthly cost of ConEd's MVP contract.²³ At a load factor rate of 100 percent, and with an assumed 20 percent discount for foundation shippers, the likely ConEd shipper rate was estimated by EDF to be \$0.78 per Dth.²⁴ EDF added the value of the MVP capacity, shown above, to this shipper cost to arrive at the net daily cost to ConEd ratepayers of natural gas plus transportation. By multiplying this cost by the ConEd subscription of 250,000 dekatherms per day, we estimated costs (or savings) to ratepayers. These costs (or savings) are shown in Table 2. Red values in parentheses represent savings to consumers from the MVP, from a lower cost of gas from the Marcellus plus MVP transportation than the cost of purchasing gas at Transco Zone 5. The values in black represent a cost to consumers of Marcellus gas plus MVP transportation, above the cost of purchasing gas at Transco Zone 5.

Table 2: Costs/(Savings) to Ratepayers from the 20-year transportation agreement and cost of Marcellus gas²⁵

Year	2015	2016	2017	2018+
Teal	2015	2010	2017	2010+
NPV 20-year gas + contract cost	(\$1,244,597,148)	(\$186,241,814)	\$318,369,888	\$629,876,647
Average annual cost	(\$62,229,857)	(\$9,312,091)	\$15,918,494	\$31,493,832
Levelized net cost (\$/MMBTU)	(\$1.39)	(\$0.21)	\$0.36	\$0.70

Under these assumptions, the MVP would have had a benefit to ConEd ratepayers in 2015 and 2016 due to the basis differentials that existed between natural gas pricing hubs in the Marcellus and Henry Hub, but the expected benefit was rapidly diminishing at the time ConEd entered into a contractual obligation for firm transportation service. As new and expanded pipeline capacity came online at the end of 2016 and the beginning 2017, basis differentials between the MVP supply and market regions fell, eroding the benefits of the shipping agreement on the Mountain Valley

²³ This value is derived from MVP's FERC application in Docket No. CP16-10 at Exhibit N (Revenues, Expenses, and Income).

²⁴ The \$29.60 monthly reservation rate is rounded up from \$29.5967 in MVP's FERC application at Exhibit N. Assuming an average of 30.4 days per month in a 12 month year (i.e., 365/12) the daily reservation rate is derived by dividing \$29.60 by 30.4 or \$0.9730 per Dth per day. Then discounting this by 20% yields the assumed \$0.78 per Dth per day (Dthd).

²⁵ Average annual cost and levelized net cost are on an NPV basis.



Pipeline. It is difficult to fathom how ConEd could have failed to anticipate these diminished basis differentials, given the volume of pipeline capacity expected to come online during this period, and the number of projects still in advanced stages of development.

V. The MVP Contract Locks Con Edison Customers into Higher Rates for 20 Years

In its most recent natural gas rate case in 2016, ConEd witness Ivan Kimball stated that the Company "is looking to select pipeline projects that increase the reliability of our system, increase our flexibility, provide access to an abundant source of supply, are feasible to complete, and provide delivered gas that is economic compared to existing alternatives." Signing a 20-year transportation agreement on the MVP for 250,000 dekatherms per day runs counter to this strategy of increasing flexibility at a lower delivered cost of natural gas. With the signing of this agreement, ConEd customers are locked into the 20-year transportation costs on the Mountain Valley Pipeline at a total nominal cost of \$1.2 billion over twenty years. The utility must also purchase natural gas from a supplier along the pipeline in order to utilize that firm transportation capacity. Natural gas from the MVP must be shipped along additional pipelines, incurring additional shipping fees, in order to bring it to customers in ConEd's service territory. If lower priced natural gas becomes available elsewhere, ConEd loses the opportunity to purchase that gas and pass those lower prices on to consumers. ConEd ratepayers are locked into higher prices for the 20-year duration of the Mountain Valley Pipeline agreement.

Given that the MVP had a sufficient number of signed shipper agreements to confirm that the project was "economically viable" in 2014, and that MVP filed a certificate application with FERC three months before ConEd decided to take service on the project, the pipeline construction would have proceeded whether or not ConEd committed its customers to a 20-year obligation to buy transportation service. Nonetheless, the utility has obligated its ratepayers to take on the costs to reserve shipping rights on that new pipeline.

The costs of the MVP contract, which total \$1.2 billion (nominal) over the course of the 20-year contract, will be shouldered by New York ratepayers, whether or not the pipeline capacity is used. Representation costs are recovered from ratepayers as part of a gas cost reconciliation process before the New York State Public Service Commission. As the Commission assesses these costs, it has a responsibility to consider the affiliate relationship underpinning ConEd's interest in this pipeline and require ConEd to demonstrate that its decision to enter into this agreement is in the public interest.

²⁶ See Consolidated Edison 2016 Rate Case, Case 16-G-0061, Ivan Kimball Gas Supply Testimony at page 22. Available at: https://legacyold.coned.com/2016-rate-filing/pdf/testimony-exhibits-gas/13-gas-supply-testimony-final.pdf

²⁷ And a net present value cost of over \$600 million, as calculated above.

²⁸ This cost could be reduced to \$600 Million of net cost, only if the capacity is fully used and the calculated \$0.08 per Dth "value" is realized thus reducing the \$0.78 per Dthd cost to \$0.70 per Dthd. However, this would only be the case if there are no other sources of supply into pipelines directly connected to ConEd that are more advantageous than receiving gas into Transco at the Zone 5 terminus of MVP.

Attachment B

July 10, 2017

Ben Leach, GISP Stormwater Team Lead of the Office of Stormwater Management Department of Environmental Quality 629 E Main Street Richmond, VA 23219 Submitted Via Email: Benjamin.Leach@deq.virginia.gov

Re: Mountain Valley Pipeline Spread 8 Plan Submission Completeness Review

Mr. Ben Leach,

EEE Consulting, Inc. (3e) has reviewed the Mountain Valley Pipeline (MVP) Spread 8 Erosion and Sediment Control (ESC) Plans, Stormwater Management (SWM) Plans, Stormwater Calculations, and the Stormwater Pollution Prevention Plan (SWPPP) for completeness. At this time, 3e has deemed that the SWPPP is complete and will progress to the review phase. Additionally, 3e has determined the Spread 8 plans submitted **do not** constitute a complete plan package with sufficient information to move forward to the plan review phase. Please see the Completeness Review Checklist provided in **Attachment #1**. 3e has provided recommended comments on the MVP plan submittal, as listed below, for DEQ's review and consideration.

Although the plans were not complete enough to begin the plan review phase, 3e has performed a cursory review of a subset of the plans and calculations submitted and has provided some additional comments below in an effort to convey any immediate concerns related to the general approach and methodology utilized by MVP. These comments are not part of an all-inclusive plan review, but are intended to provide some preliminary generalized comments prior to a thorough plan review of all complete sheets. **Please note, that an official full plan review may result in additional overarching comments.**

Completeness Review Comments To Be Addressed:

- 1. Provide an Erosion and Sediment Control narrative. The narrative should include all Erosion and Sediment Control narrative requirements from the checklist provided in **Attachment #2**.
- 2. Provide a delineation of all proposed permanent right-of-way (ROW) and/or permanent easements on each post-construction plan sheet and in the corresponding calculations.
- 3. Provide proposed permanent culvert locations and supporting calculations, including all inverts based on field conditions.
- 4. Please provide stationing on all stormwater calculation maps to expedite the review.
- 5. Please provide GIS shapefiles for the limits of disturbance, temporary and permanent ROW, and drainage areas to expedite the review.
- 6. Please provide an electronic version of excel spreadsheets for compost soil amendment calculations and sheet flow runoff calculations to expedite the review.
- 7. Please provide an index relating plan sheet numbers to drainage calculations.

Plan Review Comments To Be Addressed:

Stormwater Calculations - Water Quality

8. Water Quality calculations are not consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24), the Virginia Stormwater Management Program Regulations (9VAC25-870), nor the guidance documentation for the Virginia Runoff Reduction Method (VRRM) Compliance Spreadsheet (Guidance Memo No. 16-2001). While the VRRM allows for credit to be taken for preserved forest/open space areas, the VRRM Guidance Memo No. 16-2001 describes that "all areas that will be considered forest/open space for stormwater purposes must have documentation that prescribes that the area will remain in a natural, vegetated state. Appropriate documentation includes: subdivision covenants and restrictions, deeded operation and maintenance agreements and plans, parcel of common ownership with maintenance plan, third-party protective easement, within public right-of-way or easement with maintenance plan, or other documentation approved by the local program authority." The calculations (VRRM Spreadsheet) provided by MVP demonstrate a credit for forest/open space areas outside of the permanent ROW, which appear to be out of MVP's operational control once construction is complete. Please demonstrate how operational control of the temporary easement area will be maintained post construction as represented in the calculations. Otherwise, please revise calculations to reflect the permanent ROW only. Calculations provided by 3e below, using DA-GI-001 as an example, show the impact of excluding these areas. In this example, the water quality requirements go from a surplus Phosphorus credit, to needing additional Phosphorous reductions. Please update all calculations to reflect forest/open space credit only within the permanent ROW under MVP's operational control. In addition, please provide documentation or statements on the plans that the meadow areas within the permanently maintained ROW will be preserved in a natural, vegetated state.

MVP Provided Methodology in VRRM (Forest/Open Space Credit within Temporary and Permanent ROW)

Land Cover	A Soils	B Soils	Total
Forest (Ac.):	1.28	12.92	14.2
Impervious (Ac.):	0	1.47*	1.47*
Phosphorous Load Reduction Requirement (lbs/yr):		+2.4 lbs/yr	

^{*} Any temporary impervious areas that will be returned to existing conditions do not need to be accounted for in water quality calculations because there are no permanent water quality impacts.

Note: This methodology results in a +2.4 lb/yr phosphorous credit in this specific example.

Methodology Based on VSMP Regulations and VRRM Guidance (Forest/Open Space Credit only within Permanent ROW)

Land Cover	A Soils	B Soils	Total
Forest	0.77	4.97	5.74
Impervious (Access Road Impacts):	0	1.47	1.47
Phosphorous Load Reduction Requirement (lbs/yr)		-0.52 lbs/yr	

Note: This methodology requires a 0.52 lb/yr phosphorous load reduction in this specific example.

- 9. MVP does not account for "off-site" permanent access roads in their drainage calculations. Examples can be found on sheets DA-GI-004/005, 010/012, 017/018, & 018/019. Please include these areas in the stormwater calculations and supporting documentation.
- 10. MVP detail ES39 (grass-lined channel) on sheet 0.10 depicts a typical section with the water quality volume. Please clarify if this is a permanent or temporary measure and if utilized for ESC or post

- construction water quality and/or quantity. Please show all instances of grass-lined channels on the plans. Note that the channel should be sized per the Virginia BMP Clearinghouse Specification No.3 Grass Channels for water quality credit and also for applicable quantity requirements.
- 11. As described on calculation sheets, MVP intends to purchase off-site nutrient credits from registered mitigation banks in accordance with 9VAC25-870-69. Please provide a summary of the credits by HUC to be purchased and the source to obtain the credits.

Stormwater Calculations - Water Quantity

- 12. Water Quantity calculations are not consistent with the Virginia Stormwater Management Act (§ 62. 1-44.15:24) and the Virginia Stormwater Management Program Regulations (9VAC25-870). Please provide a response to each item listed below:
 - a. Virginia's VSMP Regulations separate the water quantity requirements into two sections: Channel Protection and Flood Protection, 9VAC25-870-66 B & C respectively. Channel Protection has been addressed in the summaries for each drainage area (Energy Balance), but Flood Protection has not been mentioned, although it does seem to have been investigated based on the presence of 10-year hydrographs within the calculations provided. Please add a statement to each Drainage Area Summary regarding how the Flood Protection requirements have been met.
 - b. The Channel Protection section referenced above states that "Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2, or 3 of this subsection," the latter of which is the energy balance equation which MVP has chosen to use. Please address the following:
 - The energy balance equation should be analyzed at each location the temporary ROW discharges concentrated runoff to a stormwater conveyance system. Please see
 Attachment #3 for examples of appropriate points of analysis.
 - Please provide a stormwater narrative describing the methodology utilized and include items such as how the points of analysis were chosen and how time of concentrations were analyzed.
 - iii. Please demonstrate that the permanent water bars are releasing drainage in a sheet flow condition or they are released into an adequate conveyance per the above referenced regulations.
 - c. MVP is listing a portion of the limits of disturbance (LOD) in the post-development condition with the curve number for "Brush, Good Condition" which provides a lower runoff coefficient than the pre-development land cover of "Forest, Good Condition." Please explain how a "Brush, Good Condition" land cover is an appropriate land cover for the permanent post-construction condition by using: the proposed "Forest Regenerating Woody Seed Mix" on detail sheet .08, which contains large trees that will grow above brush height.
 - d. Please respond to the comments below in regards to time of concentration calculations:
 - i. Time of concentration calculations should be calculated from the most hydraulically remote point in the watershed to the point of discharge being analyzed. It appears that MVP picked a "representative" smaller time of concentration that does not necessarily include the overall point of discharge nor the most hydraulically remote point. Please note that this may not be the most conservative approach. Please see Attachment #4 for an example of the effects of Time of Concentration on peak flows and volumes. Please revise all time of concentration calculations to ensure that the watershed's hydraulic properties are being accurately represented. Please note, if calculations are revised to

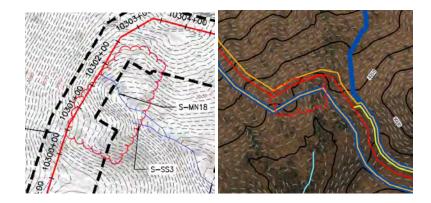
- reflect the above point of analysis comment, the issues with time of concentration calculations may be inherently addressed.
- ii. Calculations provided by MVP show that the time of concentrations between pre- and post-development are going up in several cases, even though the flow paths are shorter and go through channel flow in post-development conditions. It also seems that there may be inconsistencies in the channel flow properties listed on the Time of Concentration worksheets provided. Please demonstrate how the channel flow properties from Hydraflow were calculated. This comment is also related to comment iii below.
- iii. Time of concentration channel flow calculations show that all channel flow across the water bars will be a max 2% slope. This is not consistent with the MVP PSS&S and plans provided which state the water bars can be sloped up to 8%. Please clarify how water bars will be installed such that a 2% slope is not exceeded and/or adjust the Tc calculations according to actual site specific slopes.
- iv. Time of concentration flow paths are not always consistent with the drainage area shown. For example, see DA-GI-002 stormwater calculations where the flow paths for the preand post-development conditions both appear to start at the same spot, but in the post-condition, the flow path stops in the middle of the drainage area whereas the predevelopment flow path extends to the edge of the LOD. This issue occurs in several locations, including some areas where the post-development flow path appears to divert runoff into an adjacent drainage area. Please clarify and revise maps and calculations as necessary.
- 13. Some drainage areas provided by MVP are artificially cut off where contour data ends. Please revise drainage areas to reflect the physical site specific area as appropriate. See Attachment #6 for a graphic (example DA-GI-019).
- 14. 3e has concerns over the function of proposed temporary and permanent water bars. Please respond to the specific comments below:
 - a. Please provide an explanation of how water bars will be installed such that a maximum slope of 8% will not be exceeded in cases where sheet flow is flowing perpendicular to the pipeline (e.g. across the ROW). See **Attachment #5** for a graphic.
 - b. As stated above in item 12.b.iii, water bars will be constructed across the length of the permanent right-of way, creating points of concentrated runoff. The VSMP Regulations (9VAC25-870-66.B) state that "Concentrated stormwater flow shall be released into a stormwater conveyance system" and no evidence of such conveyance channels or level spreaders are shown. Please explain how concentrated flow will be returned into sheet flow and not be diverted to or impact adjacent properties.
 - c. Water bars will be constructed along the length of the permanent right-of way. Please explain how velocities will be calculated & remain as non-erodible velocities where the bars discharge. In the cases where energy dissipaters are utilized, how are they being sized? Also, how will the measures be maintained post-construction?
 - d. If temporary or permanent vegetated filter strips are proposed, please show and label on the plans.
 - e. Please provide any other supporting documentation such as historical use and function of water bars that would be helpful when evaluating this measure for compliance with VA regulations.

Stream Crossings

- 15. Please provide smaller scale sheets for all stream crossings which provides a detailed explanation and location of all control measures that will be implemented to protect the water quality of the stream. Please demonstrate adherence with VESCH specification 3.25 by identifying specific proposed utility stream crossing methods at each location (e.g. cofferdam, flume, etc). Please also add a note to the plans at each stream crossing that states "If alternate stream crossings are implemented, each method shall be approved by the construction supervisor and the LEI/EI." Please also provide the following:
 - a. Cross section
 - b. Detail of the type of crossing and associated VESCH measures.
 - c. Restoration detail of the stream post construction.
 - d. Show all buffers associated with crossings per the PSS&S.
- 16. Plans show that timber mats are proposed for temporary road crossing of streams and wetlands. Please provide a response to the comments below regarding these mats:
 - a. In a rain event, how will streams be protected from sediment tracked onto timber mats?
 - b. The detail states that culverts may be utilized when verified by field conditions. Are these temporary culverts going to be sized? Please show all stream and utility crossing locations and the measures to be utilized. Please provide any calculations and supporting documentation demonstrating compliance with MS-12.
- 17. Please show all streams and waterbodies on stormwater calculations. For example, existing conditions sheet 12.02 depicts streams S-KL24, KL-23, S-KL22, S-SS-3, S-MN18 and S-KL21; however, these streams are not shown the calculations sheet for DA-GI-001. This is also depicted in the graphic example for comment 19 below.

Erosion and Sediment Control

- 18. Plan sheets depict sensitive environmental resource areas in accordance with PSS&S 5.3.7, yet there appear to be no additional ESC measures to reduce impacts to these areas. Please describe the ESC measures in the narrative and show all protective measures on the plans. Please note, any work outside of the approved limits of disturbance on the plans requires additional plan review and approval.
- 19. Limits of disturbance from plan sheets do not appear to be consistent with the provided stormwater calculations. For example, sheet existing conditions 12.02 depicts the limits of disturbance breaking towards the pipeline at station 10302+00 but this is not consistent with the limits of disturbance figure provided for DA-GI-001 in the stormwater calculations. 3e recommends that DEQ requires MVP to revise all necessary plan sheets.



- 20. Please provide sizing information (e.g. size and slope) in each instance where compost filter socks are proposed (MVP details ES 3.1 and 3.2).
- 21. The Stone Construction Entrance detail on sheet 0.01 specifies that wash racks used with this measure can discharge to a vegetative filter strip; however, as noted above, VA standards require that these areas have a minimum length of 75 feet long. Please provide a narrative stating how the practice will discharge to an appropriate device and the type of measure proposed.
- 22. MVP details MVP-ES4, 4.1 and 4.2 (sht. 0.05) depict ESC measures with sumps where sediment is captured. Please size the sumps in accordance with the VESCH Standard 3.13 (Temporary Sediment Trap) and 3.14 (Temporary Sediment Basin).

Requested Variances and Exemptions:

- 23. Super Silt fence proposed by MVP is not consistent with the VESCH Standard 3.05 (Silt Fence). Please also note that drainage areas and lengths are exceeded per this Standard. Please provide a deviation request and supporting documentation showing how super silt fence meets MS-4.
- 24. MVP has provided a variance request to MS-16a for an open trench length of 3 miles at one time per spread, for potentially 12 miles open at once in total. Virginia MS-16a currently allows 500 feet. Please note that on any spread, this is over 30 times the current allowable limit. 3e recommends that DEQ evaluate this request with MVP to determine what open length is of trench is practicable.
- 25. MVP has provided a variance request to MS-16b, to place excavated material downhill of the trench, versus the standard uphill placement, which is compliant with standard pipeline safety practices. 3e recommends approval of this variance request.
- 26. MVP has provided an exemption/deviation request to VADEQ Standard 3.09 for Temporary Diversion Dikes to utilize silt fence to "minimize upslope runoff" and "to control the velocity of upslope runoff, and allow for infiltration". This proposed use does not meet the intent or the specifications relating to the design and function of silt fence. 3e recommends that DEQ further evaluate this request.
- 27. MVP has submitted an exemption/deviation request to VADEQ Standard 3.11 for Temporary Right-of-Way Diversions to use the minimum slope breaker spacing as established by FERC based on site and construction restraints inherent to pipeline construction. Since this specification for pipeline installation has been approved by FERC, 3e recommends approval of this variance.
- 28. MVP has submitted an exemption/deviation request to VADEQ Standards 3.31 and 3.32 for Temporary and Permanent Seeding, in order to use alternate seed mixes established and approved by various State and

Federal Agencies. Since the alternate seed mixes are approved by the agencies whom requested their use, 3e recommends approval of this variance.

The re-submittal must include a copy of these comments with responses to the requested information. If you have any questions, please contact us at (804) 442-3330.

Sincerely,

Andrew E. Kassoff, PE, PG, LEED AP

Andr E. Kul

President

Kathleen A. Cabe, PE

Senior Environmental Engineer, Associate



Plan Name: Mountain Valley Pipeline Project - Spread 8

Submittal Date: 06/20/17

3e Reviewer: KAC Review Date: 07/05/17

3e Reviev	wer: KA	ıC .	Review Date: 07/05/1
Yes	No	N/A	Plan Completeness Checklist
1. Project I	nformatio	n	
X			1a. General applicant information provided?
x			1b. Layout map with an index provided?
Х			1c. Original plan dates and all revision dates provided?
Х			1d. P.E. seal and signature?
	х		1e. Index to classify sheet type for billing purposes provided?
х			1f. Detailed existing condition sheets provided?
	х		1g. Shows all permanent and temporary ROWs?
2. Erosion	and Sedim	ent Contro	l Plan
х			2a. Erosion and Sediment Control plan sheets provided?
х			2b. ESC details provided for all proposed measures?
	х		2c. Supporting calculations for ESC measures as provided?
х			2d. Are the limits of disturbance delineated?
	х		2e. Is an ESC Narrative provided?
3. Drainage	e Structure	s (ESC and	SWM)
	х		3a. Hydraulic calculations and supporting documentation provided?
х			3b. Drainage areas delineated?
	х		3c. Are calculations provided referenced to a Sheet #?
4. Stormwa	ater Mana	gement Pla	an
X			4a. Post Construction plan sheets provided?
х			4b. SWM calculations & supporting documentation provided?
х			4c. BMP calculations provided?
х			4d. Drainage areas delineated?
Х			4e. RRM spreadsheet and calculations provided?
	х		4f. Are flooding impacts for proposed drainage structures provided where applicable?
5. SWPPP		1	-
х			5a. Is a complete SWPPP including applicable referenced appendices provided?
	l	1	

Yes	No	N/A	Plan Completeness Checklist
6. Varianc	es and Devi	ations	
х			6a. Is a copy of the variance and supporting documentation provided?
		х	6a. If a variance has been previously requested, is a copy of the approval included?
	х		6b. Is the deviation called out on the plans and supporting documentation provided?
7. Roads a	nd/or Perm	anent Im	pervious Areas
	х		7a. Culvert sizing calculations and supporting documentation provided?
	х		7b. Sizing calculations for drainage structures provided?
	х		7c. Are flooding impacts for permanent drainage structures provided where applicable?

Please note, this is a completeness checklist intended for a preliminary screening level review of the plan submittal. This is not an all-inclusive plan review. The plan reviewer reserves the right to make additional comments on items described above at a later date.



	Erosion and Sediment Control Plan Review Checklist	
	General Information	
Project Name:		
Submittal Date:		
Review Date:		
3e Reviewer:		

Yes	No	N/A	ESC Narrative Requirement (To be provided as part of plan set)
			Project description including the nature and purpose of the land-disturbing activity.
			Minimum Standard (MS) 1 through 19 provided with a description for each that describes
			how the minimum standard is addressed with the plan. (MS-1 - MS-19).
			Inclusion of erosion and sediment control notes (ES-1 through ES-9) found in Table 6-1 on
			page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook in each spread
			submittal.
			Description of the existing site conditions , including topography, ground cover, and drainage
			patterns (include information for both on-site and receiving channels).
			Description of adjacent areas such as residential developments, agricultural areas, streams,
			lakes, roads, etc., that might be affected by the land-disturbing activity.
			Description of off-site land disturbing activities that may occur (borrow sites, disposal areas,
			easements, etc.). Include a statement that any off-site land-disturbing activity associated with
			the project must have an approved ESC Plan.
			Description of the site soils conditions encountered within this project, including hydrologic
			soils group, mapping unit and other pertinent characteristics. Mapping of soil variations
			should be provided in the narrative or on the plans.
			Description of critical areas that have potentially serious erosion problems or that are
			sensitive to sediment impacts (e.g., steep slopes, channels, wetlands, etc.).
			Description of the structural and vegetative ESC measures that will be used to control erosion
			and sedimentation on the site. Controls should be consistent with Chapter 3 of the Virginia
			Erosion and Sediment Control Handbook (VESCH), latest edition and/or DEQ approved Project Specific Standards and Specifications (PSS&S). Variances, exemptions, and proprietary
			measures require approval from DEQ.
			Detailed sequence of construction that includes the phasing of the installation of ESC
			measures, and has sediment trapping measures installed as a first step prior to upslope land
			disturbance. (MS-4 and PSS&S Section 3.0)
			Description of permanent stabilization for the entire site, including post-construction
			stablization specifications. Permanent Seeding shall be in accordance with the DEQ approved
			MVP PSS&S and demonstrate compliance with the VESCH Standards or DEQ approved
			variance and/or deviation. (MS-3 and PSS&S 2.9)
			Schedule of maintenance requirements for ESC measures including inspection frequency,
			maintenance concerns, and methods for repair or preventative maintenance (e.g. removal of
			sediment build-up).
			Description of stormwater runoff considerations that includes any increase in peak runoff
			rates and the effects on downstream erosion and flooding, and any strategies to control
			stormwater runoff. (MS-19 and PSS&S 4.0 and Appendix D)
			Calculations for temporary sediment basins, diversions, channels, culverts, etc., where
			applicable. See VESCH or SWM Checklist for requirements of supporting calculations. (MS-19
			and PSS&S 4.0 and Appendix D)

Plans
Vicinity map locating the site in relation to the surrounding area. Include any landmarks and
road information that might assist in locating the site.
North arrow provided on all plan sheets.
Legend with a complete listing of all ESC measures used, including either the VESCH or DEQ approved MVP PSS&S uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
A description of any variance , exemption or deviation to be approved by DEQ described on the cover sheet of the ESC Plans.
Existing conditions including existing contours, existing impervious areas, sensitive areas (i.e. wetlands, water body crossings, residential areas, railroad crossings, etc.), surface waters, existing tree lines, grassed areas, and other surface features.
Where applicable, identification of features to be demolished and measures to address ESC for the demolition.
Proposed conditions including contours, pipeline alignment, access roads, limits of grading, staging areas, temporary ROW, permanent ROW and any other features or improvements proposed as part of the project.
Final conditions for any temporary measures showing how the area will be restored and associated ESC measures
Delineation of the limits of disturbance.
Identification of any off-site land disturbing activities (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
Identification of critical areas and appropriate protection measures proposed in accordance
with the DEQ approved MVP PSS&S or DEQ approved variance and/or deviation. (PSS&S 5.0)
Identification of property and easement lines . For each adjacent property, list the property
identifier (GPIN, Deed Book & Page, etc.) and the property owner's name and address.
If applicable, finished floor elevation of any impervious structure, such as pads and/or compressor stations.
The locations of erosion and sediment control measures used on the site. Use the standard
symbols and abbreviations in Chapter 3 of the VESCH, the PSS&S or other symbols for non-VESCH products.
Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
Storm sewer and culvert calculations with invert elevations and post-development water surface elevations as well as information to show that cover is adequate.
Site-specific details for all ESC measures . Where applicable, details shall include site-specific dimensions and elevations. Proprietary measures, where a variance has been issued, shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
Stabilization and/or protection measures for soil stock piles and borrow areas. (MS-2)
Permanent vegetative cover is proposed in accordance with the DEQ approved MVP PSS&S and utilizes the VESCH Standard Plate 3.32 or DEQ approved variance and/or deviation. (MS-3 and PSS&S 2.9.2)
Sediment traps and sediment basins designed based upon the total drainage area to be served by the trap or basin. (MS-6)

Soil stabilization and blanket matting for slopes in excess of 30% in accordance with the DEQ approved MVP PSS&S, the VESCH Standards or DEQ approved variance and/or deviation. (MS-7 and PSS&S 2.9)
Where necessary, concentrated runoff down cut or fill slopes is contained within an adequate temporary or permanent channel, flume, slope drain structure or practice in the DQ approved PSS&S. (MS-8)
Measures to address water seeping from a slope face. This includes Temporary ROW Diversions (VESCH 3.11) or DEQ approved variance and/or deviation. (MS-9 and PSS&S 3.0)
Inlet protection provided for all operational storm drain and culvert inlets. (MS-10)
Outlet protection and any required temporary or permanent channel lining is proposed for conveyance channels and receiving channels. (MS-11)
Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. (MS-12)
Temporary stream crossings of non-erodible material where a live watercourse will be crossed by construction vehicles more than twice in any six-month period are addressed in accordance with the DEQ approved MVP PSS&S and demonstrate compliance with the VESCH Standards or DEQ approved variance and/or deviation. (MS-13 and PSS&S 3.6)
Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. (MS-14)
Stabilization measures for bed and banks of live watercourses subject to disturbance. (MS-15)
The pipeline shall be installed in accordance with the following unless a variance has been requested (MS-16):
A. No more than 500 linear feet of trench may be opened at one time.
B. Excavated material shall be placed on the uphill side of trenches.C. Effluent from dewatering devices shall be filtered or passed through an approved sediment
trapping device, or both and discharged in a manner that does not adversely affect flowing streams or offsite property.
D. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization.
E. Restabilization shall be accomplished in accordance with these regulations. F. Applicable safety regulations shall be complied with.
Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads in accordance with the DEQ approved MVP PSS&S and demonstrate compliance with the VESCH Standards or approved variance. (MS-17 and PSS&S 3.0)
Receiving channel calculations demonstrates compliance with (MS-19).
All applicable ESC and requested variance and/or deviations and details have been provided.

			Stormwater Plan Review Checklist		
	General Information				
Projec	t Name	:			
Submit	ttal Dat	e:			
Reviev	v Date:				
3e Rev	viewer:				
Yes	No	N/A	SWM Plan/Narrative Requirement		
			General Plan Information (Plan)		
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and		
			road information that might assist in locating the site.		
			North arrow provided on all plan sheets.		
			Legend with a complete listing of all SWM measures used. Include any other items necessary to		
			identify pertinent features in the plan.		
			A description of any variance and/or deviation to be approved by DEQ.		
			Existing conditions including existing contours, existing impervious areas, sensitive areas (i.e.		
			wetlands, water body crossings, residential areas, railroad crossings, etc.), surface waters,		
			Identification of features to be demolished and the post-construction land cover.		
			Proposed conditions, including proposed contours, pipeline alignment, access roads, limits of		
			clearing, limits of grading, staging areas, temporary ROW, permanent ROW, stormwater		
			Delineation of the limits of disturbance.		
			Identification of any off-site land disturbing activities (e.g., borrow sites, disposal areas, etc.)		
			and appropriate SWM controls.		
			Identification of critical or environmentally sensitive areas and protection measures.		
			Identification of property and easement lines . For each adjacent property, list the property		
			identifier (GPIN, Deed Book & Page, etc.) and the property owner's name and address.		
			SWM Facility Certification - Plans shall list all SWM facilities and critical construction inspection		
			timeframes (i.e., liner, underdrain and outlet pipe installation) for which SWM BMP certification		
			is required.		
			The following note is on the plan: "A certified construction record drawing for permanent		
			SWM facilities shall be submitted to DEQ for approval. Construction inspections and surveys,		
			performed by a licensed professional, shall be required at each stage of installation		
			(construction) as necessary to certify that the SWM facility has been built in accordance with		
			the approved plan and design specifications. The Contractor shall provide a minimum of two (2)		
			business days' notice to the certifying professional to allow for critical inspections."		
			BMP Inspection and maintenance plan for each permanent SWM facility. For proprietary		
			permanent BMPs, the construction drawings shall include manufacturer's recommendations for		
			inspection and maintenance.		
			Specifications for construction/installation of proprietary BMPs from the manufacturer.		
			Cross sections for stormwater conveyance channels with maximum water surface elevations		
			for design storms (1-, 10-, and 100-year).		
			Where applicable, outlet protection with dimensions and class of stone at points of		
			concentrated discharge.		

SWM Plan/Narrative Requirement
Summary tables with pre- and post-development land cover conditions for water quality and
water quantity calculations (i.e. forest, managed turf, and impervious areas and TR-55 Land
Use, Condition, HSG, & Curve Numbers).
Discussion of the stormwater management strategy to address water quantity and quality
criteria in accordance with Virginia Laws & Regulations and all necessary supporting
calculations.
Information on the type and location of stormwater discharges, including information on the
features to which stormwater is being discharged such as surface waters or karst features if
present.
If the project impacts any wetlands or surface waters, are all permits and correspondence
concerning any proposed impacts to jurisdictional wetlands, streams and channels included (i.e.
COE 404 permit). Note that the plan cannot be approved without proper documentation or
necessary permits for jurisdictional impacts.
A general description of the proposed stormwater management facilities and the mechanism
through which the facilities will be operated and maintained after construction is complete.
Information on the proposed stormwater management facilities, including (i) the type of
facilities; (ii) location; (iii) impervious and pervious acres treated; and (iv) the surface waters or
karst features into which the facility will discharge.
Discussion of possible stormwater impacts on downstream properties (from both sheetflow
and concentrated flow) including mapping with sufficient information on adjoining parcels to
assess the impacts.
Geotechnical report when applicable including the following information:
-Boring locations: borrow area, basin pool area and embankment area (centerline principal
spillway, emergency spillway, abutments).
-Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high
groundwater table, infiltration rates when required for a BMP, etc.
Mapping and supporting computations that at a minimum includes the following:
-Pre-development drainage area mapping that includes all contributing drainage areas; CN
labels; depiction of time of concentration flow paths, slopes and lengths used for runoff
hydrographs.
-Post-development drainage area mapping that includes all contributing drainage areas; CN
labels; depiction of time of concentration flow paths, slopes and lengths used for runoff
hydrographs.
-Rainfall precipitation frequency data as summarized on the DEQ approved PSS&S.
-Summary table for determination of runoff curve numbers .
-Time of concentration calculations.
-Pre-development runoff hydrographs.
-Post-development runoff hydrographs.
. out detector in the objection.

Hydraulic Computations (Narrative & Plans, as indicated)
Routing computations for each proposed stormwater management facility for each applicable
design storm provided in narrative.
Stage-storage data used in routing computations provided in the narrative.
Control structure information used in routing computations provided in the narrative.
Summary table of pre- and post-development peak runoff rates for each point of discharge
from the site referenced in narrative.
Maximum water surface elevations for design storms shown in sections or profiles on the plans
for each stormwater management facility.
Impoundments designed to convey the 100-year storm as demonstrated in computations referenced in the narrative.
Adequate freeboard is provided for impoundments as shown on the plans based on
computations in the narrative.
Hydraulic grade line computations with indication of locations of surcharge or inadequacy
provided in the narrative.
Storm sewer design computations referenced in the narrative.
Culvert calculations referenced in the narrative.
Gutter spread calculations referenced in the narrative.
Provide profiles of all storm conveyances on plans. Profiles should include existing and
proposed grade, structure types, pipe materials and sizes, slopes, inverts, etc.
Water Quality Computations (Narrative & Plans, as applicable)
Provide Runoff Reduction Method spreadsheet output including:
-Site loadings
-Required reductions
-Input for each BMP employed and reductions achieved by each BMP
-Compliance worksheet
-Adjusted CN worksheet , when applicable.
Treatment volume calculations for sizing BMPs.
Stage-storage information indicating the treatment volume required and provided.
All proposed SWM design follows the Virginia BMP Clearinghouse design specifications. Water Quantity Computations (Narrative & Plans, as applicable)
Provide supporting calculations showing that both Channel Protection and Flood Protection
have been addressed, including:
-Concentrated stormwater flow is released into a stormwater conveyance system.
-Calculations that the recieving system is adequate from the point of discharge to the point of
analysis (non-erosive velocities from a 2-yr 24 hr storm for manmade systems, meets the
parameters of a restored system's design parameters, or follows the energy balance equation
for the 1-yr 24 hr storm for natural systems; see 9VAC25-870-66).
-The conveyance system contains the post-development peak flow rate from the 10-yr 24 hr
storm within the system or the post-development peak flow rate from the site is less than the
pre-development peak flow rate.
-Increased volumes of sheet flow are identified and evaluated for potential impacts on
downgradient properites or resources.

Review Date: 3e Reviewer: Yes No N/A General Information Erosion and Sediment Control Plan incorporated by reference. Stormwater Management Plan incorporated by reference.		SWPPP Review Checklist				
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The location of the on-site rain gauge , if applicable, is included in the site plan.				The location of the on-site rain gauge , if applicable, is included in the site plan.		

DEQ SWPPP Review Checklist 1

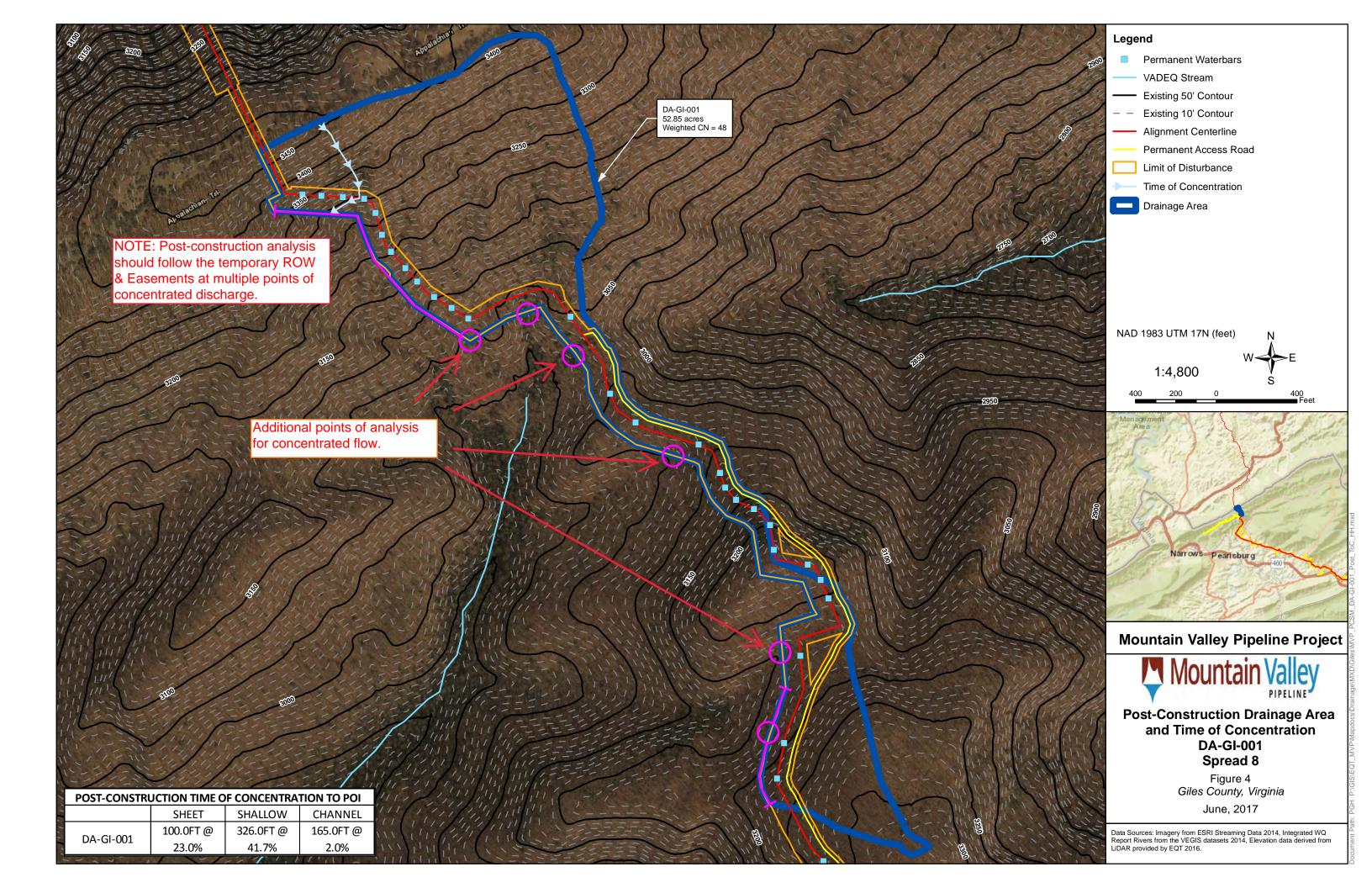
		Pollution Prevention Plan	
The p	The pollution prevention plan addresses potential pollutant-generating activities that may reasonably be		
expec	ted to	affect the quality of stormwater discharges from the construction activity, including any support	
activi	ty.		
		Potential pollutant-generating activities are identified and shown on the plans.	
		The location of potential pollutant-generating activities is shown on the plans.	
		The plan identifies all nonstormwater discharges , including any support activity;	
		The plan identifies the person responsible for implementing the pollution prevention practice	
		for each pollutant-generating activity (if other than the listed qualified personnel);	
		Pollution Prevention Practices and Procedures	
		Plan includes methods to prevent and respond to leaks, spills, and other releases including (i)	
		procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other	
		releases; and (ii) procedures for reporting leaks, spills, and other releases in accordance with	
		Part III G.	
		Plan includes methods to prevent the discharge of spilled and leaked fuels and chemicals	
		from vehicle fueling and maintenance activities (e.g., providing secondary containment such as spill berms, decks, spill containment pallets, providing cover where appropriate, and having	
		spill kits readily available).	
		Plan includes methods to prevent the discharge of soaps, solvents, detergents, and wash	
		water from construction materials, including the clean-up of stucco, paint, form release oils,	
		and curing compounds (e.g., providing (i) cover (e.g., plastic sheeting or temporary roofs) to	
		prevent contact with stormwater; (ii) collection and proper disposal in a manner to prevent	
		contact with stormwater; and (iii) a similarly effective means designed to prevent discharge of	
		these pollutants).	
		Plan inlcudes methods to minimize the discharge of pollutants from vehicle and equipment	
		washing, wheel wash water, and other types of washing (e.g., locating activities away from	
		surface waters and stormwater inlets or conveyance and directing wash waters to sediment	
		basins or traps, using filtration devices such as filter bags or sand filters, or using similarly effective controls).	
		Plan includes methods to direct concrete wash water into a leak-proof container or leak-proof	
		settling basin. The container or basin shall be designed so that no overflows can occur due to	
		inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed	
		of in a manner consistent with the handling of other construction wastes. Liquid concrete	
		wastes shall be removed and disposed of in a manner consistent with the handling of other	
		construction wash waters and shall not be discharged to surface waters.	
		Plan includes methods to minimize the discharge of pollutants from storage, handling, and	
		disposal of construction products, materials, and wastes including (i) building products such as	
		asphalt sealants, copper flashing, roofing materials, adhesives, and concrete admixtures; (ii)	
		pesticides, herbicides, insecticides, fertilizers, and landscape materials; and (iii) construction	
		and domestic wastes such as packaging materials, scrap construction materials, masonry	
		products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete, and other trash.	
		The plan details methods to prevent the discharge of fuels, oils, and other petroleum	
		products, hazardous or toxic wastes, and sanitary wastes. The plan address any other discharge from the potential pollutant-generating activities not	
		addressed above.	
		Plan describes procedures for providing pollution prevention awareness of all applicable	
		wastes, including any wash water, disposal practices, and applicable disposal locations of such	
		wastes, to personnel in order to comply with the conditions of this general permit. The	
		operator shall implement the procedures described in the SWPPP.	

DEQ SWPPP Review Checklist 2

	Impaired Waters	
SWPPP req	uirements for discharges to impaired waters, surface waters with an applicable TMDL wasteload	
	Identify the impaired water(s), approved TMDL(s), pollutant(s) of concern, and exceptional	
	waters identified in 9VAC25-260-30 A 3 c, when applicable.	
	The plan provides clear direction that permanent or temporary soil stabilization shall be	
	applied to denuded areas within seven days after final grade is reached on any portion of the	
	site.	
	The plan indicates that nutrients shall be applied in accordance with manufacturer's	
	recommendations or an approved nutrient management plan and shall not be applied during	
	rainfall events.	
	The plan provides clear direction that a modified inspection schedule shall be implemented in	
	accordance with Part I B 4 or Part I B 5 when discharging to waters identified as impaired.	
	The plan includes the name, phone number of the qualified personnel conducting required	
	inspections.	
	The plan includes the individuals or positions with delegated authority , in accordance with	
	Part III K, to sign inspection reports or modify the SWPPP.	

DEQ SWPPP Review Checklist 3







Hydrograph Report

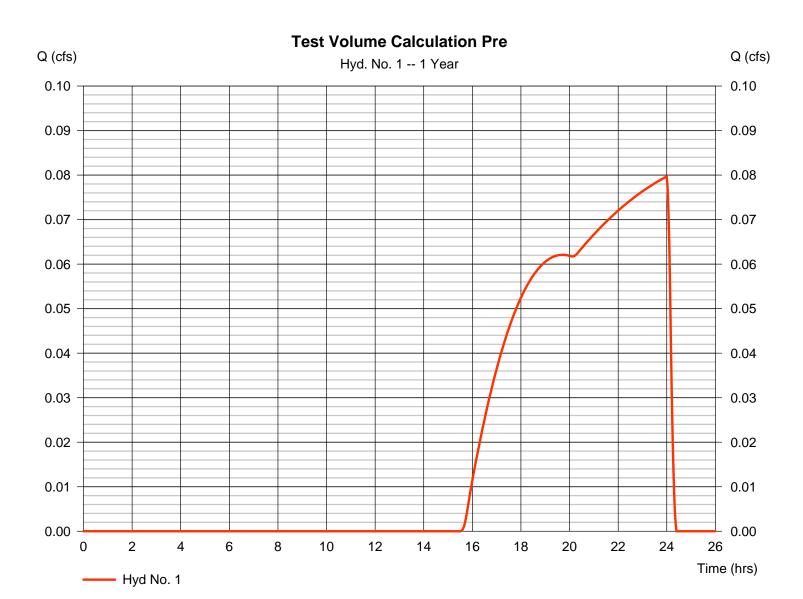
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Friday, 06 / 30 / 2017

Hyd. No. 1

Test Volume Calculation Pre

Hydrograph type Peak discharge = SCS Runoff = 0.080 cfsStorm frequency Time to peak = 24.00 hrs= 1 yrsTime interval = 2 min Hyd. volume = 1.767 cuftDrainage area Curve number = 52.850 ac= 49Hydraulic length Basin Slope = 0.0 %= 0 ftTc method Time of conc. (Tc) $= 15.50 \, \text{min}$ = User Total precip. = 2.40 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484



Hydrograph Report

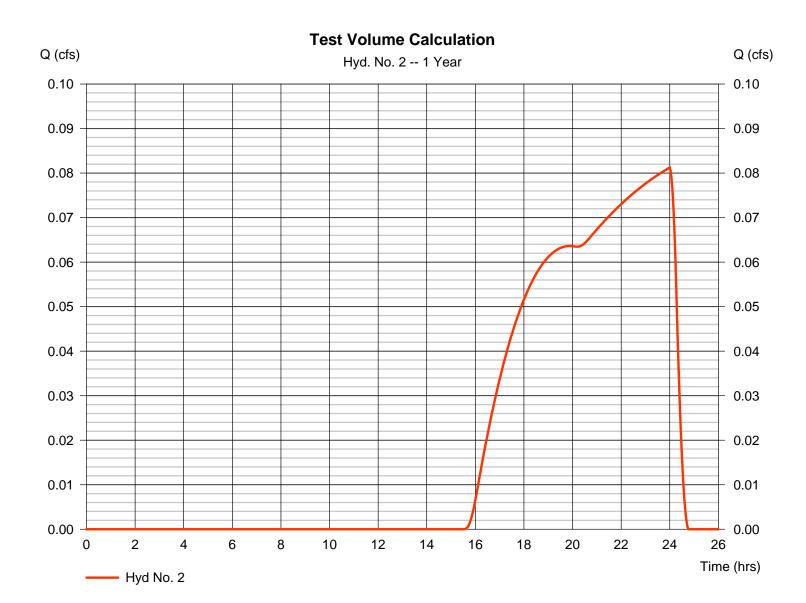
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

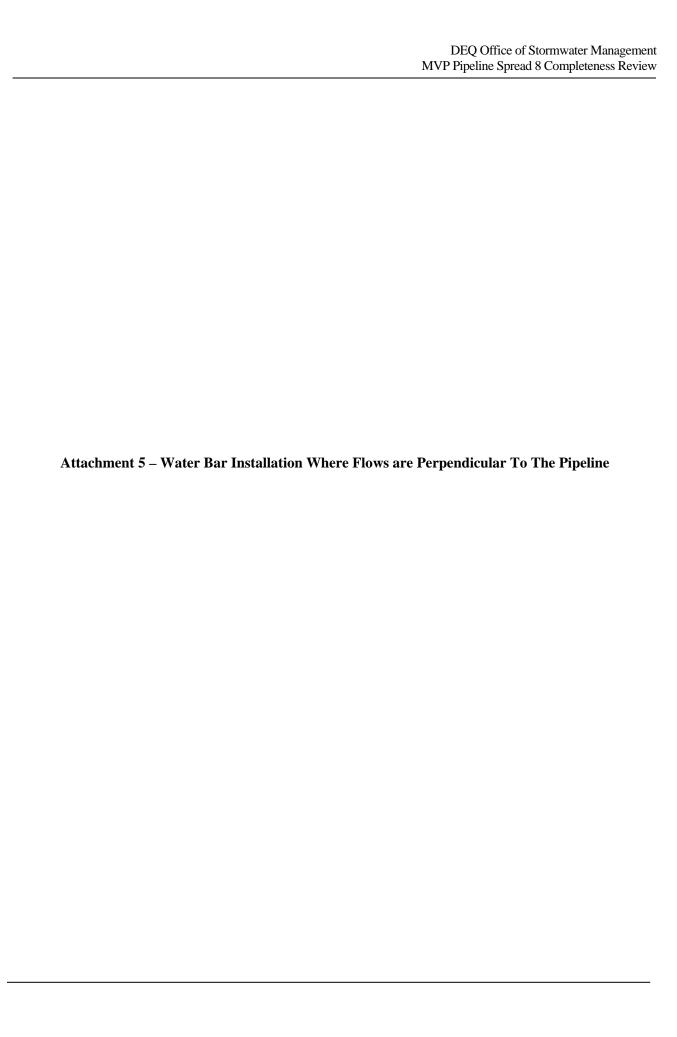
Friday, 06 / 30 / 2017

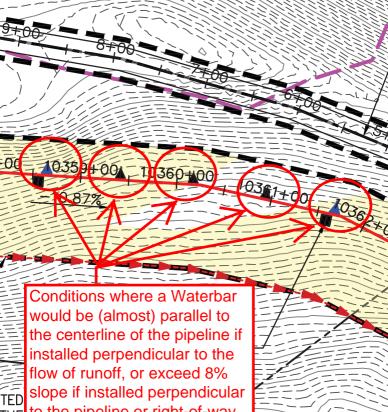
Hyd. No. 2

Test Volume Calculation

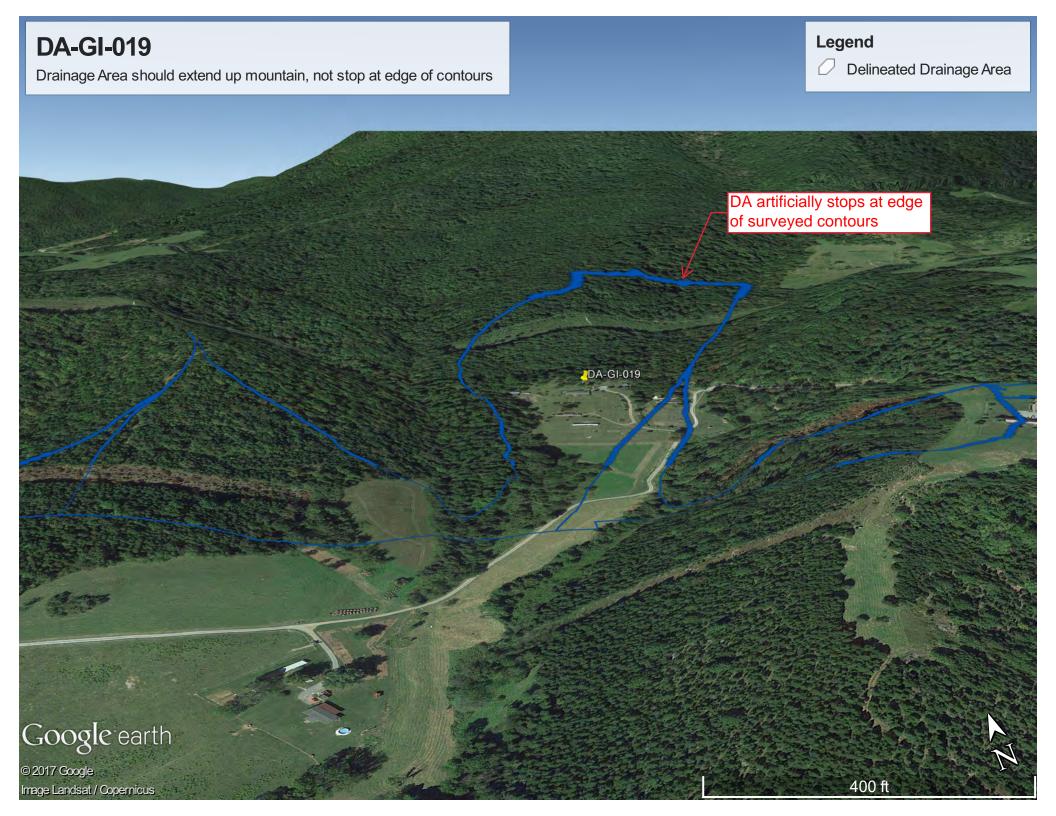
Hydrograph type = SCS Runoff Peak discharge = 0.081 cfsStorm frequency Time to peak = 24.00 hrs= 1 yrsTime interval = 2 min Hyd. volume = 1.813 cuftDrainage area Curve number = 52.850 ac= 49Hydraulic length Basin Slope = 0.0 %= 0 ftTc method Time of conc. (Tc) $= 30.00 \, \text{min}$ = User Total precip. = 2.40 inDistribution = Type II Storm duration = 24 hrs Shape factor = 484











Attachment C

State of Delaware Secretary of State Division of Corporations Delivered 04:01 PM 03/11/2015 FILED 03:54 PM 03/11/2015 SRV 150343690 - 5580929 FILE

AMENDED AND RESTATED CERTIFICATE OF FORMATION OF MOUNTAIN VALLEY PIPELINE, LLC

194 . x

The undersigned, being authorized to execute and file this Certificate, hereby certifies that:

FIRST:

The name of the limited liability company (hereafter referred to as the

"Company") is Mountain Valley Pipeline, LLC.

SECOND:

The address of the registered office of the Company is: Corporate Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, State of Delaware. The name of the registered agent at such

address is The Corporation Trust Company.

THIRD:

The Company is organized for the bona fide purpose of operating as a natural gas company as defined in 15 U.S.C. §717(a), and for any other lawful business, purpose or activity in accordance with Section 18-106 of

the Limited Liability Company Act of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has executed this Certificate this 10th day of March, 2015.

Jonathan M. Lushko, Authorized Person

Attachment D

10-K 1 eqm1231201610k.htm 10-K

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

_	TORW 10-K
[X] ANNUAL REPORT PURSUANT TO SECTION	ON 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
TRANSITION REPORT PURSUANT TO SEC	CTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
FOR THE FISCAL Y	EAR ENDED DECEMBER 31, 2016
FOR THE TRANSITION PE	or ERIOD FROM TO
	ON FILE NUMBER 001-35574
	tream Partners, LP of registrant as specified in its charter)
DELAWARE	37-1661577
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
625 Liberty Avenue, Suite 1700 Pittsburgh, Pennsylvania	15222
(Address of principal executive offices)	(Zip Code)
Registrant's telephone no	umber, including area code: (412) 553-5700
Securities registere	d pursuant to Section 12(b) of the Act:
Title of each class	Name of each exchange on which r egistered
Common Units Representing Limited Partner	
•	ursuant to Section 12(g) of the Act: None
	seasoned issuer, as defined in Rule 405 of the Securities Act.
Indicate by check mark if the registrant is not required t Yes □ No 図	o file reports pursuant to Section 13 or Section 15(d) of the Act.
	filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchang period that the registrant was required to file such reports), and (2) has been subject
	itted electronically and posted on its corporate Website, if any, every Interactive 05 of Regulation S-T ($\S232.405$ of this chapter) during the preceding 12 months (or and post such files). Yes \boxtimes No \square
	s pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not containe owledge, in definitive proxy or information statements incorporated by reference i
	e accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reportin erated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Ac
Large accelerated filer ⊠	Accelerated filer □
Non-accelerated filer □	Smaller reporting company □

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes $\ \square$ No $\ \boxtimes$

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Summary of Related Party Transactions. The following table summarizes related party transactions:

	Years Ended December 31,					
		2016	2015		2014	
		(Thousands)				
Operating revenues	\$	551,353	\$	462,371	\$	337,132
Operating and maintenance expense (a)		34,179		33,452		29,258
Selling, general and administrative expense (a)		67,345		55,092		46,524
Other income (b)		18,191		2,367		_
Interest income on Preferred Interest (see Note 12)		1,740		_		_
Principal payments received on Preferred Interest (see Note 12)		1,024		_		_
Distributions to EQM General Partner (c)		169,438		109,194		59,537
Capital contributions from EQT		602		7,492		500
Net contributions from/(distributions to) EQT	\$	20,234	\$	(15,179)	\$	87,452

- (a) The expenses for which EQM reimburses EQT and its subsidiaries may not necessarily reflect the actual expenses that EQM would incur on a stand-alone basis, and EQM is unable to estimate what those expenses would be on a stand-alone basis. These amounts include the recast impact of the October 2016 Acquisition, NWV Gathering Acquisition and Jupiter Acquisition as they represent the total amounts allocated to EQM by EQT for the periods presented.
- (b) For the year ended December 31, 2016, other income included distributions received from EES of \$8.3 million and equity income from the MVP Joint Venture of \$9.9 million. For the year ended December 31, 2015, other income included equity income from the MVP Joint Venture of \$2.4 million. See Notes 6 and 12.
- (c) The distributions to the EQM General Partner are based on the period to which the distributions relate and not the period in which the distributions were declared and paid. For example, for the year ended December 31, 2016, total distributions to the EQM General Partner included the cash distribution declared on January 19, 2017 to EQM's unitholders related to the fourth quarter 2016 of \$0.85 per common unit.

The following table summarizes related party balances:

	As of December 31,				
	2016		2015		
		(Thousands)			
Accounts receivable – affiliate	\$	81,358	\$	80,507	
Due to related party		19,027		47,563	
Other current assets (current portion of Preferred Interest in EES - see Note 12)		4,167		_	
Investments in unconsolidated entities		184,562		77,025	
Preferred Interest in EES (see Note 12)	\$	119,126	\$	124,317	

See also Note 2, Note 3, Note 6, Note 7, Note 9, Note 10, Note 12 and Note 14 for further discussion of related party transactions.

6. Investments in Unconsolidated Entities

MVP Joint Venture

On March 30, 2015, EQM assumed EQT's interest in MVP Holdco, which owns the interest in the MVP Joint Venture, for \$54.2 million. The MVP Joint Venture plans to construct the Mountain Valley Pipeline (MVP), an estimated 300-mile natural gas interstate pipeline spanning from northern West Virginia to southern Virginia. EQM also assumed the role of operator of the MVP from EQT. In April 2015, October 2015 and January 2016, EQM sold 10%, 1% and 8.5% ownership interests in the MVP Joint Venture, respectively. The purchase from EQT and subsequent sales of interests in the MVP Joint Venture were all for consideration that represented the proportional amount of capital contributions made to the joint venture as of the date of the respective transactions. As of December 31, 2016, EQM owned a 45.5% interest in the MVP Joint Venture.

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The MVP Joint Venture has been determined to be a variable interest entity because it has insufficient equity to finance its activities during the construction stage of the project. EQM is not the primary beneficiary because it does not have the power to direct the activities of the MVP Joint Venture that most significantly impact its economic performance. Certain business decisions, including, but not limited to, decisions about operating and construction budgets, project construction schedule, material contracts or precedent agreements, indebtedness, significant acquisitions or dispositions, material regulatory filings and strategic decisions require the approval of owners holding more than a 66 2/3% interest in the MVP Joint Venture and no one member owns more than a 66 2/3% interest. Beginning on the date it was assumed from EQT, EQM accounted for the MVP Interest as an equity method investment as EQM has the ability to exercise significant influence over operating and financial policies of the MVP Joint Venture. EQM records adjustments to the investment balance for contributions to or distributions from the MVP Joint Venture and its pro-rata share of earnings of the MVP Joint Venture.

The value of the equity method investment recorded on the consolidated balance sheets was approximately \$184.6 million and \$77.0 million as of December 31, 2016 and 2015, respectively. In January 2017, MVP Holdco paid capital contributions of \$11.5 million to the MVP Joint Venture. The capital contribution payable has been reflected on the consolidated balance sheet as of December 31, 2016 with a corresponding increase to EQM's investment in the MVP Joint Venture.

Equity income related to EQM's portion of the MVP Joint Venture's AFUDC on construction of the MVP is reported in other income in the statements of consolidated operations and was \$9.9 million and \$2.4 million for the years ended December 31, 2016 and 2015, respectively.

As of December 31, 2016, EQM had issued a \$91 million performance guarantee in favor of the MVP Joint Venture to provide performance assurances for MVP Holdco's obligations to fund its proportionate share of the construction budget for the MVP. Upon the FERC's initial release to begin construction of the MVP, EQM's guarantee will terminate and EQM will be obligated to issue a new guarantee in an amount equal to 33% of MVP Holdco's remaining obligations to make capital contributions to the MVP Joint Venture in connection with the then remaining construction budget, less, subject to certain limits, any credit assurances issued by any affiliate of EQM under such affiliate's precedent agreement with the MVP Joint Venture.

As of December 31, 2016, EQM's maximum financial statement exposure related to the MVP Joint Venture was approximately \$276 million, which includes the investment balance on the consolidated balance sheet as of December 31, 2016 and amounts which could have become due under the performance guarantee as of that date.

7. Cash Distributions

The EQM partnership agreement requires EQM to distribute all of its available cash to EQM unitholders within 45 days after the end of each quarter. Available cash generally means, for any quarter, all cash and cash equivalents on hand at the end of that quarter:

- less, the amount of cash reserves established by the EQM General Partner to:
 - provide for the proper conduct of EQM's business (including reserves for future capital expenditures, anticipated future debt service requirements and refunds of collected rates reasonably likely to be refunded as a result of a settlement or hearing related to FERC rate proceedings or rate proceedings under applicable law subsequent to that quarter):
 - comply with applicable law, any of EQM's debt instruments or other agreements; or
 - provide funds for distributions to EQM's unitholders and to the EQM General Partner for any one or more of the next four quarters (provided that the EQM General Partner may not establish cash reserves for distributions if the effect of the establishment of such reserves will prevent EQM from distributing the minimum quarterly distribution on all common units);
- plus, if the EQM General Partner so determines, all or any portion of the cash on hand on the date of determination of available cash for the quarter resulting from working capital borrowings made subsequent to the end of such quarter.

All incentive distribution rights are held by the EQM General Partner. Incentive distribution rights represent the right to receive an increasing percentage (13.0%, 23.0% and 48.0%) of quarterly distributions of available cash from operating surplus after the minimum quarterly distribution and the target distribution levels described below have been achieved. The EQM General Partner may transfer the incentive distribution rights separately from its general partner interest, subject to restrictions in EQM's partnership agreement.

Attachment E

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF JAMES GORE

I, James Gore, state and affirm as follows:

- I live near Peterstown, West Virginia, in Monroe County. Our family moved to Blue Lick in 1949. The farm has been in the continuous possession of our family since.
- 2. I am a member of Sierra Club. Sierra Club is a nonprofit corporation, incorporated in California, with more than 770,000 members and supporters nationwide and approximately 2,600 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment, and protection of land and waters in West Virginia.
- 3. The approved right-of-way for the Mountain Valley Pipeline ("MVP")—a 42-inch natural gas transmission line—crosses a 228.5-acre parcel of land of which I am the sole owner and an adjacent 116-acre parcel of which I own a one-third undivided interest. I live, farm, and hunt on those parcels, which are located near Lindside, West Virginia, in Monroe County.
- 4. The right-of-way for the MVP crosses both of those parcels, including a crossing of an unnamed tributary Blue Lick of Hans Creek of Indian Creek of the New River and two wetlands. Additionally, construction and operation of the MVP would result in the widening of an existing road on my property on an extremely steep slope, at the base of which lies an unnamed tributary of Blue Lick. The construction and use of that road threatens the unnamed tributary with additional sedimentation and other runoff.
- I use the water in the unnamed tributaries of Blue Lick on my property as a water source for livestock.
- 6. Much of the 116-acre parcel in which I hold a one-third undivided interest is forested. The forest on that parcel is part of an inventoried interior core forest of greater than 500 acres, identified as WV Core-20 on page 4-167 of the Final Environmental Impact Statement. Timbering on that parcel has not occurred since 1950, so the forest is quite mature.
- Several hundred feet of the MVP right-of-way will cut through mature, large core forest on the 116-acre parcel.

- 8. I, along with my co-tenants, intend to preserve the forests on the 116-acre parcel without timbering. We use the forest for hunting game, including deer, squirrel, and turkey. I also enjoy seeing non-game wildlife in the forest, including birds. Timbering would be inconsistent with that use because it would threaten the property's productivity as wildlife habitat.
- The MVP right-of-way would fracture the core forest on the 116-acre parcel by dividing it, creating forest edges and rendering it non-contiguous.
- 10. I hunt in the forest that would be affected by the MVP several times a year during hunting season, and frequently visit it for other purposes throughout the year, such as for gathering edible mushrooms.
- 11. Timbering the MVP right-of-way on my property would result in a permanent scar through these forests that have meant so much to me throughout my life. Timbering land that I had intended to remain unspoiled will diminish my enjoyment of my time in the woods. Timber on the construction easement will not mature in my lifetime (I am 73 years old), so it might as well be forever. Moreover, if the permanent right-of-way is timbered, and the Certificate does not survive legal review, then that land too will not produce mature forest within my lifetime.
- 12. I am concerned that timbering the MVP right-of-way and the resulting fracturing of the forest will harm the wildlife that I hunt and the non-game wildlife that I enjoy seeing while in the woods. Those concerns diminish my enjoyment of living here.
- Accordingly, timbering on my property will cause harm to my property, recreational, and aesthetic interests in those forests that will not be remedied in my lifetime.
- 14. I have been named as a defendant in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter my property and begin construction (including timbering) on my property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of my property. The developer has asked the Court to give it access to survey our property by January 15, 2018, and access to begin construction, including timbering, by February 1, 2018. If they are allowed early possession on the basis of the Certificate, prior to a rehearing by FERC, I will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this day of November, 2017.

James O. Gore

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF CHARLES CHONG

- I, Charles Chong, state and affirm as follows:
- 1. I live near Bristol, West Virginia, in Harrison County, and have lived there since 1978.
- 2. I am a member of the West Virginia Rivers Coalition. The West Virginia Rivers Coalition makes its mission the conservation and restoration of West Virginia's exceptional rivers and streams. It not only seeks preservation of high quality waters but also the improvement of waters that should be of higher quality.
- 3. The approved right-of-way for the Mountain Valley Pipeline ("MVP")—a 42-inch natural gas transmission line—crosses a 220-acre (more or less) parcel of land that I co-own with my wife. Our homestead is located on that property. Our property is a "hollow," and constitutes the watershed of an unnamed tributary of Halls Run. Our homestead is located at the opening of the hollow.
- 4. The right-of-way for the MVP runs along nearly 7,000 feet of ridgeline on the north, west, and south of the hollow on our property.
- 5. We use the water in the unnamed tributary located on our property as a water source for livestock and domestic animals. At the headwaters of the unnamed tributary, we use a farm pond for recreational purposes.
- 6. The increased sedimentation that will result from construction and operation of the MVP will irreparably harm our use of our pond and the unnamed tributary of Halls Run.
- 7. The MVP right-of-way will cross thousands of linear feet of our forest on the ridge above our home. When we purchased this property in the 1970s, we did so with the intent to leave the forest undisturbed and to allow it to grow naturally. We consider ourselves stewards of our woodlands and planned to manage the forest with that ideal.
- 8. Timbering in the MVP right-of-way on our property would irreparably end our plan to leave the forest undisturbed and to allow it to grow naturally. It would raze 17.3 acres of the property, over 13% of our woodlands. The right of way would facilitate the introduction and propagation of invasive plant species that we have gone to great effort and expense to control on our property. The MVP right-of-way will ruin our property, which we selected because we could find no other property like it in West Virginia.

- 9. We have owned and lived on our property for almost 40 years, and planned to spend the rest of our days here. In our hollow, we have managed the bottom and its fields and have wandered through the wooded hillsides as part of our life here. Our property has become a part of our identities, and we consider ourselves stewards of the land. The construction of the MVP will raze over 6,000 feet of our forested ridge, over 17 acres or nearly 10% of our property. The construction of this pipeline will be a violation, in the worst sense of the word, of our property and our persons.
- 10. Construction of the MVP right-of-way will affect over 10,000 linear feet of ground above and through the watersheds of the two streams that cross our property and within a mile of our homestead. During heavy persistent rains, surface runoff from the right-of-way will increase into and flood the streams, and inundate the area where they meet less than 200 feet below our house. The deforestation and land-use changes will increase the frequency and severity of flooding of these two streams, which will harm our homestead, including our yard, garden areas, buildings, and their contents.
- 11. For all of the foregoing reasons, construction and operation of the MVP will result in irreparable injury to my property and my person.
- 12. We have been named as defendants in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter our property and begin construction (including timbering) on our property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of our property. The developer has asked the Court to give it access to survey our property by January 15, 2018, and access to begin construction, including timbering, by February 1, 2018. If early possession is allowed, on the basis of the Certificate, prior to a rehearing by FERC, we will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this day of November, 2017.

Charles Chong

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF REBECCA ENEIX-CHONG

- I, Rebecca Eneix-Chong, state and affirm as follows:
- 1. I live near Bristol, West Virginia, in Harrison County, and have lived there since 1982.
- 2. I am a member of the West Virginia Rivers Coalition. The West Virginia Rivers Coalition makes its mission the conservation and restoration of West Virginia's exceptional rivers and streams. It not only seeks preservation of high quality waters but also the improvement of waters that should be of higher quality.
- 3. The approved right-of-way for the Mountain Valley Pipeline ("MVP")—a 42-inch natural gas transmission line—crosses a 220-acre (more or less) parcel of land that I co-own with my husband. Our homestead is located on that property. Our property is a "hollow," and constitutes the watershed of an unnamed tributary of Halls Run. Our homestead is located at the opening of the hollow.
- 4. The right-of-way for the MVP runs along nearly 7,000 feet of ridgeline on the north, west, and south of the hollow on our property.
- 5. We use the water in the unnamed tributary located on our property as a water source for livestock and domestic animals. At the headwaters of the unnamed tributary, we use a farm pond for recreational purposes.
- 6. The increased sedimentation that will result from construction and operation of the MVP will irreparably harm our use of our pond and the unnamed tributary of Halls Run.
- 7. The MVP right-of-way will cross thousands of linear feet of our forest on the ridge above our home. When we purchased this property in the 1970s, we did so with the intent to leave the forest undisturbed and to allow it to grow naturally. We consider ourselves stewards of our woodlands and planned to manage the forest with that ideal.
- 8. Timbering in the MVP right-of-way on our property would irreparably end our plan to leave the forest undisturbed and to allow it to grow naturally. It would raze 17.3 acres of the property, over 13% of our woodlands. The right of way would facilitate the introduction and propagation of invasive plant species that we have gone to great effort and expense to control on our property. The MVP right-of-way will ruin our property, which we selected because we could find no other property like it in West Virginia.

- 9. Our farm is my faith and my friend. I take strength from each tree that offers me shade, each leaf that glows with sunlight and quivers in the breeze, every flower that shares its intricate arrangement of color, pattern, and scent. I delight in watching the bats dip for insects above our pond, the songs of the wood thrush, owls, warblers, the soft rustling of creatures in the underbrush, the lazy arcs of the hawks and others as they play in the thermals over my head. From the hills that encircle our farm I feel comforted, like the hug of a lifelong friend. The land lifts my spirits, gives me joy, and eases my sorrows. This land, this piece of earth sustains me. It is my soul, and now the MVP right-of-way slaughters both.
- 10. Construction of the MVP right-of-way will affect over 10,000 linear feet of ground above and through the watersheds of the two streams that cross our property and within a mile of our homestead. During heavy persistent rains, surface runoff from the right-of-way will increase into and flood the streams, and inundate the area where they meet less than 200 feet below our house. The deforestation and land-use changes will increase the frequency and severity of flooding o these two streams, which will harm our homestead, including our yard, garden areas, buildings, and their contents.
- 11. For all of the foregoing reasons, construction and operation of the MVP will result in irreparable injury to my property and my person.
- 12. We have been named as defendants in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter our property and begin construction (including timbering) on our property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of our property. The developer has asked the Court to give it access to survey our property by January 15, 2018, and access to begin construction, including timbering, by February 1, 2018. If they are allowed early possession on the basis of the Certificate, prior to a rehearing by FERC, we will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this \underline{G}^{th} day of November, 2017.

Rebecca Eneix-Chong

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF ROBERT MARCUS JARRELL

- L. Robert Marcus Jarrell, state and affirm as follows:
- I am building my retirement home on a 90.5 acre parcel of property that I own near Pence Springs, West Virginia, in Summers County.
- 2. I am a member of Sierra Club. Sierra Club is a nonprofit corporation, incorporated in California, with more than 770,000 members and supporters nationwide and approximately 2,600 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment, and protection of land and waters in West Virginia.
- 3. The approved right-of-way for the Mountain Valley Pipeline ("MVP")—a 42-inch natural gas transmission line—crosses my 90.5 acre property in Summers County, West Virginia. I purchased that absolutely gorgeous property more than 15 years ago with the intent of building a home and retiring there. It had been my lifelong dream to build a home to retire to on a mountainside in West Virginia. Approximately 25 acres of my property is cleared; the remainder is forested.
- The right-of-way for the MVP runs over 3,000 feet of my property, almost exclusively through the forested portion.
- 6. I visit the ridgeline on my property along which the MVP right-of-way will run approximately 3 to 4 times per week. I enjoy my time there. It is the most peaceful place.
- I am absolutely sick about the imminent construction of the MVP on my property.
 It has been my lifelong dream to retire to this property, and now it is about to be destroyed for private gain.
- 8. As the MVP right-of-way descends from the ridgeline, it is incredibly steep. Timbering on the steep slopes of my property, including on the narrow ridgeline, will increase the risk of landslides on my property and increase erosion.

- The ridgeline on my property along which the MVP right-of-way will run averages 40 feet in width, which means that, to create the 125-foot wide construction easement, "mountaintop removal" would be necessary.
- For all of the foregoing reasons, construction and operation of the MVP will result in irreparable injury to my property and my person.
- 11. I have been named as a defendant in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter my property and begin construction (including timbering) on our property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of our property. The developer has asked the Court to give it access to begin construction, including timbering, by February 1, 2018. If early possession is allowed, on the basis of the Certificate. prior to a rehearing by FERC, we will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this day of November, 2017.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF MAURY JOHNSON

- I, Maury Johnson, state and affirm as follows:
- I live in Greenville, West Virginia, in Monroe County, and have lived there since 1960.
- 2. I am a member of Sierra Club. Sierra Club is a nonprofit corporation, incorporated in California, with more than 770,000 members and supporters nationwide and approximately 2,600 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment, and protection of surface waters in West Virginia.
- 3. The proposed right-of-way for the Mountain Valley Pipeline—a 42-inch natural gas transmission line—crosses the approximately 160-acre organic farm on which I live and co-own on Ellison Ridge Road in Greenville, West Virginia.
- 4. This property has been in my family since the mid-19th Century—except for a 14-year period in middle of the Twentieth Century. My great-grandfather built his house here in the late 1800's, and I have been the caretaker of the farm since I was twenty-three years old. I bought a small house adjoining the farm and I have lived in it since 1987.
- 5. The proposed final route for the Mountain Valley Pipeline would cross three streams on my property, including Slate Run of Hans Creek and its tributaries. Downstream of the crossings, Slate Run of Hans Creek runs past my house and near my domestic water well. The proposed Mountain Valley Pipeline would cross Slate Run and its tributaries approximately 600 feet upstream from my house.
- 6. My well has a hydrologic connection to the surface streams that the proposed pipeline would cross. Because of the karst-like geology of my property, the streams "sink," or run underground, and intermingle with the aquifer of my domestic well. I use water from my well for cooking, cleaning, watering livestock, and other domestic purposes.
- 7. I am concerned that the construction and operation of the Mountain Valley Pipeline across my property, including the stream crossings of tributaries of Slate Run of Hans Creek, will contaminate my well water with sediment and other pollutants, rendering it unusable.

I am also concerned that the construction and operation of the pipeline could affect the quantity of water available from my well.

- 8. When representatives of Mountain Valley Pipeline surveyed my property, I got the sense from one of the surveyors that he felt it would be hard for them not to affect the water on my property. Based on that, I have concerns about the effect of the construction and operation of the Mountain Valley Pipeline on my farm's water resources, including my well, the streams, and the springs.
- 9. The proposed final route for the Mountain Valley Pipeline will cross the best farming field on my farm, rendering it unusable. We currently use that field to run cattle, for hunting, for hiking, and for hay and crop production.
- 10. As I understand it, during construction of the pipeline, an alternative work site may be used on my property dangerously close to identified wetlands and springs on my property. I am concerned about the effects on water quality in those water features from sedimentation and other pollution from the construction of the pipeline. There are several springs on my property that are within 50 feet of the pipeline corridor, alternative worksites, and access roads.
- 11. I have long considered running water from one of the springs near the construction corridor to my home to use for domestic purposes. I am concerned that pollution from the construction and operation of the pipeline may render water from that spring unusable for domestic purposes, or that the flow quantity of the spring may be reduced.
- 12. I enjoy watching Slate Run of Hans Creek flow past my house from my living room window and enjoy listening to the frogs that gather in it and the associated wetlands. I call this place "Frog Heaven." I am concerned about the impact that pollution from the construction and operation of the pipeline across the tributaries of Slate Run could have on the wildlife in the stream that I enjoy. My enjoyment of the stream has been reduced since I learned of Mountain Valley Pipeline's proposed route across my property and my streams.
- 13. Past my house, Slate Run of Hans Creek flows onto my neighbor's property and feeds a small pond at which I have fished in the past and intend to continue fishing. I am concerned about water quality in the pond from the disturbance along Slate Run and its tributaries that will be cause by the pipeline. Those concerns diminish my enjoyment of the prospect of fishing in that pond and I may not fish there as often if the pipeline is constructed.
- 14. My property has been blessed with abundance of good water, and I am concerned that the proposed Mountain Valley Pipeline will affect both the quantity and quality of my water resources. Those concerns diminish my enjoyment of living here. I most likely will leave and/or sell my property if the pipeline is constructed. Since the pipeline was announced, I have felt upset and angry and lost sleep worrying about the effect of the pipeline on my water resources. Those negative effects have grown with each step in the pipeline approval process.

- 15. My two adult children had intended to move back to the farm to build their own homes here. Neither will do so if the pipeline is constructed. As a result, the construction and operation of the Mountain Valley Pipeline would deprive me of the opportunity to live here on my farm with my children.
- 16. Approximately half of the Mountain Valley Pipeline right-of-way across my property crosses through forests. I use those forests for multiple purposes and I walk through them at least once a week.
- 17. I hunt deer, squirrel, rabbit, grouse, and turkey in the forests on my property that will be crossed by the Mountain Valley Pipeline right-of-way. I also gather other resources from that area, including wild mushrooms and ramps.
- 18. Part of the forests on my property through which the Mountain Valley Pipeline will be constructed is registered as a whippoorwill nesting area with the West Virginia Department of Natural Resources.
- 19. Tree cutting in the Mountain Valley Pipeline right-of-way in my forests will disturb the wildlife resources that make living here enjoyable. The right-of-way will fragment the forest and diminish my use of it. In fact, I will forego hunting game or gathering resources near the pipeline corridor after construction begins and will continue to avoid that area during operations. The forests, once cut, will not mature in my lifetime.
- 20. In addition to its direct effects on my property and my water resources, the proposed final route of the Mountain Valley Pipeline crosses two additional streams that I use for recreational and aesthetic purposes, and those uses are harmed, and my enjoyment of them diminished, by the approval of the pipeline.
- 21. As I understand it, the Mountain Valley Pipeline will cross Indian Creek at or near the location where I was baptized in that creek as a young man. I drive by that section of Indian Creek almost every day, and enjoy looking at the stream and reflecting on my connection to it. My enjoyment of such reflection has been reduced recently, as I realize that that special place is never going to look the same. They are going to destroy it.
- 22. As I understand it, the Mountain Valley Pipeline will cross Hans Creek, a tributary of Indian Creek, at a location known as the Narrows of Hans Creek. I have been using the Narrows of Hans Creek throughout my life. I walked through the woods there and crossed Hans Creek at or near the proposed Mountain Valley Pipeline crossing at a young age to get to my grandfather's house. I still go there three to four times each summer, and would intend to keep doing so but for the pipeline. If the pipeline were to be constructed across Hans Creek, I would no longer use it for recreational or aesthetic purposes. I am concerned about the effect of the Mountain Valley Pipeline's stream crossing on the aquatic life in the creek and I know that the pipeline right-of-way would create an intolerable eyesore in that very special place and its unique ecosytem.

- 23. For all of the foregoing reasons, construction and operation of the MVP will result in irreparable injury to my property and to my person.
- 24. I have been named as a defendant in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter my property and begin construction (including timbering) on my property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of my property. The developer has asked the Court to give it access to survey our property by January 15, 2018, and access to begin construction, including timbering, by February 1, 2018. If they are allowed early possession on the basis of the Certificate, prior to a rehearing by FERC, I will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this __ day of November 2017.

Maury Johnson

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Mountain Valley Pipeline, LLC

Docket No. CP16-10-000

DECLARATION OF TAMMY A. CAPALDO

- I, Tammy A. Capaldo, state and affirm as follows:
- 1. I have lived in Pence Springs, West Virginia, on property along the Greenbrier River that I co-own with my daughter, Caitlyn A. Gragg, since approximately February 2015.
- 2. I am a member of Sierra Club. Sierra Club is a nonprofit corporation, incorporated in California, with more than 770,000 members and supporters nationwide and approximately 2,600 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment, and protection of surface waters in West Virginia.
- 3. The proposed right-of-way for the Mountain Valley Pipeline—a 42-inch natural gas transmission line—crosses the property on which I live and co-own along the Greenbrier River in Pence Springs, West Virginia.
- 4. My lifelong dream, since I was a little girl, has been to own property along the Greenbrier River in West Virginia. I spent my formative years in Ohio, but my fondest memories of childhood are of time spent on my father's family's camps along the Greenbrier River. The time that I spent there instilled in me a lifelong love for the outdoors and for river life. I always dreamed about owning a place of my own on the Greenbrier River and using it to share with my children and grandchildren the same joys, memories, and upbringing that I had.
- 5. For decades, I have planned to purchase property along the Greenbrier River and spend my retirement years there.
- 6. I looked at many properties along the Greenbrier River in West Virginia before I decided to purchase the property on which I now live. I selected this property because it was unique among the properties at which I looked in that the property has approximately 271 feet of Greenbrier River frontage, the property includes a semi-shaded sand and pebble beach along the River (providing incomparable access to the water for me, my children, and my grandchildren), and the residence on the property is located out of the floodplain. Indeed, in the "1000-year" flood of June 2016, the residence on my property was untouched by the floodwaters.
- 7. In or around July 2014, my daughter and I made an offer to purchase the Greenbrier River property on which I now live. The purchase transaction closed in or around January 2015. The prolonged time period between my offer to purchase the property and closing was due to difficulties in locating comparable properties on which to base an appraisal of the property.
- 8. Sometime between July 2014 and October 2014, I learned that the property that I was purchasing was located on one of several potential routes by which the

Mountain Valley Pipeline was proposed to cross the Greenbrier River. It was my understanding that the proposed pipeline would cross the Greenbrier River one time, but that the precise location of that crossing was not confirmed. It was not until sometime in 2016, after I had purchased the property, that I learned that the crossing location that affected my property was selected as the final proposed route.

- 9. The pebble and sandy beach described above is the only access point I have on my property to the Greenbrier River. The remainder of my river frontage is along a bank too steep to provide access for my family and me.
- 10. In addition to my daughter Caitlyn, with whom I co-own the property, I have a son, Carson, who has two children of his own. My children and grandchildren frequently visit the property, fulfilling my dream of sharing time along this special river with them. When I think of the Greenbrier River, I have always thought of family.
- 11. The beach is the center of activities on my property for my family and me. The ease of access, and child-friendly beach areas, were the main reasons that I selected this property. There is something about the water that just soothes the soul.
- 12. The recreational activities that my family and I use the beach for include camping, wading and swimming, fishing, and kayaking.
- 13. During my annual family reunion, my guests frequently camp near the beach, pitching tents and building campfires. For thirty years, my family has reunited along the Greenbrier River, and since I acquired my property, we have used it for camping, swimming, and kayaking as part of the reunion.
- 14. My family and I use the beach to wade into the Greenbrier River and access deeper swimming holes in the river.
 - 15. We also fish from the beach for bass and catfish.
- 16. The beach provides a launch point for kayaking out to fishing holes, as well as a take-out point for longer float trips along the Greenbrier River.
- 17. As I understand the proposed final route for the Mountain Valley Pipeline, the beach on my property is located at the point at which the pipeline is proposed to emerge from the Greenbrier River at the southern end of its crossing of that stream.
- 18. If the pipeline is constructed as proposed, it will change my day-to-day use of my property, affect my enjoyment of living along the Greenbrier River, and may cause me to abandon my dream of living on the property full-time, or even to sell the property (if I can).
- 19. Construction and operation of the pipeline at its proposed location will affect the landscape of my beloved beach and damage or destroy precious shade trees, changing its features and diminishing my recreational and aesthetic enjoyment of this aspect of my property.
- 20. During construction, I will lose access to the beach for an undefined period of time, as construction crews build cofferdams across the river, dig a trench and workspace out of the riverbed, and then construct the pipeline through the beach to the point it exits my property. My access to the beach will also be affected by efforts to "reclaim" the property to the long-term right-of-way.
- 21. After construction, I fear that the landscape features of the beach, now transformed into a pipeline right-of-way, will be altered to the point that I will no longer be able to use it recreationally, if at all, and that any use that I am able to make of the beach will not be as enjoyable because of its alterations. It may be unrecognizable from the little slice of heaven that I purchased.

- 22. Moreover, since the time I purchased the property I have thought that I had the potential to generate supplemental retirement income if necessary by using the beach area as part of a commercial campground. Because of the pipeline right-of-way and its disturbance to the natural beauty of the area, I will no longer be able to use the beach for that purpose.
- 23. As I understand, the pipeline right-of-way only crosses a portion of my property on the western property line. The proposed river crossing, however, proceeds from the northeast to the southwest. Accordingly, there is the potential for sedimentation from construction on the opposing shore and under upstream portions of the river that could affect much more of the river along my property than just the corner of the property on which the right-of-way is directly located.
- 24. I fear that construction of the pipeline crossing under the Greenbrier River adjacent to my property will lead to water quality problems from, among other things, increased sedimentation that will result from the construction process. I enjoy the aquatic life in the Greenbrier River, including the fish that I catch and the crawdads that I show my grandchildren. I am concerned that sedimentation from the construction process may adversely affect the aquatic life and that will diminish my enjoyment of my time along the Greenbrier River.
- 25. I am also concerned that construction on the riverbanks adjacent to the pipeline will increase sedimentation into the Greenbrier River along the stretch of river that I own, harming aquatic life and altering the stream bottom that I wade on and swim above. Those effects will diminish my recreational and aesthetic enjoyment of the Greenbrier River.
- 26. Moreover, I fear that construction and maintenance of the pipeline crossing and associated rights-of-way could result in prolonged sedimentation into the Greenbrier River and/or the creation of sediment deposits that could alter the streambed where my family and I wade and swim along the Greenbrier River, converting it from an accessible gravelly riverbed in to a mucky, swampy, and inaccessible mess. Those concerns affect my enjoyment of my time along the Greenbrier River.
- 27. I understand that underground natural gas pipeline leaks are not uncommon. I have great fear that once the pipeline is in operation, minor leaks could occur into the Greenbrier River. For that reason, if the pipeline is constructed, I expect that my family and I will forego all water activities, to include camping, along the Greenbrier on my property. I do not want my children and grandchildren to play near or splash around in the river when there could be a leak.
- 28. Although less frequent, I also understand that catastrophic natural pipeline leaks can occur. My fears of a catastrophic explosion from a leaking pipeline will, and in fact already have, diminished my enjoyment of using my beach and swimming in the Greenbrier River along my property.
- 29. If the pipeline is constructed, I will very likely not continue to use my property to host guests during my annual family reunion. That prospect saddens me and affects my recreational and aesthetic enjoyment of my property and the river.
- 30. In June 2016, I witnessed the effects of a "1000-year" flood on my property. I saw unimaginable debris float down the Greenbrier River and fear that floods could expose the pipeline or damage it, and those fears affect my enjoyment of my property.
- 31. My domestic water supply for my residence on my property is provided by the Big Bend Public Service District, which withdrawals water from the Greenbrier River downstream of the final proposed crossing. I am aware of changes in water quality observed in

other water districts as a result of upstream pipeline crossings, and I have concerns about the effects of the proposed final Greenbrier River crossing on my domestic water supply, both in the short term and the long term. Those concerns include both water quality issues and rate increases that may result from any additional treatment that the water district must add to account for pollutants from the construction, operation, and maintenance of the Mountain Valley Pipeline. Those concerns affect my enjoyment of my property.

- 32. I got became engaged to be married in May 2017 and got married on August 13, 2017. My husband and I have discussed living on my Greenbrier River property full time. My husband has told me that he does not want live on the property if the pipeline is constructed because of his fears of leaks/explosions and concerns about health issues related to living so close to a major natural gas transmission line.
- about those effects, my diminished recreational and aesthetic enjoyment of my property and this stretch of river, and my foregone use of the Greenbrier River that will result from them. I may simply have to give up on this property. That deeply saddens me and causes me anxiety. You simply cannot put a price tag on a dream. If the pipeline company were to come in and destroy my sanctuary, and take away the spot where I have long intended to enjoy the outdoors with my grandchildren, you simply cannot put a price on that. If I do find myself in the market for new Greenbrier River property, I will not purchase a property located downstream of (or anywhere near) the Mountain Valley Pipeline crossing because of my concerns about the effects of the pipeline on water quality in the river.
- 34. To be clear, my concerns about future effects of the construction, operation, and maintenance of the pipeline on my Greenbrier River property are presently diminishing my quality of life and my recreational and aesthetic enjoyment of my property and the Greenbrier River. Fach time I wade, swim, or kayak in the Greenbrier River, I am unfortunately preoccupied with concerns about the effect of the Mountain Valley Pipeline on this special river that I hold so dear.
- 35. As a result of the foregoing, construction and operation of the MVP right-of-way will cause irreparable injury to my property and to my person.
- 36. I have been named as a defendant in a recently filed condemnation action in the United States District Court for the Southern District of West Virginia. In that action, the developers of the MVP are currently seeking a preliminary injunction to enter my property and begin construction (including timbering) on my property. The pipeline developer cites the existence of the FERC Certificate for the MVP as the basis for its early possession of my property. The developer has asked the Court give it access to begin construction, including timbering, by February 1, 2018. If early possession is allowed, on the basis of the Certificate, prior to a rehearing by FERC, I will be irreparably injured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 2 day of November 2017.

lammy A. Capaldo

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

DECLARATION OF NAOMI COHEN

- I, Naomi Cohen, state and affirm as follows:
- I live in Gap Mills, West Virginia, in Monroe County, and have lived there since 1975.
- 2. I am a member of Sierra Club and have been for decades. Sierra Club is a nonprofit corporation, incorporated in California, with more than 770,000 members and supporters nationwide and approximately 2,600 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment, and protection of surface waters in West Virginia.
- 3. I am an avid hiker and I have been since the age of ten, when my father would invite me to accompany him on hikes in the Catskill Mountains of New York. I have hiked the Appalachian Trail and all over the world. I frequently plan my vacations based on hiking trips in both new and familiar regions.
- 4. For more than 40 years, I have hiked to the Hanging Rock Raptor Observatory, high atop Peters Mountain in Monroe County, West Virginia. I can see the observatory from my kitchen window and it is a special place to me. I hike to the Observatory at an elevation of 3,800 feet above sea level at least six times a year and will continue to do so for so long as I am physically able. Members of the Brooks Bird Club and others have been maintaining that former fire tower since 1972, and it is currently used for the observation of migrating birds of prey. From the Observatory, the visitor has a most incredible 360-degree view of the surrounding area.
- 5. To access the Observatory, I hike on the Allegheny Trail from a trailhead on Zenith Road. On those hikes, I usually hike past the Observatory a mile or two, and return to the Observatory on a side trail. The Allegheny Trail is the closest hiking trail to my front door. I have participated in trail maintenance activities on that trail through my membership in the West Virginia Scenic Trails Association, and intend to again.
- 6. I am drawn to the Observatory so frequently by the incredible and remarkable view along a trail just ten minutes from my house. From the Observatory, I can see Flat Mountain and Muddy Creek Mountain, as well as Potts Mountain and Brushy Mountain in Virginia.

- 7. The view from the Observatory rivals other vistas I have experienced in my hiking, including famous views along the Appalachian Trail in Virginia. The long-distance views from the Observatory allow me to see so much of the Appalachian Mountains and gain an understanding of their topography and geology.
- 8. My hikes to the Observatory are emotionally restoring. I go there to find peace, inspiration, and rejuvenation. I frequently take out-of-town guests to the Observatory because it is a hike within the capabilities of most people and the view gives my visitors a sense as to why I choose to live here.
- 9. Based on my geographical knowledge of Monroe County and my reviews of maps of the proposed route for the Mountain Valley Pipeline, I have little doubt that the construction of the pipeline, as well as the right-of-way that remains after construction, will interrupt the magical view from the Observatory and several other vistas along the Allegheny Trail that I hike, including at Neel's Rocks and Cole's Cabin.
- 10. As of right now, the view from the Observatory is superior in many ways to other vistas in this region to which I hike because of the absence of the sight of human impacts, beyond farming, such as utility rights-of-way. I am disturbed by the knowledge that my view from the Observatory and the Allegheny Trail will be marred by a wide swath of deforested land, in the form of the Mountain Valley Pipeline right-of-way marching and snaking over the ridges and through the forests of Monroe County.
- 11. If the Mountain Valley Pipeline were constructed as proposed, the view of its right-of-way through Monroe County and into Virginia would diminish my enjoyment of my hikes along the Allegheny Trail and of my time at the Hanging Rock Raptor Observatory. I anticipate that the peace, inspiration, and rejuvenation that I find there would be marred by frustration, sadness, and sorrow. I am concerned not only about my own loss of pleasure, but for the loss that my children and grandchildren may suffer from their loss of the ability to see what I saw there.
- 12. Seeing the right-of-way would not only interrupt my view from the Observatory, it would also carry with it concerns about the Mountain Valley Pipeline's effect on wildlife and water resources along its path. I am a user and officer of Sweet Springs Valley Water Company. As I understand it, the proposed route of the Mountain Valley Pipeline would traverse dangerously close to the water source for that company, in an area of sensitive karst terrain. I am concerned that the Mountain Valley Pipeline could affect the quantity and/or quality of the Sweet Springs Valley Water Company's source, and those concerns will haunt me on my visits to the Observatory and interrupt my enjoyment of my time there.
- 13. For the foregoing reasons, the deforestation and impacts to groundwater and surface water that would result from the construction of the MVP would cause irreparable harm to the environment in Monroe County, West Virginia, and to my enjoyment of living and recreating here.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this Z day of November 2017.

Naomi Cohen