INDIVIDUALS IND650 – Jobyl A. Boone

IND650-4 the environment and water with no guarantees for the people of Franklin County, and it does not serve the public good.

And lastly, the propaganda that MVP, LLC, has created and used to win over the people of this IND650-5 and other rural Virginia counties in the proposed pipeline path is not unexpected in this era of spin, media manipulation, and fake news in which we are living. But in the most emphatic terms I denounce their campaign of deception. This county is not populated, on the whole, with highly educated, critically thinking people. The people of Franklin County are good and largely honest people. They want to believe the best of others, and are not cynical and mistrusting. As a person who grew up here in a family that worked hard and wanted its next generations to think bigger, be smarter, to get out in the world, I am still proud to call Franklin County home. I am proud to be from here and proud of the moral compass growing up here gave me. I consider all of the people of Franklin County MY people. The land here, all of it, is MY land. As a person who was fortunate enough to go to college, who did get a graduate degree, and who has roamed and lived far afield from Franklin County, both domestically and abroad, I am deeply offended by MVP's dishonest and manipulative tactics in both presenting and advertising this pipeline, and in the tone and content of their easement negotiations with residents. I take great umbrage that MVP's land agents are presenting themselves deceptively as allies working on behalf of landowners when they make their "pitches." This campaign is clearly designed to take advantage of the trusting, good-intentioned people of this county who of course would not assume people are lying to them to take or use their land. I am deeply offended that anyone would attempt to make money off the backs of the people of this county, just because they are able. But that is what is happening. It is a gross practice that should not be rewarded.

The FERC has gone through tens of thousands of pages of documents from MVP, LLC: studies and assertions and statistics and plans and promises. All of these documents created and submitted by a conglomerate-company whose sole goal is to make money. There is no way the people of Franklin County or any group of opposed citizens could possibly present a similar volume of information to the FERC in opposition. I strongly urge the FERC to legitimately hear what people like I are saying in these submissions: the goal of this pipeline is not to benefit the people of Franklin County, the citizens of Virginia, or the United States of America. The goal of this pipeline is to make a small number of people a large amount of money. I suggest to you, Secretary Bose, that the number of people who will be put at risk, the number of people whose lives will be negatively impacted, the number of people who live in Franklin County and in Virginia, and their children, and their children's children, who will have to wake up and every day see the scars in the landscape, see the slashes up and down the mountain slopes and along the hills and fields, who will live with the risk of disaster for generations, THOSE people far, far outnumber--would swallow whole--the small number of people who would benefit from this pipeline.

Based solely on facts, there are not enough certainties or guaranteed benefits to justify FERC's approval of the MVP. Considering the environmental risks to waterways and water sources, the potential economic risk of lost tourist and tax dollars and negatively impacted property values; the visual blight of a permanent 37-mile-long scar cutting through our rolling hills and mountains; and the devastating physical risk associated with a breach in the line of this enormous

BOONE p. 3 IND650-5

See the response to comment IND12-1 regarding property values. The EIS provides a discussion of tourism in section 4.9 and visual impacts in section 4.8.

INDIVIDUALS IND650 – Jobyl A. Boone

IND650-5 | pipeline, the FERC should unquestionably deny this application. I beseech the FERC to do just that: deny MVP, LLC's application to construct the Mountain Valley Pipeline.

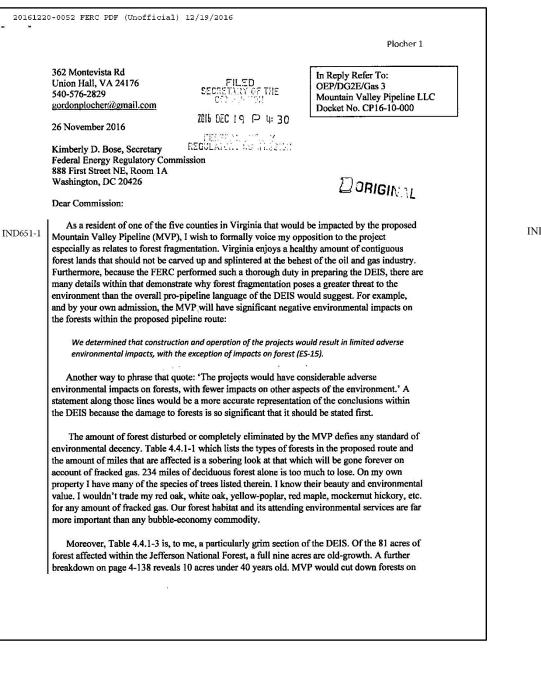
Sincerely, A. Boone bby

BOONE p. 4

Individual Comments

INDIVIDUALS

IND651 – Gordon Plocher



IND651-1

See the response to comment FA15-5 regarding forest impacts.

INDIVIDUALS IND651 – Gordon Plocher

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Plocher 2

IND651-1 cont'd

public lands that have not begun to realize their potential as true forest lands. 11 acres are more than 40 years and a full 60 acres are more than 100 years old. To undue 60 thriving acres that are a fully realized and mature forest ecosystem under federal protection is simply unconscionable. However, eliminating 9 acres of legitimate old-growth forest within our public Jefferson National Forest is nothing short of reprehensible. Furthermore, what you're proposing is a negative feedback loop. Healthy forests provide cleaner air, and cleaner water. Fracking, despite the dubious claims to the contrary, promotes air pollution, and poisons our water supply. You're proposing to cut down the very forests that purify the air and provide healthier water to provide a market commodity and energy source that is proven to pollute the air and poison water. The end result of which will certainly be a less healthy environment.

However, an impressive amount of careful consideration was applied to section 4.4.2.3. The attendant details of the effects of the MVP on interior forest fragmentation and edge effects was thorough and compelling. The scope of potential environmental damage and consideration for minimization was thoughtfully studied and explained. Nevertheless, as detailed in the report, the potential for altering entire ecosystems of these delicate forested lands is too great. The necessary rights-of-way for both construction and operation pose a significant risk for the long-term health of the forest. On pages 4-144 - 5, the DEIS details potential permanent disruptions to the forest on account of the corridor, and subsequent creation of new forest edges. From microclimate changes that would affect humidity, wind, sunlight, wildfires, plant and animal species dispersal, to increased corridor access for predators, hunters, and poachers, all of these factors amount to profound, and unnecessary impacts on the forest ecosystems. Nevertheless, credit is due for aligning 29% of the MVP along existing rights-of-way. 29% is a commendable amount of minimization, but I contend it is not nearly enough. The amount of forest fragmentation within the proposed path of the MVP is too great to justify the project.

Additionally, as relates to core forested areas, the DEIS paints a resoundingly negative picture. In Virginia alone, as Table 4.4.2-2 elucidates, the MVP would cut through 937.8 acres of ecological core forest land for construction with a net figure of 358.9 acres lost permanently due to operation. However, I contend that a large portion of the difference will be lost permanently as well because, as documented in section 4.4.2.3, the recovery of prime forest land is not guaranteed due to microclimate changes, species dispersal and forest edge disruption. Nevertheless, as I look closer at the breakdown of Table 4.4.2-2, I see some galling figures as relates to the scale of disruption of ecological core forests. Acreage of disruptions for core ecological forests during construction totaling 167.8 for High, 198.4 for Very High, and 134 for Outstanding Quality Forests with a net disruption for operation of 58.1, 80.8, and 56.4 respectively. It is simply not justifiable to wreck 134 acres of Outstanding Quality ecologically core forests to assume the difference in acreage will rebound to Outstanding Quality is highly unlikely.

Reviewing the map in Figure 4.4.1-3 and its clusters of core forests which would be sliced through by the MVP is disheartening. I live in Franklin County, VA and work in Roanoke. I

INDIVIDUALS IND651 – Gordon Plocher

2016100	
2016122	0-0052 FERC PDF (Unofficial) 12/19/2016
	Plocher 3
ID651-1 ont'd	know the hiking trails and forest lands very well. I see the pink zones on the map that are listed as Outstanding, and I know firsthand how outstanding they truly are. I then see the MVP cut right through the pink, orange (Very High), and yellow (High) zones, and I feel loss.
	we have determined that the MVP would result in significant impacts on large acreages of upland forest. (4-146)
	So states your own conclusion.
	This letter only addresses forest fragmentation, and on such grounds alone the justification for the MVP, in my opinion, breaks down completely. Moreover, forest fragmentation is interlinked and interdependent upon the Wilderness Act, ESA, MBTA, BGEPA, CAA, CWA, etc. I could as easily broaden this letter's scope to dovetail all those laws and more.
	In 2016, only Wall Street lives in the type of alternate reality that can attempt to justify commodification and profits above living, breathing ecosystems and the invaluable services they provide. Our environment, and ecosystem services, face long odds in the face of climate change. Building new pipelines amounts to a massive gamble with the near and long-term health of our planet and human society. I would strongly urge the Commission to honestly ask whether or not fracked gas is worth the risk.
IND651-2	The DEIS is predicated upon the notion that 2 Bcf/d of fracked gas <i>will</i> be shipped whether by pipeline, vessel, truck, or train. Granted, the DEIS was not commissioned to examine whether or not 2 Bcf/d of fracked gas <i>should</i> be shipped. Nevertheless, the bottom line is that the safety of fracking is based on flawed science and the damage it is causing is quickly coming home to roost. Any talk about fracked gas being better for the environment than say, coal, is like saying a rattlesnake bite is better than a cobra bite. They're both poisonous and potentially fatal, only the rattlesnake bite marginally less so. So why the push for fracking when solar and wind are actually environmentally friendly and becoming more economically viable? Wall Street. That's why. Fracked gas is a symptom of the poisonous oil and gas industry which itself is a relic of the robber baron era of environmental and economic exploitation. Therefore, based on moral and scientific grounds, I will oppose <i>anything</i> to do with the insidious practice of fracking.
	Unfortunately, forest fragmentation in my own backyard is just <i>one</i> of the tragic consequences the MVP and fracked gas will bring to the Commonwealth of Virginia and to humanity in general.
	Sincerely,

IND651-2 See the response to comment IND2-3 regarding hydraulic fracturing. In section 3 of the EIS, we find that transporting natural gas by vessels, trains, or trucks would not be recommended. Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1

regarding renewable energy.

INDIVIDUALS IND652 – Bob Peckman

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IND652-1	The exacultive summary says that there will be I impact. That is a value judgement. You should be	anted viegative
1 	and the conclusions should be based on those tests neorrest, Pipelines sometimes (eventually periodic)	<u>His also quite</u> <u>y) loak. In</u>
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IND652-1

The statement made in the Executive Summary is based on the facts and conclusions as discussed throughout the EIS. See the response to comment IND92-1 regarding leaks. The EIS provides a discussion of karst and aquifers in sections 4.1 and 4.3, respectively. See the response to comment IND3-1 regarding drinking water.

INDIVIDUALS

IND653 – Andrew Ianni

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IND653-1 See the response to comment IND2-3 regarding hydraulic fracturing.

INDIVIDUALS IND654 – Amy Dellinger

20161220-00	e9 FERC PDF (Unofficial) 12/19/2016	C716-10
	DEAR MS BOSE, DRIGINAL	11/26/16
IND654-1	I AM WRITING YOU TODAY OVER FOR THE PROPOSED MOUNTAIN UA UNE. AS A VIRGINIA RESIDENT, MY WHO THIS POTENTIAL ENVIRON MENTAL D' COULD CAUSE MUCH DAMAGE TO THE I COVE. WE HAVE ALL WITNESSED THE IN CANC OR BUSTED PIPE LINES THE OUR COUNTRY OVER THE LAST SEVEN THE IRREVERSIBLE HARM CAUSED TO CAND, WATER, WILDLIFE, AND RESID NOT WORTH THE TRANSPORT OF RES	LLEY PIPE- DLE LIFE, ISASTOR STATE MACT OF 2010GHOUT 20100GHOUT 2010GHOUT 2010GHOUT 2010GHOUT 20
	THAT ARE OUT-DATED. I URGE YOU TO DO AUL THAT YO TO SAVE OUR BEAUTIFUL STATE. PUT A STOP TO THIS PIPELINE. I APPRECIATE YOUR TIME AND CO OF THIS. THANK YOU!	PLEASE
	SINCEREU Amy C Amy BEI	elli

IND654-1

The MVP would not be an environmental disaster that would significantly damage Virginia (with the exception of the clearing of forest). See the response to comment IND92-1 regarding leaks. The EIS provides a discussion of water resources in section 4.3 and wildlife in section 4.5.

INDIVIDUALS IND655 – Judith Smallwood

20161220-0072 FERC PDF (Unofficial) 12/19/2016 December 11, 2016 RE: Docket No. CP16-10-000 & CP16-13-000 Kinberly D. Bose, Secretary Federal Evergy Regulatory Conn. 2016 DEC 19 P 4 22 888 First St. NE. Roost 1A DORIGINAL Washington, DC 20426 REGERAL INCROY REGULATORY CONDENSION Dear Mr. Bose: I am writing with concerns about the construction and operation of the Moustain Valley Pypeline (MVP). IND655-1 Groundwater and drinking water supplies are discussed in section IND 4.3 of the final EIS. See the response to comment FA11-15 As a resident of West Virginia who uses ground water (well water) as the source of drinking water and who 655-1 regarding the open-cut wet waterbody crossings. has moved to this area to enjoy the peace and quict and recreational opportunities of the area, Nom very concerned about issues that I do not feel were adequatedy addressed by The Profe Environ-mental Impact Statement (DEIS). The following are some of my specific concerns , "River Crossinger The open-cut wet crossing proposed is the most invessive and impartful crossing method available. as a person who enjoys being on the Greenbrien River, I find this very problematic - Wetland Crossing (Section 4.3.3): The AVP has proposed IND permanently filing 44 wetlands along access roads IND655-2 See the response to comment IND209-1 regarding the permanent Withank an important habitat for many species and also provide natural flood protection, while is so important in the mountainous tarrain of 655-2 fill of wetlands. Geology (Section 4.1.2.5): The DIES identifies 94 Karet features (or caves) to be crossed by MVP It is clean from independent studies that harst IND IND655-3 655-3 Section 4.1 of the final EIS has been revised to provide additional details regarding karst features in the project area.

INDIVIDUALS IND655 – Judith Smallwood

20161220-0072 FERC PDF (Unofficial) 12/19/2016 topography is not an appropriate as for construct IND 655-3 cont'd A conclusion, West Virginia has a long history of being used for resource extraction, with lettle regard for the residents' lives. Please reconsider construction of this pypelin across this progile area. IND 655-4 Sincerely , Judite Smallwood, Ph. D. 218 Chestrut Farm In. Lewisburg, WV 24901

IND655-4 The MVP pipeline is for transporting natural gas; which is not an extractive activity. The Commission would decide whether or not to authorize the projects based on the record.

INDIVIDUALS IND656 – Daniel R. Averill

20161221-5040 FERC PDF (Unofficial) 12/21/2016 8:06:24 AM Daniel R. Averill, Vinton, VA. Mountain Valley Pipeline IND656-1 Like it or not our civilization is powered by fossil fuels. Whether it is oil, coal or natural gas we cannot produce, transport, manufacture or purchase the goods and services which make our society what is today without these fuels. Nor would we be able to light and heat our homes and offices or refrigerate our food using only "renewable" energy sources. The technology to produce this volume of energy does not yet exist. The cleanest fossil fuel is natural gas and the safest way to transport it is a pipeline. Our area has numerous pipelines that most people don't even know are there because they are so safe. It is much more dangerous move fuel by truck or rail. This region has seen a significant drop in available jobs over the last decade. We need to bring more employment opportunities to Western Virginia. The construction of the Mountain Valley Pipeline will be an economic boon to this area. Access to cheap, readily available natural gas will be a significant draw to businesses looking to relocate. Daniel R. Averill 4278 Toddsbury Circle Vinton, VA 24179

IND656-1

Comments noted.

INDIVIDUALS IND657 – Patrick Gabbert

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	acids for Specific Purposes, Pigging Trendrie the Run Vertical	
	42" pips was never one of this purposes. This proposal allow	4
	the lagging of extremely Rare Old Hrewith Fored Currently month	int
	in a Spring Found many ent Premiting these amendments	,
	do nothing for the public and thereaster the integrity of	
	the national Forest System steeld, all Publicity leve. The	
	will be no cuporte entity to hald velocity to Remediate	
	the damage that WILL occur. They will revisaring to	~
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IND657-1 Comment noted.

INDIVIDUALS IND658 – Tatyana Romanyukha

IND658-1	The FS has worked with Mountain Valley to develop project design features, mitigation measures and monitoring procedures to minimize the impacts to the resources on NFS lands. These mitigation measures and monitoring procedures are described in the POD.
IND658-2	See the response to comment IND2-1 regarding safety. See the response to comment IND92-1 regarding leaks. The EIS provides a discussion of environmental justice in section 4.9.

INDIVIDUALS IND659 – Grace M. Terry

IND 659-1 My name is Grace M. Terry. My 3 siblings, my mother and I all own parcels of land that are located within the Coles-Terry Rural Historic District which was approved on Sept. 15, 2016 by the Virginia Department of Historic Resources (VDHR) as eligible for listing to the National Historic Register. The Draft Environmental Impact Statement (DEIS) fails to recognize the impacts of miles of the pipeline path, and multiple permanent access roads and work spaces located within the boundaries of the Coles-Terry RHD. It is stated on p. 4-345 of the DEIS that the pipeline crosses the Coles-Terry RHD, however there is no other information given. The proposal of this RHD was identified and acknowledged by MVP in June 2016, yet the DEIS has NO evaluation of the effects, therefore the DEIS is inadequate in its evaluation of historic resources on Bent Mountain in Roanoke County, Virginia.

In addition to this omission, surveyors working for the MVP entered my brother John Coles Terry III's property on October 10, 2016, without his permission and despite his attempt by certified mail to provide his phone number to request a date to be present for surveying. The surveyors dug up artifacts from the property that day and did it out of the sight of family members-including my brother's wife-who were present. We had objected to their entry of the property which they accomplished not by coming up the driveway and knocking on the door of my brother's home to identify themselves and notify the landowner that they were going to be digging holes in the back of a cleared field which is easily accessible by dirt road and very close and visible from his house. Instead, they parked multiple vehicles on Poor Mt Road about half a mile down from my brother's driveway and entered the property where they had to cross a creek, climb a steep ridge through the woods, then descend through more woods and the thick underbrush of an overgrown orchard to reach the ruins of an old house. We have wondered how they knew the specific location of where they were going since they were earlier observed entering coordinates in ipads if they had never been on the property before. That is, they had never before been on the property legally and with proper notice. (NOTE: We can prove the fact that surveyors have entered our properties without permission because a neighbor videoed them and their survey flagging in April 2014 when they had four vehicles parked in the middle of my brother's field that is 1/2 a mile off Poor Mt. Rd across a private wooden bridge and down a private gravel drive.

Despite our seeking help from Roanoke County police on October 10, 2016, the surveyors were not removed from the property. We waited by the road with the police where a land agent named Crystal and a man named Dave (a crew chief?) told the police that the surveying crew did not have radios and could not be contacted. When the surveyors emerged hours later, there were fewer than the number that had originally entered the property. They proceeded to dump Ziploc bags of artifacts on the bed of a truck. They were planning to take the artifacts with them, however we stated our objections. Since my brother's wife was present, we said that the landowner had the right to take possession of the artifacts. The artifacts are in bags with labels but they do not have information such as GPS coordinates on the labels that identifies the location where they were dug up. They tried to take our private personal property even though IND659-1

The Coles-Terry Rural Historic District is discussed in section 4.10 of the EIS.

IND659-2 Your comments about Mountain Valley land surveyors are noted.

IND 659-2

INDIVIDUALS IND659 - Grace M. Terry

IND	
659-2	we were there. They probably thought we didn't know our rights because their security guard(?)
cont'd	told me that I had "interfered with the process".
	I would like to state my objection to FERC about this incident and have it entered into the public
	record and reported to VDHR and any other state and federal agencies that have regulatory

oversight of the National Environmental Policy Act (NEPA) under Section 106. MVP should be held responsible for this blatant violation of a landowners, rights to retain possession of their artifacts. Additionally, I think it should be unacceptable for any entry by unidentified persons on a property but it is especially problematic for these surveying crews to enter a designated historic property for the disturbance and removal of artifacts when the landowner has requested to be present. This is a blatant violation of property rights. Furthermore, the private property owner should be extended the same consideration that would be taken for surveying on Forest Service properties where the credentials and identification of the surveyors are required. No private property owner should have to go through having unidentified and potentially unqualified people sneaking onto their land and removing ANYTHING. Furthermore, there should be a process of safeguards including, but not limited to, checking surveyors' bags, clothing and electronic equipment to ensure that nothing is removed illegally. One of our Bent Mountain neighbors had to confront a surveyor this past summer who was observed putting something in her pocket which turned out to be a partial arrowhead point. I'm sure that there is a market for such items on EBay which would be an incentive to take it. Another worry is that the surveyors may be instructed to "overlook" the artifacts that are thousands of years old vs. the newer ones to make the archaeological studies appear as if there are no findings of Native American artifacts.

	То:	Kimberly D. Bose, Federal Energy Regulatory Commission Norman Bay, Chairman; Members of the Commission	
	From:	Thomas Bouldin, Pence Springs, West Virginia	
	Date:	December 20, 2016	
	Re:	Draft Environmental Impact Statement Docket No. CP16-10-000 Mountain Valley Pipeline	
	Comment:	Treatment of MVP's Route Planning Process in the DEIS Discussion of Socioeconomics	
IND660-1	FERC's Draft E the Socioecon- directed. ¹ The and the econo I have argued in a Suppleme	part of the NEPA process for formulating decisions about federally regulated projects, nvironmental Impact Statement for the Mountain Valley Pipeline application must address omic environment in which the proposed action arises and to which its effects are e existing draft is mostly devoted to a summary of the demographics of affected counties mic contributions associated with the proposed pipeline's construction and operation. As elsewhere, there are other equally important socioeconomic issues that must be taken up ntal or revised DEIS, because the existing draft is entirely inadequate to the tasks that e sets for a Draft Environmental Impact Statement.	
	environmenta part, they have negative impa FERC staff are FERC is publicl the environme forests may be compensatory	ntly, the FERC staff authoring the DEIS have committed themselves to the notion that any l impacts entailed by the project are largely temporary and insignificant—yet for the most e withheld from decision-makers and the public any direct measures of those projected lcts. Even in the case of damages to the forests through which 81% of the line is routed, committed to accepting the damage which they acknowledge will be significant. ² Since y committed to approving a project only if it can be shown to have "minimal impact" on ent, we are therefore left with the implication that, significant though the damage to e, it is the minimal impact possible—and various mitigation strategies and other ractions will bring the damages (so far as possible) into an acceptable range. (In relation chousands of acres of core forests, this is a striking assertion.)	
IND660-2	minimal impa possible (i.e., assumption th impacts be ma without system	sistion, I would argue that the acknowledged impacts of the MVP can be regarded as the cts possible only if it is assumed that the preferred pipeline route is the only route is to be accepted on the basis of inadequate data from the Applicant). Only under the at the pipeline will be installed along the preferred route can any judgment of minimal ade without actual, measured estimates of those impacts which are judged possible—and natic attempts to determine whether alternative routes might entail measurably less e proposed route is the only one that can or will be considered, then, yes, the impacts it	
	environmental e See the Nationa environment" fo	ironmental impact statement is prepared and economic or social and natural or physical affects are interrelated then the EIS will discuss all of these effects on the human environment." Il Environmental Policy Act, Section 1508.4 in materials defining the concept of the "human or purposes of embodying the principles of the Act. 1–1 (page4–132), and Conclusions, page 5–5.	

IND660-1 The EIS discusses socioeconomic issues in section 4.9. We would not supplement or revise the draft EIS, but would produce a final EIS that addresses comments on the draft. See the response to comment FA15-5 regarding forests.

IND660-2 Alternative routes are discussed in section 3 of the EIS. Only impacts and mitigation measures for the proposed route are evaluated in section 4 of the EIS. See the response to comment IND266-1 regarding perceived FERC support for the projects. The proposed route was adjusted during the pre-filing process due to landowner requests, avoidance of sensitive resources, and engineering considerations.

cont'd

IND660-2 entails may be the least that can be achieved, (that is, 'minimal'). But this obviously does not demonstrate that there are not other routes which might entail less damage.

Thus the character of the route—and the processes by which it has been developed—are significant features of the proposed action. The DEIS must provide to decision-makers and the public the information needed to evaluate this crucial dimension of the project. Yet the Draft Environmental Impact Statement excludes any detailed discussion of how the managerial organizations involved (EQT/MVP and FERC) implemented selection of the route. If the proposal is truly in the public interest, it will reflect a procedure of route selection that maximized the efficient and effective use of both corporate and affected public resources, systematically eschewed unnecessary threats to the pipeline's integrity and the resulting safety of affected populations, and at the same time minimized negative impacts on both the natural and the human environment. One section of a revised or supplemental Socioeconomic discussion in the DEIS will have to address this procedure in some detail.

The following paragraphs provide a preliminary focus for the writing of an appropriate sub-section for FERC's revised or supplemental Draft Environmental Impact Statement. I trust that the material will be of some more immediate practical use to the applicant—and to FERC—as well.

The Route the Applicant Planned

In a previous comment I have shown that MVP's proposed route offends against 9 of the 9 identified criteria specified by NEPA as signaling potentially significant impacts³. And so I begin this inquiry into the route planning process by asking:

How did it happen that the Federal Energy Regulatory Commission received—and is supporting—an application for pipeline infrastructure that commits its proposing corporations to the following:

- A route for which more than one-third of its distance is over slopes in excess of 30%, and many over 50%;⁴ when company documents themselves dictate that any slope over 30% will require "special construction techniques" and "additional workspace"⁵—conditions that imply something other than minimal environmental impact;
- A route that crosses 62 miles of the most intensive karst terrain in the Eastern United States (a little over 20% of the route), a geological area described by a well-published and highly regarded specialist in karst geology as a "no build zone" in relation to major linear construction features;⁶

⁶ See especially Docket CP16-10, Document 20160713—5029, the Kastning Report "Geologic Hazards in the Kasts Regions of Virginia and West Virginia." This report is the culmination of concerns expressed throughout the development of the Docket, including for example, comments in Docket CP16-10 such as document # 20160506— 5059; and in Docket PF15-3, Document 20150630—5143, #20150202—5048, and 20150914—5084. There are numerous other instances that could be adduced to show long-standing concern for construction in this karst region.

³ That comment was submitted to Docket CP16-10, Document # 20161205—5233. The NEPA guidance referenced here is Section 1508.27 which is an attempt to define the notion of "significance"—as the concept might be used in such a phrase as "no significant impacts on water resources."

⁴ This estimate was based on the DEIS Table of Steep Slopes in Appendix K which lists 102.1 miles of slopes in excess of 30% (33.92% of the total route). Entries indicate slopes as steep as 70%.

⁵ MVP's Erosion and Sedimentation Control Plan, Docket CP16-10, Document #210160226—5404, Part 1, file pages 1-21.

IND660-2

cont'd

- A route that passes through areas of known seismic activity that have resulted in minor earthquake movements 9 times in the last 50 years, and major quakes (4.0 or more) 5 times since 1976,⁷ any of which might have constituted a threat to the integrity of the line, especially in karst areas where direct support for the pipe might be eliminated by ground shifting;
 - A route for which 75% is acknowledged by the DEIS as involving areas of high landslide potential⁸, including some of the most intensive boulder fields in the "largest known landslides in Eastern North America"⁹—which research suggest could easily have resulted from significant earthquakes in the area;
 - A route that intrudes on 6 historic districts in the State of Virginia;¹⁰ and according to the DEIS itself¹¹ imperils 87 sites or structures including at least 33 cultural sites that staff agree should be avoided;
 - A route that crosses the most heavily visited scenic hiking trail in Giles county Virginia— Cascade Falls, with over 150,000 visitors per year;¹²
 - A route that crosses both the Blue Ridge Parkway and the Appalachian National Scenic Trail, each in its own way a huge tourist draw noted for the beauty and rural character of the viewscape and thus especially vulnerable to the intrusion of an industrial artifact like the pipeline ROW;¹³
 - A route that involves significant negative impacts on 3,423 acres of core forest for which
 proposed mitigation plans would have to be extraordinary indeed to compensate for
 'significant' damage along 81% of the route's length;¹⁴

⁹ As reported by the US Forest Service in their evaluation of MVP Resource Reports, Docket CP16-10, Document #20160311—5013: "In addition, assess the large rock block landslides on Sinking Creek Mountain as evidence for potentially much more powerful and destructive earthquakes than magnitude 5.8 and MM-VIII. The pipeline corridor traverses the JNF on the southeast flank of Sinking Creek Mountain. A series of large rock block slides extends for miles along the southeast flank of Sinking Creek Mountain. A series of large rock block slides extends for miles along the southeast flank of Sinking Creek Mountain. A series of large rock block slides extends for miles along the southeast flank of Sinking Creek Mountain (Schultz, A.P., 1993). Schultz (1993) states that the analysis shows that the rock block slides may have been emplaced as a single catastrophic event of short duration." (file page 15.) Later the Forest Service notes: "The Landslide section of Resource Report 6 failed to recognize the largest known landslides in eastern North America on Sinking Creek Mountain (MP 217.2 – 218.0) traverses one of the large bedrock landslides mapped by Schultz (1993). The Landslide section of Resource Report 6 failed to identify this large bedrock landslide on a published geologic map (Schultz, 1993). File page 17.
¹⁰ See FERC Docket CP16-10, Document 20160509—5041 which identifies 6 specific NRHP sites intruded upon, 2
eligible sites in the area which have been excluded from consideration. There are, of course, many other culturally and historically important areas traversed by the pipeline route which wild be effectively spoiled or destroyed by

construction. ¹¹ See Table 4.10.9—1 (pp. 4—374-382).

¹² http://www.mountaintravelguide.com/waterfalls/virginia/giles/cascades

¹³ See for example the comment by the Appalachian Trail Conservancy condemning inadequacies in the treatment by the DEIS, Docket CP16-10, Document #20161208—5043.

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⁷ These figures are drawn from a report in Docket CP16-10 Document # 20160801—5042. Concerns for Earthquake damage are also forcefully expressed in the Forest Service documents cited below.

³See DEIS, Table 4.1.1—10, pages 4—30-31.

¹⁴ See DEIS discussion in Section 5.1.5 Vegetation in Conclusions and Recommendation, (pg. 5–4-5). Also comment to Docket CP16-10, Document #20161121—5051, documenting inadequacies in the proposed mitigations for forest impacts.

IND660-2 cont'd

- A route that involves 1,150 stream crossings¹⁵ (including numerous streams that provide source water to local residents and extensive recreational opportunities for residents and tourists alike, as well as crucial aquatic habitat for endangered species). It appears that a substantial number of these crossings take place in areas where bedrock is less than 18 inches below the surface, thus in all likelihood necessitating extensive blasting to dig an adequate trench.¹⁶ This maximizes violations of habitat for at least 7 species of mussels, 3 species of fish; the route also imperils 12 species of plants, 4 species of bats, as well as turtle, snake, butterfly and arthropod species considered either endangered, threatened or a species of concern;¹⁷
- A route that only at the late stage of the published DEIS is revealed to be so inadequately
 designed that it requires a proposed 500'-wide utility corridor through the Jefferson
 National Forest, including extensive reduction or waiving of Forest Service standards in
 order for the project to be approved.

How did this happen? It was no accident; in fact, according to the DEIS, it was the result of "a deliberate and thoughtful" procedure, involving the systematic planning processes of a major, multi-national corporation pursuing an infrastructure project estimated to be worth far more than the \$3.5 billion involved in its construction. And this corporation was working in close consultation with an independent regulatory arm of the United States Government about application requirements and procedures (through bi-weekly telephone discussions and extensive textual submissions heavily revised under guidance from the regulatory commission). And this proposed route is the result?

EQT corporation put together a consortium of corporate partners with the goal of getting into the *highly profitable natural gas pipeline infrastructure business*—and this route is their first entry into this arena, involving a 42-inch natural gas pipeline over three hundred miles long, delivering gas from Northern West Virginia to the Southeastern US, to the Northeastern US, to the Mid-Atlantic US, maybe even to the Appalachian US (from which the gas has been fracked at bargain rates)—and also possibly to parts unknown. An ambitious project, requiring significant investment, projecting significant profits.¹⁸

¹⁷ These are the species listed by MVP in Resource Report 3. Fisheries, Vegetation, and Wildlife. See section 3.4 "Endangered, Threatened, and Special Concern Species" file page 53, ff. There may very well be others reported to the Docket for the application. The DEIS lists 22 species described as "Federally listed or sensitive" (pg. 4-184).
¹⁸ At the MVP "open house" in Hinton West Virginia, December 2015, I was told by a fellow who claimed to be a lawyer for the corporation that profits were greatly exaggerated by 'enemies' of the project; in fact, he said, the company projected only a nickle on the dollar in annual return on their \$3.5 Billion investment. Of course, in 20

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¹⁵ This number is reported by MVP in the Table of Waterbodies Crossed by the MVP Project in Docket CP16-10, Document #20160226—5404, Part 2. The DEIS Appendix reporting Waterbodies Crossed implies a much high number of crossings, but is almost unintelligible in terms of how many of the entries actually involve crossings; and subsequent submissions in October 2016 by MVP further complicate the estimate. At the time I initiated the draft of this comment the 1150 figure was accurate.

¹⁶ An interested reader may want to inspect the Indian Creek Watershed Association Interactive Environmental Map, utilizing the 'layer' showing depth to bedrock. A large number of streambeds in the route are shown as "0 -18 cm." to bedrock: such stream crossings in West Virginia include four major rivers in the state (Little Kanawha, Elk, Gauley, and Greenbrier); Hungards Creek, Kelly Creek, Wind Creek, Lick Creek and Red Spring Branch in Summers County; the entire Hominy Creek complex in Nicholas County—and the list goes on. Note that the trench must, on average, be 102 inches deep to accommodate the pipeline (although regulations allow a cover of only 2 feet in areas of 'consolidated rock'); **if bedrock begins at, say, 18 inches, NVP is looking at between 60 and 84 inches (5 to 7 feet) of blasting for many of their stream crossings in the state.**

IND660-2 cont'd	Apparently, a <i>lot of people</i> ask how such a thing could happen. In a note on the Mountain Valley Pipeline Website, as a response to a <i>frequently asked question</i> (FAQ), you can find the following description of the corporation's intricate and carefully-designed route-planning process:
	"The route selection process is conducted in a deliberate and thoughtful manner, utilizing experience and expertise of industry professionals. The pipeline route is designed to minimize the project's impact on the environment, landowners, and communities. As Mountain Valley Pipeline, LLC refines the route during the planning and permitting process, it will consider a number of factors including landowner concerns, environmental issues, cultural resources, and constructability."
	Notice that there is not one single specific <i>action</i> denoted in this description. <i>The process is conducted in a manner</i> . (By whom? Through what activities? How does a 'manner' utilize experience?) <i>The route is designed to minimize impacts</i> . (Who articulates this design, selects the impacts, measures them, calculates an acceptable minimum? How does all this affect the design? What aspects of the route will reflect these choices?) <i>MVP</i> , <i>LLC will consider factors</i> (Who at MVP will dentify the particulars of these factors, particular concerns, issues, etc? What effect on the route will this person's considerations have? What changes will count as 'refinements' and what refinements will be rejected as being 'actual changes' that are rejected for reasons of cost?)
	So the process has been conducted, designed, and refined, certainly—but what specifically occurred in conducting, designing, and refining? As described, <u>nothing</u> specific happened except that a preferred route was established. And because the route selection has proved to be disastrous from the point of view of scientist/citizens, affected landowners and communities, very few who have been paying attention through this process <u>can</u> trust the Applicant's and FERC's determination that the details really are none of our business.
	The FAQ description is not MVP's only account of their planning process: there is a two-page discussion in a more elaborate form in Resource Report 10. Alternatives, Section 10.5.1 (pages 10-9—10-11.) Despite the level of detail provided in describing particular decisions (including desk-top analysis, confirmation through aerial research and on-the-ground surveys of selected areas), this account, too, is thin on particulars. The writers claim that a major consideration in initial planning was "to avoid (if possible) or minimize crossings of major population centers and significant natural resources, especially crossings of National Forests, National Parks, the Appalachian National Scenic Trail, and the Blue Ridge Parkway." They do not suggest what exactly was done in the planning process to achieve these avoidances, and they do not acknowledge that they failed in this original intent almost point by point.
IND660-3	They do, however, indicate that the selection of the Transco Station 165 was—from the beginning—a 'given' for the design process. This choice is presented without any explanation of why, any evaluation of the advantage of Station 165 over other possible terminals, or any acknowledgement that this choice may be the root cause of the many problems facing the route. A good deal of space is devoted to explaining the impact of this decision on various routing limitations: pipelines, roads, and transmission lines typically do not run North-South as is required by attaching the MVP to Station 165.
	years, that amounts to \$3.5 Billion in profits—beyond recouping the investment. Judging by information presented below, he may have been off a bit: the rate of return permitted by FERC has often run around 12-14%— not 5%—according to information referenced in notes 21 and 22 below.

IND660-3

As stated in section 1.2.1 of the EIS, Mountain Valley selected the Transco Station 165 as the terminus to its pipeline because it is an existing pooling point for Zone 5 on the Transco system, and a gas trading hub for the Mid-Atlantic, that was selected as the delivery point by Mountain Valley's shippers. The FERC staff conducts environmental reviews of projects as submitted by applicants. We do not try to "re-engineer" those projects. The terminus of the MVP pipeline serves project purposes and objectives, that other locational alternatives may not. IND660-4 A final issue with the explanation is that the writers get remarkably 'impressionistic' when describing the sources of information used. They state that the corporation utilized "publicly available data from state, Federal and private entities" to identify stretches of line providing "compatible uses," "sensitive areas" and "exclusion areas" (page 10—10). But in context, they fail to identify those sources. Again, they state that later decisions were based on "spatial data, existing information, published reports, local knowledge, and prior experience," but they fail to indicate particulars. Thus, although they claim that "special consideration was also given to residential areas, which were avoided whenever possible" (page 10—11)—there is insufficient evidence to explain how they ended up crossing newly-purchased residential lots in sudvivisions near Blacksburg, Virginia. Early comments from residents in the area seem to show that whatever "spatial data" (like maps?) and "existing information" were used, they faile to add up to even the most generally-informed "local knowledge".

In sum, then, MVP's account of planning fails to persuade a critical reader. The evidence of the 'preferred route' and its many flaws casts doubt on the accuracy of the sketchy details of the process that have been provided by the company so far. It is difficult to explain many particulars of the route if MVP really means that constructability issues and the avoidance of "sensitive areas" were crucial concerns that guided their choices in "identification of ridgelines, topography at road and waterbody crossings" (pg. 10–11). The claim that the preferred route embodies the planners' greatest concerns is called into question by numerous examples in the route —the crossing of Peters Mountain with its karstarea water resources for Monroe County West Virginia,¹⁹ the Mt. Tabor Sinkhole Plain, the Sinking Creek landslide areas (all three "sensitive areas" if there ever were such things); the steep descent from a high ridge to the Greenbrier River crossing; or the numerous valley stream crossings below steep slopes throughout Summers County. A **reader simply must wonder whether this is the best that could be done**. Or, **if this is the best possible route available—by what criteria can the project proceed at all?**

Given all the dangers and all the damage to private and public resources, I assert once more: These are minimal impacts only if you assume that EQT's preferred route is the only route possible, and that the inadequacies, misrepresentations and errors in the data provided by the Applicant are persuasive.

Questions About the Planning Process

IND660-5

The corporation's description opens the door for many more questions—especially in light of the terrible reception the actually-proposed route has gotten. The Application has sparked objections and expressions of concern from thousands of citizens—including specialists in the natural and social sciences in relevant fields of geology, engineering, biology, agronomy, economics, etc.; the Forest Service; the EPA; numerous county governments, historical societies, land conservancies; the Blue Ridge Parkway; the Appalachian Trail; and, of course, environmental organizations ranging from watershed associations and groups concerned with the preservation of freshwater mussels and trout habitats to groups with a far broader focus like the Sierra Club.

IND660-4

Section 380.15(b) of the Commission's siting guidelines is intended to guide applicants in their preliminary selection of project routes. The section provides numerous criteria by which the Commission typically evaluates proposals and uses the criteria to weight the impacts of one over the other. Through the Commission's review process, we often discover that many routes are infeasible even though they meet one or more of the suggested criteria for designing a pipeline route.

We have evaluated numerous route alternatives to Mountain Valley's proposed route in order to assess whether impacts could be further minimized, including impacts on forested lands and on steep slopes. We note that Mountain Valley has adopted numerous route alternatives into its proposed route over the course of the project, and we concluded that several other alternative routes were not environmentally preferable to the proposed route.

IND660-5

See the response to comment IND660-3 regarding the start and end locations for the MVP.

¹⁹An MVP representative at the open house in Hinton, WV—early in the pre-application process—even denied that the project would cross Peter's Mountain—and was also unaware that the Monroe County High School was within 500' of the proposed crossing of US Route 219 in Lindside WV.

IND660-5 cont'd	In relation to the Mountain Valley Pipeline, a project that represents significant environmental impact in a region with core forests and biodiversity rankings of global significance, there are bound to be questions. Here are mine:
	1. For designing the route, was there a research-and-development team of <i>experienced and expert professionals</i> ? How many of them were there? What particular experience and expertise was commanded by each member? How did they meet, when, for how long, and where? <i>Did they consider multiple routes prior to announcing a 'preferred' route</i> ? Did they have a <i>research staff</i> to help them identify details of the routes being considered? Did they meet regularly with management to ascertain <i>short- and long-term goals</i> for the project and to clarify criteria for identification of an initial preferred route?
	2. What were the procedures by which 'deliberate and thoughtful' steps were articulated and brought to bear on the research-and-development team's thinking and selection process? Were <i>criteria for an acceptable route fully articulated, researched, operationalized, and put into actual practice early in the process</i> ? Were <i>multiple possibilities</i> entertained, researched, compared, and evaluated? Were team members provided opportunities to <i>compare and critique potential alternative routes</i> —or were their data reported and actual choices reserved for the managerial personnel who reviewed the team's work

3. How were potential routes identified? What mapping tools were made available to team-members? How were significant criterial variables identified among team members and then transposed to the existing maps? How were potential alternative routes identified—and how were these winnowed down to a few acceptable possibilities which were then thoroughly mapped and analyzed for potential violations of criterial variables?

periodically and simply announced a decision?

4. What specific actions were undertaken to identify potential impacts on the environment, landowners, and communities? How were individual team members enabled to communicate specific concerns about these issues to the larger group and to management? How were data collected to transfer these various impacts-of-concern to the mapping of routes under review? What procedures and criteria were developed for overriding expressed concerns on these issues?

Questions about Implementation and Evaluation: Implications for the DEIS

Questions like those above must arise in considering any proposal as ambitious and potentially damaging as this project. And given the sometimes rough road the proposal has travelled, EQT/MVP will want to review and evaluate what went awry, so that they can avoid such problems next time. In evaluating the selection process, it is clear that things have not gone smoothly. The company's internal evaluation of the route-planning and selection process should come to grips with a number of significant failings. Among them are these:

(1) The original route announcements to the media occurred in June of 2014-and were accompanied by a general map that in fact closely approximated the current preferred route. (My own first casual glance at that map misplaced the route through Summers County by no more than fourteen miles although no county boundaries were portrayed in the graphic.)²⁰ This suggests that decisions had

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²⁰ I cannot locate that original article in the Charleston Gazette-Mail, but a similar article and map are available at the MVP website under information from 2014: see http://media.eqt.com/press-release/eqt-and-mextera-energy-

IND660-5 cont'd	already been made at that time, decisions which have not been significantly changed or vacated. If the route planning process was, in effect, 'short-circuited' by prior decision-making among management, the effects of such a decision must be examined in full.	
	One basic question concerning decision-making must be answered in the DEIS: how was it decided that the route would terminate in Pittsylvania County? Were alternate terminal points considered? ²¹ What were the over-riding concerns that fixed the route at this particular Transco terminus? Was this decision made in light of any knowledge of the geographic, geologic, cultural, and environmental difficulties associated with the now-preferred route? If not, what criteria were used to continue up-holding the terminus decision even in the face of clear evidence of extensive problems and opposition? ²² As there is no more formative 'alternative' than the fixing of the end-point of the route, the DEIS will want a detailed examination of the procedures by which this was established, and also of the subsequent decisions which retained this end point as the defining feature of a route replete with dangers. Clearly the 'alternative' end-points are other Transco intersects which would have defined an entirely different route for EQT's first undertaking of a major interstate pipeline.	
	As a matter of process—and of public relations—and in light of the fact that there has been little overt evidence of a willingness to change the route, there is little proof that as MVP personnel have 'refined the route,' they have been considering landowner concerns, environmental issues, cultural resources, and constructability. And the fact that three of these four areas of concern involve explicit directives from FERC as to considerations for <i>route</i> planning , may be seen as an indication that these are issues that should have been addressed more carefully and fully in the pre-planning stage of route selection. ²³	
IND660-6	(2) Early critiques of MVP's published application materials revealed that maps being used in the routing process were quite severely out-of-date, a demonstration which involved identifying a large number of features missing from the maps for which construction dates were available. The selection of just these particular maps (from the huge range available commercially and on-line) was one product of MVP's 'deliberate and thoughtful procedures'—which leaves the question of what purpose was being served by out-dated maps in a process that was designed to minimize impacts on the environment ,	
	announce The story is dated June 12, 2014, and the map provided here is far more detailed than the one I first saw, but it still confirms the impression that almost nothing of significance has changed, despite the immense collection of data and detail. ²¹ For the purposes of the DEIS, this is the crucial question and one that will require a good deal of discussion, since I assume—but cannot know—that there may be a number of alternate Transco intercepts that might receive the MVP gas. NEPA guidelines discussed in the following note make clear how crucial the discussion of alternatives is to evaluating the impacts of the proposed route. ²² NEPA procedural documents describe the discussion of alternatives as follows: "§1502.14 Alternatives including the proposed action. This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. In this section agencies shall: (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits " ²³ In FERC's document from September 1999 providing new statements of the Criteria for an Application, it is stated explicitly that applicants should assure the route avoids environmental and community impacts (pg. 13).	
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IND660-6

Maps filed by Mountain Valley meet the Commission's requirements under 18 CFR 380.12.

IND660-6	landowners, and communities? ²⁴ Surely professionals with expertise and experience could have guessed that in an intervening 20 or 30 years, things might have changed substantially, especially given the expansion of sub-divisions, rural homes sites, and the increasing popularity of rural real estate during those years. As one commenter pointed out, it is quite difficult to minimize impacts on landowner populations you do not know exist.
	(3) Even with out-of-date maps, some prominent flaws in the originally projected route would have been apparent if the experienced and expert professionals had consulted available sources of information on environmental tourism, sensitive environmental areas, and various cultural and historical resources (all areas of concern for route planning according to FERC). As I myself pointed out early on ²⁵ , MVP could have consulted the official Giles County website and learned about the tremendous popularity of the Cascade Falls hiking trail, the seismically active Mountain Lake district, and important historical and cultural resources that the originally-projected route would endanger. What went wrong with the "deliberate and thoughtful" elements of the process? Or does my term 'wrong' somehow misrepresent MVP's judgment of the procedure's effectiveness?
IND660-7	(4) As to the refinement of the route in response to environmental concerns and landowner issues, there are plenty of instances in the FERC docket to suggest that this procedure, too, will need a good deal of attention. The recent instance reported in Docket CP16-10, Document #20160901—5056 may be an extreme but not atypical example: in this comment, MVP personnel are shown to have been inept in the execution of surveys and observation of the landowner's properties, unresponsive to proposed routing solutions that would avoid major damage and inconvenience, unconcerned or utterly incompetent in registering and responding to communications with the affected landowner, and utterly unprepared to make meaningful changes in the routing of the line on the grounds that it is "too late in the game" to do so. EQT/MVP's managers will want to reflect on the impression such a report makes of the corporation's willingness to refine the route in response to landowners' issues. And how utterly cynical such claims by the Applicant appear to be in the face on the very real abuses documented by landowners and intervenors in Docket CP16-10.
IND660-8	In addition to requiring some serious re-training for employees charged with routing decisions, EQT/MVP will also need some hard work on making explicit those situations in which recommendations from paid sub-contractors will be disregarded ²⁶ , or those circumstances in which research staff will be permitted to forego detailed analysis of environmental issues which could significantly alter the route. ²⁷ EQT/MVP will need to develop some protocol for assessing when a danger such as steep slopes, or extensive karst, or powerful river discharge is sufficiently problematic to justify a change of route.
	 ²⁴ The first major statement of the route's flaws occurs in Docket PF15-3, Document #20150908—5059 and clearly demonstrates the extent to which MVP's out-of-date maps result in a route which imperils resources which FERC asks be avoided. A fulsome catalog of such violations is provided by the same commenter in Docket PF15-3, Document #20150202—5048. ²⁵ Docket PF15-3, Document #20150504—5060. ²⁶ See for example, the discussion of the Draper Aden evaluation of the Mt Tabor Sinkhole Plain, Docket CP16-10, Document #20160801—5042. ²⁷ For example, MVP's inadequate examination of the issue of stream scour, reporting data that were seriously
	inaccurate, and generally inadequate to assure a useable understanding of an issue with serious implications for pipeline safety and environmental damages. See my comment, Docket CP 16-10, Document 20160502—5052.

IND660-7

IND660-8

Individual Comments

Not all landowner requests can be adopted into the proposed route. Some requests are not feasible due to the location of

Mountain Valley has already developed protocols for crossing

karst terrain and steep slopes; see section 4.1 of the EIS.

sensitive resources or engineering considerations.

IND660-9 (5) There is some question as to the wisdom of MVP's aggressive pursuit of the 'preferred' route prior to any official response from FERC as to the route's acceptability in terms of safety and environmental impact. In attempting to achieve its pre-selected ends, MVP has engaged in surveying activities that appear to have violated state laws,²⁸ has attempted to force compliance with corporate wishes by entering legal suit against more than 100 citizens²⁹ prior to losing a suit designed to test the right of survey asserted by the corporation³⁰, and was pursuing individually negotiated easement purchases throughout the length of the route at a time when FERC was still placing requests for extensive, and in some cases, very basic environmental data. Surely such a level of investment of corporate resources has the effect of intensifying managerial commitment to a route that may ultimately prove unacceptable.³¹ While, in the event the project is rejected, MVP may be able to recoup financial losses by the sale of the easements to another company for another purpose, surely such a 'defeat' of corporate planning would have a negative impact on EQT's reputation for business acumen. In a review of the process, officials may want to examine those aspects of corporate culture and managerial decision-making that encouraged such potentially ineffectual and damagingly aggressive pursuits.

And of course all these deliberations will result in some explicitly-described procedures which MVP's managers can then share with the public to provide some real evidence that there is a 'deliberate and thoughtful' process by which the next route is planned and refined. (I would recommend that, until such detailed and persuasive evidence of the corporation's intentions, policies and procedures is available to the public, it would be best for EQT/MVP.LLC to refrain from the sort of public relations claims as appears in the quoted website passage. At best, such claims are unpersuasive, and at worst they create a very negative impression of an organization's honesty and competence.)

The Part Played by FERC's Procedures and Implications for the DEIS

 IND660-10
 While clearly it is EQT/MVP—as the assertive force in the application process—which is responsible for the choice of route, through the DEIS issuance, FERC has begun to reify what is obviously a poorly selected route. A revised or supplemental Draft Environmental Impact Statement's treatment of the Socioeconomic context must examine a number of aspects of the Commission's stance and procedures as possibly motivating or encouraging the reckless behavior of the applicant. The first area of procedural concern involves FERC's encouraging the over-building of infrastructure through generous limits on returns for investment. Next, there are more diverse concerns for FERC's broad tolerance for the submission of under-researched data, encouragement of easement purchases prior to deliberations on the safety and environmental impacts of the preferred route, and the cultivation of an institutional reputation for support and enhancement of corporate applicants at the expense of reasonable standards for environmental protection. Finally there are issues surrounding the use of third-party contractors paid by the applicant to pursue the work of environmental research and documentation of

⁹ See <u>http://www.register-herald.com/news/pipeline-company-files-suit</u>

³⁰ See "Monroe County Judge Rules Mountain Valley Pipeline Developers Can't Survey Property Without Permission," State Journal August 6, 2015, at <u>http://www.statejournal.com/story/29726945/monroe-countyjudge-rules</u>. In November 2016, The West Virginia Supreme Court upheld the lower court opinion. ³¹ In treating of this aspect of the problem in the revised DEIS staff may want to address the question of whether such purchases may in fact violate NEPA requirements that forbid participants from taking actions during the decision-making process which could limit acceptable alternatives. IND660-9 The FERC staff reviewed the acceptability of the proposed pipeline route in the EIS. This is done before the Commission considers whether or not to authorize use of that route; with or without modifications recommended by staff and cooperating agencies.

IND660-10 As part of our analyses, we critically examined relevant filings and research information provided by the Applicants, other government agencies, and the public. See the response to comment LA13-17 regarding easement negotiations prior to issuance of a certificate.

IND660-11 It is true that the third-party contracting system is established so that the applicant is financially responsible for funding the program. However, third-party contractors work under the sole direction and control of the FERC staff, not the Applicants.

²⁸ See for example, the Roanoke Times story of May 28, 2015 at <u>http://www.roanoke.com/news/local/pipeline-</u>contractors-face-trespassing-charges.

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IND660-11	environmental damage. All these areas of concern must be addressed by the revised Draft Environmental Impact Statement, and all are taken up in greater detail in the following paragraphs.	
cont'd IND660-12	Integral to the socioeconomic environment for the MVP proposal are the regulatory agencies and procedures which by American law can support or restrict the expansion of energy infrastructure. In the present case, for instance, FERC can approve or disapprove proposals for gas infrastructure and also can regulate charges for natural gas service (at least to the extent that the Commission can restrict charges they judge to be unfair or unwarranted). Representatives of the public and the gas industry have expressed contrasting concerns for FERC's traditional position on the rate of return permitted for expansions of gas infrastructure. The industry position, as suggested in the following quotation, is that American corporations will be reluctant to expand commitments to infrastructure projects if the rate of return is not kept high: "The 9.34% ROE initially found just and reasonable for the Kern River pipeline project is substantially less than the 12—14% FERC has authorized in most cases during the last 30 years" ³² On the other hand, the Institute for Energy Economics and Financial Analysis (IEEFA) has argued persuasively in a study released in April 2016 that the high rate of return on investment allowed by FERC for gas infrastructure is one major source of otherwise unlikely and utterly unnecessary overbuilding of gas infrastructure generally, and in the Marcellus Shale gas fields in particular ³³ . FERC will need to analyze and evaluate these arguments in the revised Draft EIS as the Commission documents the socioeconomic environment's impact on the planning of the route.	
IND660-13	If FERC regulations have possibly motivated the application in the first place, it is surely true that the application procedure would seem to have tolerated—if not encouraged—the Applicant's reporting of less than high-level data for the project . Two examples: for more than a year FERC permitted reports of utterly unsubstantial information about the proposed stream crossings involved in the project—not even requiring an account of substrates at crossing sites when such information would dictate the depth at which the pipeline needs to be implanted. ³⁴ The Commission also tolerated the submission of conflicting reports of slopes in two different MVP documents, letting the contradictions slide despite the importance of soil composition and steepness of slope to evaluating the likelihood of slope failures, erosion, and damage to the pipeline. ³⁵ As noted below, the problem here may lie with the third-party contractor collecting materials for the EIS: if this company's employees (incidentally, paid by the applicant) do not articulate a need for accurate data, it is not clear from procedural documents that FERC staff will direct them to demand improved materials.	
IND660-14	The Commission's procedural position seems to be that details of the route can be reported and integrated into the plan in slowly-developing, progressive fashion; but such procedural tolerance clearly encourages the applicant to commit to a particular route long before there is adequate information to know whether or not that route is safe or appropriate to protection of the environment. The issue of stream scour is a case in point: the required revision of an inept first study was not reported to FERC until after the DEIS was released. The dimensions of this problem become clear in reviewing the 44	
	 ³² See "INGAA to FERC: Include MLPS in Equity Return Formula," http://www.ogi.com/articles/print/volume-104/issue-33/general-int. ³³ See <u>http://www.appalmad.org/2016/04/27/study-mvp-and-acp-show-overbuilding</u> ³⁴ See my earlier comments requesting stream-crossing data, Docket PF15-3, Documents #20150420—5197; #20150603—5082 and Docket CP-16-10, Documents # 20160112—5182, #20160127—5020, and #20160318—5072. ³⁵ See my comment in Docket CP16-10, Document 20160721 for details. 	
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IND660-12

Non-environmental staff at the FERC would review Mountain Valley's proposed rates.

IND660-13 See the responses to comments IND660-10 and IND660-11 regarding review of filed data and the FERC's third-party contractor.

IND660-14 The route as proposed during pre-filing is refined over time based on survey data, stakeholder input, engineering considerations, staff and agencies recommendations, and avoidance of sensitive resources.

IND660-14 | recommendations and requests for additional information at the end of the DEIS: much of the data referred to in this section is needed by cooperating agencies and the public to evaluate impacts from cont'd the project, and all such information was needed by MVP planners much earlier in the process. In effect, such a procedure may encourage just the sort of reckless decision making that seems to have marred the MVP application, a possibility that FERC will want to investigate and evaluate in revising the Draft EIS. Another aspect of FERC's regulatory arsenal that may encourage over-commitment by the applicant is IND660-15 the Commission's rather 'hands-off' attitude toward corporate conduct during the application process. By this I mean the way the Commission stands aside from intervention in disputes or interactions between the applicant and affected landowners. I'm unaware of anything in the public record of the application indicating that FERC has chastened, or cautioned, the applicant for inappropriate behavior reported to the Docket by landowners. Moreover, there are FERC regulations that seem to actively encourage the reckless practice of IND660-16 purchasing easements along the 'preferred route' prior to any evaluation of the route as safe and environmentally appropriate for construction.³⁶ It would seem that this reckless decision to commit corporate resources prior to approval is even in violation of a NEPA standard which forbids any actions prior to approval that might discourage or "limit the choice of reasonable alternatives."37 Such an effect would be one clear result of the MVP having purchased miles of easement and rightsof-way, making any change in route a highly undesirable waste of funds. There have been reports that landsmen for MVP have used the threat of eminent domain as a negotiating tool in these pre-approval land purchases, which, if true, further incriminates FERC in a process that may ultimately prove costly to both the applicant and the public. These procedures also must be carefully described, documented and assessed in the process of revising the DEIS. IND660-17 While it is clear that FERC may rightfully be concerned about over-regulating the industry in the context of Libertarian political opposition to government regulation of anything whatsoever in the country, the Commission must attend to the possible effects of a record for almost never turning down an application. Surely applying companies are aware of the fact that, if an applicant will only persevere, some conditional approval will in all likelihood be worked out. Some unfortunate managerial decisions could easily result from the fact that route changes required by the Commission are likely to be minimal, that the corporate investment will be considered, and that the Commission will make every effort to accommodate the needs and interests of the corporate applicant. FERC must analyze existing evidence—such as the unfortunate history of the Greenbrier Pipeline application in 2000—and attempt

IND660-15 In the EIS (see section 5.2), FERC staff recommended that the Commission include an environmental condition in its Order that would allow landowners to utilize complaint resolution procedures during a dispute with the companies.

IND660-16 See the response to comment LA13-17 regarding easement negotiations prior to issuance of a certificate. As stated in the EIS, the FERC urges the Applicants to enter into good faith negotiations with landowners to reach mutual agreements for easements. If an agreement is not possible, and if the Commission authorizes the project, the company can use eminent domain, as provided by the U.S. Congress. In such a case, a court would decide compensation.

IND660-17 See the response to comment IND196-5 regarding the FERC review process.

³⁶ See for instance FERC's 1999 policy formulation for Certification of New Pipeline Facilities (Docket PL99-3-000) which states "If project sponsors...are able to acquire all or substantially all, of the necessary right-of-way by negotiation prior to filling the application...it would not adversely affect any of the three interests. Such a project would not need any additional indicators of need and may be readily approved if there are no environmental considerations." (pg. 26) The three interests referred to are apparently "the interests of applicant's existing customers, the interests of competing pipelines and their captive customers, and the interests of landowners and surrounding communities." (pg. 23)

³⁷ See 40 CFR, 1506.1 Section a, sub-point 2. This clause in the NEPA guidance seems to be directed toward issues that arise when an applicant initiates activities prior to approval that would discourage serious consideration of alternatives. Undoing destructive heavy-construction is one obvious target of such regulation, but untimely land purchase would surely be a comparable problem.

cont'd	to evaluate the extent to which the Commission own procedures are partly to blame for corporate failings and shortcomings. A detailed report of the result should appear in the revised Draft EIS, perhaps as a separate appendix.
1112000-18	Finally there is FERC's baffling and potentially incriminating decision to allow the preparation of the Draft Environmental Impact Statement by a third-party contractor nominated and paid for by the applicant. Such an arrangement—even with a detailed handbook of regulatory restrictions for the program ³⁸ —fails any test of avoiding "reasonable appearance of impropriety" that is sometimes raised with judicial conduct. And the handbook does not clarify how the public can obtain information about the sources and treatment of significant environmental decisions.
	The basic relation between the applicant, the third-party contractor, and FERC raises some significant questions in itself. For the MVP application, for example, an affected member of the public may well wonder how objectively data for the evaluation of environmental impacts will be gathered: the company paying for the research may have developed an obviously motivating investment that would be negatively affected by certain results (e.g., areas of dangerous karst, damage to a large number of springs and public water resources). Moreover, the FERC managers of the third-party employees have considerable interest in meeting the general policy goals of FERC: if FERC's policy is to encourage the building of infrastructure, then the managers of the application are likely to feel some pressure to support that policy (perhaps by minimizing research attention to potentially troublesome environmental factors). Employees of the third-party contractor are clearly in a similarly compromised position. Thus, all-in-all, for reasons of maintaining clear lines of responsibility, and in the interests of public trust of the process, the third-party arrangement seems an unfortunate procedural decision that will need analysis and justification in the discussion of the socioeconomic context for the MVP application.
	There are, in addition, some very specific questions that FERC will need to answer, and which probably should be carefully documented for future applications as well:
IND660-19	(1) How are stakeholder comments to the Docket of the application processed? Are readers members of the permanent FERC staff? Members of the third-party contractors' contingent? Members of some other third-party group?
	(2) How are the results of docket-processing communicated to the FERC staff managers in a way that allows the timely direction of third-party workers to pursue the effects of stakeholders' comments and requests? ³⁹
	(3) FERC staff members direct the work of third-party contractors, and both also participate in direct interactions with the applicant. ⁴⁰ Also, the third-party researchers/writers can notify their supervisors of missing data, errors, needed corrections and so forth. All this guarantees that
	 ³⁸ See <u>http://ferc.gove/industries/hydropower/enviro/tpc/tpc-handbook</u>. ³⁹ See the FERC Handbook discussion of supervisory relations: under "Preparation of the Environmental Document" the text reads." The OEP staff will: > have complete control over the scope, content, and quality of the contractor's work; > independently evaluate the results of the contractor's work,
	 have sole ownership of all documents (other than those related to financial aspects) produced under the contract, and have complete control over the schedule for completion of the 3PC's work. ⁴⁰ For example, Cardno staff have been regularly listed as parties to the bi-weekly phone conversations.

IND660-18

See the responses to comment IND660-11 regarding review of filed data and the FERC's third-party contractor.

IND660-19

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All stakeholder comments are reviewed by the FERC staff and our third-party environmental contractor. All comments are given equal consideration. Comments about impacts on specific environmental resources, and addressed in a general manner under that resource in section 4 of the EIS. Comments on the draft EIS filed before the closing date of December 22, 2016 are individually responded to in this appendix. All comments filed in the dockets become part of the consolidated record. The public can access the record through our eLibrary system via the internet.

IND660-19 cont'd	the applicant's interests are very well-expressed and represented in the research agenda of the Commission and will likely be a dominant force in the resulting Draft and final EIS. What procedural guidance is in place to ensure that issues brought to the docket by other stakeholders are treated with equal attention and concern?
	(4) Are records kept that trace the processing of specific requests that will reveal how the request has been handled within the structure of FERC's process for preparing data requests for the applicant, and final materials for the preparation of Draft and Final EIS? If so, how can the public access these records to determine responsibility for delayed processing or inadequate data being reported? If not, what is the justification for obscuring the procedural pathways of the agency?
IND660-20	(5) The Handbook for Third Party Contractors indicates that in the face of inadequate or erroneous data, the third-party contractor can initiate development of corrected material by requesting that supervisors issue a request to the applicant, or assign the needed research to the third-party group. ⁴¹ What are the probable criteria for distinguishing between these alternatives? How can the public ascertain how reported data were generated? How can the public assign responsibility for flawed data—beyond the obvious solution of saying that FERC is ultimately responsible (a solution that proposes no actual solution at all since we cannot replace FERC with a more productive alternative for developing accurate data).
IND660-21	(6) The Handbook also indicates that the third-party contractor may in fact make use of sub- contractors in unspecified functions. ⁴² How can the public document the use of these sub- contractors? What roles may be assigned? What is the reporting relationship between these subcontractors and the rest the managerial machinery for overseeing and implementing the environmental review?
IND660-22	(7) What regulations are in place to ensure that FERC's supervisory personnel regularly pursue the most rigorous and accurate data available, and that they assure that the third-party contractor pursues equally accurate materials? Given the issues of public understanding and public trust, why has FERC placed so many apparently compromising administrative steps between the public's information about the project, the applicant's production of evidence that the proposal is sound, and the evaluation of that proposal by personnel who are to a large degree compromised by relations to agencies and institutions with obvious biases and agendas of their own?

Perform supplemental studies or data gathering needed to acquire the missing information.
⁴² See Handbook, "Selection of the Third-party Contractor": "It is the applicant's responsibility to review carefully all OCI materials (submitted as part of each proposal) to determine whether the candidate contractor, including any subcontractor(s), is capable of impartially performing the environmental services required under the third-party contract..." (emphasis added) IND660-20Data provided in the application was prepared by the Applicants,
while data presented in the EIS was prepared by FERC staff and
cooperating agenciesIND660-21No subcontractors are in use for these projects

IND660-22 There are no administrative steps or barriers to the public access of information. The FERC's process is transparent. All information in the docket is available to the public. The FERC staff's evaluation of information filed by the Applicants is provided in the text of the EIS.

CONCLUSION

IND660-23 FERC will need to answer the kinds of questions I have raised about MVP's route-planning procedures before the Draft EIS can effectively describe the processes through which existing regulatory and corporate structures and practices were brought to bear on the planning of the MVP—and thereby affected the socioeconomic impacts of the project. However, given the close working relationship between the FERC staff and the applicant, FERC will need to fully characterize (and fiercely critique) an application process that seemingly encourages less-than-professional performance on the part of an applicant, tolerates inadequate data reports on which to ground route planning, and essentially ignores ill-informed or risky route-planning decisions throughout the 'refinement' of a route once proposed. FERC will need to evaluate the possibility that their extensive methods of support for applicants have had some significant negative impacts in this context.

Given the significant adverse effects which would result from the ill-conceived and planned route proposed by the Applicant for the Mountain Valley Pipeline, FERC's decision to reify the route in the DEIS must be revisited. A supplemental or revised DEIS must be issued that will seriously consider the Expert submissions and citizen comments to Docket CP16-10 which examine a wide range of environmental, socioeconomic and cultural issues related to the preferred route; that expert analyses have been dismissed—or simply not acknowledged—in the DEIS must be corrected. For the most part, the current DEIS simply re-states unsupported claims made by the Applicant. While such a strategy may meet procedural guidelines established by the FERC, it does not meet the Agency's publically stated commitment to ensuring decisions which will minimize environmental impacts and fails entirely the expectations of the National Environmental Policy Act. The DEIS should be withdrawn.

Respectfully submitted,

Thomas Bouldin, Pence Springs, West Virginia Registered Intervenor

Cc: Ted Boling, Associate Director for NEPA, Council on Environmental Quality Barbara Rudnick, NEPA Team Leader, US EPA, Region 3 Ben Luckett, Staff Attorney, Appalachian Mountain Advocates IND660-23

See the responses in comment IND660-1 through IND660-22

20161221-5065 FERC PDF (Unofficial) 12/21/2016 6:50:42 AM December 22, 2016 Ms Kimberly Bose, Secretary Federal Energy Regulatory Commission I, James McGrady, a resident of Hans Creek in Monroe County, WV and being a landowner IND661-1 adjacent to the MVP proposed corridor file this motion to intervene in Docket #16-10-000. The proposed corridor runs very near my farm and not far from my house and spring, the source of my drinking water and water for my animals. I am very concerned about the water as well as the air, safety and tranquility of this area. Many people living in the region rely on headwater streams, springs, wells and other water resources that stand to be significantly impacted by this project. Yet the DEIS dismisses these concerns, saying only that developers would "evaluate any complaints" and "identify suitable settlements" in the event of contamination. Once the water is contaminated you cannot fix it. Because of the vulnerability of critical water resources in the karst areas at the base of Peters Mountain and on Ellison's Ridge, I support the requests that have been made by the Monroe County Commission and others, that the FERC require an independent, comprehensive hydro geological study of the public and private water resources in Monroe County (especially in areas of karst) before issuing a Revised Draft Environmental Impact Statement or a Final EIS, or approving an MVP route through Monroe County. I also encourage the GW & Jefferson National Forest office to complete such a study per the request of numerous citizens and citizen groups as well as public officials, on Peters Mountain before any decision is made about crossing this unique aquifer.

Above is a picture of my spring that is located at the base of Ellison's ridge. Its recharge is the area the pipeline would cross Ellison's Ridge not far from my home. This spring has supplied the house and farm with fresh clean water for over 110 years.

IND661-1

Non-environmental Commission staff will make a determination on whether to grant a party's out-of-time intervention request. See the response to comment IND3-1 regarding drinking water. See the response to CO34-1 regarding hydrogeologic studies.

20161221-5065 FERC PDF (Unofficial) 12/21/2016 6:50:42 AM Sign at the beginning of my farm on the lower end of Hans Creek Road, erected by community IND661-1 members and maintained by several residents, showing the pride and beauty of this area which cont'd would be placed in peril if the Mountain Valley Pipeline is erected through this area. NELCOME HANS CREEK VALLEY PLEASE HELP KEEP IT CLEAN FERC concedes that there will be permanent adverse impacts to forests. The MVP would cross IND661-2 thousands of acres of prime forest land and habitat for species listed as threatened and endangered. It would cross national treasures like the Appalachian Trail on Peters Mountain and the Blue Ridge Parkway. The AT has stated that the impacts to the AT are severe and would impact the trail like no other project ever. It would also impact the Brush Mountain Inventoried Roadless Areas, Old Growth Forest Areas, Peters Mountain, and Wilderness Areas to name a few. The DEIS says FERC will consult with the U.S. Forest Service to minimize impacts. However, the Forest Service has already commented that the sum of these crossings will result in significant impacts. The U.S. Forest Service has raised several of these forest impact issues, yet they have not been addressed by FERC or the project partners. The project will also permanently impact farmland, fragile karst areas and fragment habitats of IND661-3 species listed threatened or endangered. Yet again, the DEIS waves off these concerns, only saying that FERC will consult with the U.S. Fish & Wildlife Service or will 'mitigate" these concerns while offering no real plans on how this could be done. The EIS process should not move forward until all concerns raised by the United States Forest Service, the Appalachian National Scenic Trail, the BLM and citizens are addressed. I would also like to comment on the Amendments to the USFS Land Management Resource IND661-4 Plan Amendments as proposed by the NOAI contacted as part of the DEIS for the MVP. I support none of these amendments to the forest plan. National Forest Service land is for the preservation of our heritage, our rights, our water and our natural resources. Ownership of the Forest is a privilege of all citizens and not something that should be given away to a corporation for financial profit.

IND661-2 See the response to comment FA15-5 regarding forest impacts

IND661-3 The EIS provides a discussion of karst in section 4.1, farmlands in section 4.8, and threatened and endangered species in section 4.7.

IND661-4 Comment noted.

IND661-5	The proposed Amendments would permit MVP to exceed many environmental restrictions, which are not acceptable. The environmental regulatory protections that are already in place for federally protected forest land and watershed areas should not be ignored or over-ridden.	
	I feel that these regulatory protections should be more stringent for such a project instead of the minimal environmental protections that now exist. The removal of old growth trees within the construction corridor is inexcusable. They are symbols of our heritage and should be protected and not cut down. They are unique part of the JNF and should not be allowed to be destroyed forever. Allowing MVP to avoid the environmental controls mandated by NEPA strictly for a for- profit company and in total disregard of the environment and the effects on citizens is troubling.	
IND661-6	The pipeline and the gas transported will provide no additional benefits to the citizens in this area (an issue already decided by the Monroe County Court in August of 2015 and reinforced by the WV Supreme Court in November of 2016) but it will have a detrimental impact on the environment affecting all citizens of the area for generations to come. Real questions have been raised about the real need for this pipeline. It appears the purpose of the MVP pipeline is for the sole interest of a few private corporations to make a substantial profit at the expense of our National Forest and local citizens.	
IND661-7	Recreation and tourism are critical to many communities, especially in Monroe county, and surrounding counties in VW and VA. A prime reason many people, including us come here is for health, wellbeing and relaxation. The impact by a pipeline corridor across the area, especially Monroe County, Peters Mountain and the Jefferson National Forest would cripple the important tourism industry of the area.	
IND661-8	While each amendment is individually and separately without merit, Proposed Amendment 1 is the most egregious and constitutes a serious violation of the basic social contract between FERC and us, the citizens	
	I strongly oppose the proposed 500 ft Designated Utility Corridors. A 500-foot Right Of Way is ridiculous. Everyone can comprehend the length of a football field. This would create a corridor that would be nearly twice the length of a football field! The Right of Way would be the initial step for future expansion, with the potential for more pipelines, electrical lines, water lines, etc., to be constructed. The USFS needs to protect the JNF from not only the immediate environmental impacts of this pipeline but possible future pipelines and other utilities. The immact of the entire width of the designated corridor and whether that conflicts with the forest plan must be evaluated, as well as the impacts to private landowners within that same corridor, as well as those nearby.	
	This proposed amendment would not only create a "Utility Corridor" across the JNF, but would also create a Pipeline/Utility Alley in Monroe, Summers, and Greenbrier Counties, WV and Montgomery, Craig, Alleghany and Roanoke Counties, VA. The damage done by this "Alley" across these counties would be severe, but the greatest impact would be to private landowners in counties on each end of this corridor, as all future projects would have to traverse these areas to enter and leave the corridor across the National Forest Lands. Thus, many landowners in these adjacent counties could become nothing more than custodians of the utilities lines and could not use their land for anything, making it useless and worthless at the same time.	
IND661-9	I believe that Peters Mountain Wilderness Area, The Appalachian Trail, Mystery Ridge, Brush	

IND661-5	The FS has worked with Mountain Valley to develop project design features, mitigation measures and monitoring procedures to minimize the impacts to the resources on NFS lands. These mitigation measures and monitoring procedures are described in the POD.

IND661-6 See the response to comment FA11-12 regarding need.

- IND661-7 Tourism is discussed in section 4.9 of the EIS.
- IND661-8 See the response to comment FA8-1 regarding the 500-foot-wide utility corridor in the Jefferson National Forest.

IND661-9 The EIS provides a discussion of soils in section 4.2 and riparian areas are discussed in sections 4.3, 4.4, 4.5, and 4.6 of the EIS.

20161221-5065 FERC PDF (Unofficial) 12/21/2016 6:50:42 AM Mountain Wilderness and Road-less Areas would suffer substantial damage with the IND661-9 construction. I find it objectionable to allow the construction of the MVP pipeline to exceed cont'd restrictions on soil and riparian corridor conditions. These exceptions in the fragile forest should not be allowed. MVP should comply with the current restrictions in place regarding soil and riparian corridor conditions and not be allowed to exceed them. I stress that the riparian buffer zones along streams in the JNF should remain intact to minimize adverse effects to the water bodies. Furthermore, I firmly believe that if soil conditions are exceeded, both ascending and descending Peters Mountain and other steep slopes in the forest it will cause silting of the water bodies below, damaging critical habitats and drinking water source. The removal of old growth trees within the construction corridor is unacceptable. Ancient IND661-10 IND661-10 The EIS analyzes impacts to forest, including old growth and woodlands have attained unique ecological features because they have not been disturbed. They are a *rare natural resource*, and could never be replaced once destroyed. To destroy core/interior forest in detail in sections 3, 4.4, and 4.8. these marvelous trees would be reprehensible. This great National resource should not be sacrificed for an industry's private gain. The existing regulations are sufficient and should not be changed to remove more old growth trees. The USFS should not change the forest plan to affect the AT. This project should not be IND661-11 IND661-11 A revised discussion of the ANST crossing is provided in section allowed to impact the AT in the extreme way it proposes. The Appalachian Trail, America's first 4.8 of the final EIS National Scenic Trail, was initially envisioned in 1921 and first completed by citizens in 1937. It is maintained by volunteers nationwide, who have devoted thousands of hours and millions of dollars to it upkeep and maintenance. It is America's most beloved trail. We should respect the natural beauty of our land and protect it for future generations. I strongly oppose these amendments to the Forest Service Plan. Enacting these amendments will irrevocably harm the invaluable cultural resources we derive from the forests, streams, and other fragile areas of the National Forest. These amendments will also have lasting negative impact on our property values, and disrupt many carefully planned retirements via loss of equity in homes near the route. Sincerely James McGrady 542 Hans Creek Road Greenville WV 24945 CC Jennifer Adams, USFS Project Coordinator Toby Timm, Forest Supervisor, JNF Bureau of Land Management Army Corp of Engineers

INDIVIDUALS IND662 – Lynda Majors

20161221-5072 FERC PDF (Unofficial) 12/21/2016 8:05:16 AM December 21, 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426 Cc: Bureau of Land Management Re: Mountain Valley Pipeline proposal, Docket No. CP 16-10 - Request for public meeting with Bureau of Land Management Dear Ms. Bose and Members of the Commission, I am writing in response to a BLM letter to FERC filed December 7, 2016. In that letter, on IND662-1 page 4, Section III it is stated: "BLM, to the extent necessary, will develop avoidance, minimization, and mitigation strategies on the areas encompassed by the Mineral Leasing Act Right-of-Way application. Avoidance, minimization, and mitigation strategies may be imposed for reasons including but not limited to: protecting the natural resources associated with Federal lands and adjacent lands and preventing unnecessary or undue degradation to public lands. See 43 C.F.R.2881.2. BLM has authority to require the applicant to "[c]omply with all other stipulations that BLM may require." 43 C.F.R. 2885.11." The MVP proposed route through the Jefferson National Forest lands in Montgomery County is adjacent to and near where I live. South of the National Forest, the pipeline route traverses through the heart of the Slussers Chapel Conservation Area where my family lives. This is an area of high density karst topography and fragile subterranean ecosystems. See Lidar images in FERC filing12/19/16. (Accession Number: 20161219-5056) Allowing this pipeline through the National Forest in Montgomery County would negate the value of the present Forest Service Land Resource Management Plan developed by forest professionals and adopted in 2004. The proposed route would bisect the Old Growth Forest area of the Jefferson National Forest. It would not eliminate a small number of trees on the edge, but would go straight through the body of the Old Growth Forest with the desired 500 foot wide ROW. The proposed pipeline route comes down the south slope of Sinking Creek Mountain to cross Craig Creek headwaters, then up the steep north facing slope of Brush Mountain through the Inventoried Roadless Area next to the Brush Mountain Wilderness Area before descending onto private property and subsequently bisecting the Slussers Chapel Conservation Area watershed. IND662-2 This Conservation Area consists of subterranean karst formation and sinkholes, all draining into Slussers Chapel Cave, home for globally rare species. This water flows through the Blake Preserve on its way to the North Fork of the Roanoke River home to the Threatened and Endangered Species, the Roanoke Logperch. The North Fork of the Roanoke River is the

IND662-1

The FS is working with Mountain Valley to incorporate mitigation measures, such as reducing the permanent operational right-of-way that is converted to herbaceous cover from 50 feet wide to 10 feet wide for its length on the Jefferson National Forest. Reducing the herbaceous right-of-way width and allowing more of a vegetative transition within the operational corridor (i.e., grasses over the pipeline then shrubs between the grasses and treeline) would help mitigate the effects of the change to the scenic character of the area. The crossing of Craig Creek and the crossing of the Brush Mountain IRA have been intensely studied by Mountain Valley and the FS because of the concerns in this comment. The effects are discussed in the EIS, section 3.5.3.1, Brush Mountain Minor Route Variations. Mountain Valley has committed to restoring the riparian area along the tributary to Craig Creek with hand planted trees and shrubs.

IND662-2

Water resources are discussed in section 4.3 of the EIS. See the response to comment IND70-1 regarding erosion. A revised discussion of sedimentation and turbidity can be found in section 4.3 of the EIS. See also the response to comment FA11-15 regarding sediment and turbidity modeling.

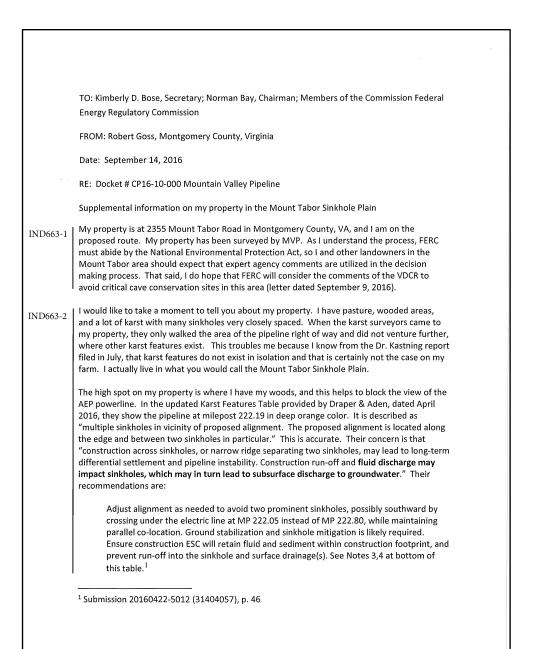
INDIVIDUALS IND662 – Lynda Majors

20161221-	5072 FERC PDF (Unofficial) 12/21/2016 8:05:16 AM]	
IND662-2 cont'd	water supply for Roanoke County's Spring Hollow Reservoir serving about 16,000 residences in western Roanoke County. When the main reservoir for Roanoke City, Carvins Cove, is in drought conditions then Spring Hollow Reservoir water is used to meet the needs of the city.		
	A pipeline route over these mountains would contaminate the watersheds listed above with sedimentation and erosion as well as contaminate them with chemical herbicides used to maintain the pipeline ROW. The Jefferson National Forest is our inheritance and legacy to succeeding generations. To destroy it for short term private corporate profit for the latest natural gas extraction industry shows negligent short sightedness.		
IND662-3	As you can see from the Lidar analysis, rather than avoiding the karst topography of the Slussers Chapel Conservation District by choosing the Mount Tabor Variation, this now preferred route is actually traversing through more karst topography than the original proposed pipeline route. This is just another example of the inaccurate and inadequate DEIS process conducted by FERC.	IND662-3	The draft EIS discussed alternatives to reduce impacts on the Mount Tabor Sinkhole Plain and the Slussers Chapel Conservation Site in section 3.5.
IND662-4	My neighbors and I are not poor or uneducated, but I have learned that it does not matter that we are not a disadvantaged community, the FERC commenting process disenfranchises everyone no matter their educational background. Here are some examples of the difficulties encountered while attempting to negotiate the FERC commenting process. The only scoping meeting in the pre-filing process was conducted in Elliston, VA at the opposite end of Montgomery County from the Mount Tabor sinkhole plain where my neighbors and I live, probably a 45 minute drive away. The most recent comment sessions on the DEIS that we could attend were only in Roanoke, VA or Peterstown, WV (50-75 minutes away), in spite of requests to add Montgomery County near Blacksburg, Virginia, has National Forest and adjacent lands that will be severely impacted by this natural gas transmission pipeline.	IND662-4	See the response to comment LA2-1 regarding the draft EIS comment sessions.
	other white-collar professionals. Whether they are young or older, they have all had problems negotiating the FERC website and instructions. This has been a huge deterent to commenting since there are so many different places to get tripped up, from becoming an intervenor to submitting an e-filing or e-comment. This is why having the public comment sessions in Montgomery County will be very important as many more people would be able to locally attend and comment than were able to travel to Roanoke earlier for comment sessions.		
IND662-5	I respectfully request that the Bureau of Land Management schedule another comment session for all the people that have been disenfranchised by the FERC process and require that the DEIS be withdrawn or supplemented to correct inaccuracies and inadequate data.	IND662-5	The BLM has received requests for additional public meetings on the Mountain Valley Pipeline Project. In lieu of additional public
	Thank you. Lynda Majors (Registered Intervenor)		meetings, the BLM will be soliciting comments on the final EIS specific to impacts on federal lands.
	Blacksburg, Virginia		

IND662-3	The draft EIS discussed alternatives to reduce impacts on the Mount Tabor Sinkhole Plain and the Slussers Chapel Conservation Site in section 3.5.
IND662-4	See the response to comment LA2-1 regarding the draft EIS comment sessions.

Individual Comments

INDIVIDUALS IND663 – Robert Goss



IND663-1 See the response to comment LA13-19 regarding the VADCR's letter.

IND663-2 On October 14, 2016, Mountain Valley adopted the Mount Tabor Variation into the proposed route. The proposed route would be more than 1 mile from the commentor's parcel. See the response to comment IND62-1 regarding Dr. Kastning's report.

INDIVIDUALS IND663 – Robert Goss

IND663-3 I believe MVP's claim that the Mount Tabor Sinkhole Plain ends at my property is incorrect because one can see many <u>more karst features</u> listed in the Table further on down the proposed pipeline. I do have other sinkholes on my property too, some that are open throat. They all likely drain to the Mill Creek Spring Cave just below my property in Blake Preserve.

I encourage FERC to insist that the wishes of the VDCR be obeyed by MVP.

Both the current proposed corridor (MVP-REV4) and MVP's Mount Tabor Alternative (April, 2016) have the potential to seriously impact the Slussers Chapel Conservation site, which includes the Mill Creek Springs (Blake Property) Natural Area Preserve, owned by The Nature Conservancy. The Slussers Chapel Conservation Site has high global biodiversity significance (B3)...Several of the rare invertebrate species in the cave live either in the cave stream, drip pools, or underground riparian areas, so protection of water quality is essential to the long-term survival of these populations. As proposed, both the proposed corridor and the Mount Tabor Alternative cross...several tributaries to the sinking stream that enters Slussers Chapel Cave and/or Mill Creek, which sinks into the system as well. These tributaries are first and second order streams that are extremely flood prone, lying along the lower, southeastern slopes of Brush Mountain. Such slope areas will be difficult to revegetate and will be subject to high erosion both during and subsequent to construction.²

I would like to extend the concept of "protection of water quality" as stated above, but in *human* terms. Homeowners in this area are dependent upon well water, so protection of our water quality is essential. If we do not protect this water source, the consequences are grave indeed. Therefore, I respectfully request that MVP be required by FERC to abide by the VCDR request and avoid passage through the <u>entire Mount Tabor area</u>.

IND663-3

In section 3 of the EIS we evaluate the alternative route proposed by the VADCR.

² Submission 20160909-5315 (31679600)

INDIVIDUALS IND664 – Elizabeth Hoffman

20161221-5091 FERC PDF (Unofficial) 12/21/2016 9:22:40 AM Elisabeth Hoffman 5917 Gentle Call Clarksville MD 21029 Comments on Mountain Valley Pipeline, LLC and Equitrans, LP FERC Docket Nos.: CP16-10-000 and CP16-13-000 These comments on the plans for the Mountain Valley Pipeline are a means to emphasize my opposition IND664-1 to this pipeline specifically and the nation's dangerous buildout of pipelines, compressors, and export facilities for fracked gas. Routing or regulatory adjustments here or there would not make this pipeline safe, safer or safe enough - for local communities, for plants and wildlife, and for the climate of the Earth, our home. Specific comments: • Construction would involve clearing a 125-foot-wide section that would cross 3.4 miles of forest protected under the Forest Service's roadless rule - designed to protect lands from road construction and logging. • Cutting across the magnificent Appalachian Trail is a nonstarter. • Residents and businesses are in the "blast zone" — a radius of about 1,115 feet around the IND664-2 pipeline where an explosion could have a "significant impact on people or property." IND664-3 • This and other pipelines are being built to accommodate fracked gas, which is not a bridge fuel and which has been linked to illnesses in people and animals nearby. The pipelines FERC routinely approves are designed to operate for about 50 years. We can't be using fracked gas for that long. We have perhaps a decade to make a major transition from fossil fuels. We must shift as rapidly as possible to renewable energy rather than continuing to invest in the climatewrecking fracked-gas industry. At our continued peril, FERC refuses to take into account the cumulative effect on our climate IND664-4 and health of all the fracked-gas infrastructure it approves.

IND664-1 The Roadless Area Conservation Rule and impacts to roadless areas under this regulation are discussed in section 4.8 of the EIS. As discussed in section 4.8 of the EIS, Mountain Valley would bore beneath the ANST.

IND664-2	See the response to comment IND2-1 regarding safety.
IND664-3	See the response to comment IND2-3 regarding hydraulic fracturing.
IND664-4	Cumulative impacts are addressed in section 4.13 of the EIS.

INDIVIDUALS IND665 – Victoria Hudsperth

20161221-5096 FERC PDF (Unofficial) 12/21/2016 9:39:02 AM		
IND665-1	Victoria Hudspeth, Herndon, VA. PLEASE do not give in to big business and the continued destructive path	
IND665-1	of non-renewable energy sources. Climate change is real, scientifically indisputable, and threatening. Renewable energy sources not only exist, but are as or more effective than oil, gas, coal, etc., are more cost effective, and have prolonged economic benefits that non-renewable energy cannot provide, by definition! Oil deposits run dry, solar panels can	
	continue to be created and sold, providing an alternate but stable job option. It's about priority and changing the discourse that has been popularized by big money above the interests of nature, wildlife, and	
IND665-2	conservation. The Appalachian mountain region is sustained in large part by eco-tourism, which this pipeline threatens. That is job loss, not creation. Even if the number of jobs lost are replaced, that's still NOT	
IND665-3	creationthat rhetoric needs to be silenced. These lands are protected and federal regulation should not be moved aside because of lobbyists and big money. Animals are becoming extinct at an alarming rate, and the fauna provided by the Appalachian mountains provides natural safe havens	
IND665-4	for local species. Not to mention the oxygen that they and WE need to breathe. Then there is the threat natural gas fracking poses, in contaminating natural water systems and poisoning the residents in the surrounding areas. The risk is high, not a minor concern to be weighed in	
	a perfunctory cost-benefit analysis. PLEASE don't allow our local habitat and economy to wither for the harmful priorities of our politicians: money above all else.	

IND665-1	Climate change is discussed in sections 4.11 and 4.13 of the EIS. Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1 regarding renewable energy.
IND665-2	Tourism is addressed in section 4.8 of the EIS. See the response to comment IND281-2 regarding jobs in Virginia.
IND665-3	The EIS provides a discussion of threatened and endangered species in section 4.7. See the response to comment IND270-1 regarding wildlife.
IND665-4	See the response to comment IND2-3 regarding hydraulic fracturing.

INDIVIDUALS

IND666 – Gene Rose

20161221-5099 FERC PDF (Unofficial) 12/21/2016 9:42:20 AM Gene Rose, Roanoke, VA. FERC Input Letter November 3, 2016 There are several good reasons to approve the Mountain Valley Pipeline. IND666-1 Among those reasons are: More and better jobs Lower future energy costs Local, long-term economic improvement Clean and safe energy Increased U.S. wealth National security Even the opposition to the MPV agrees the MPV will create jobs, short and long-term. Not only are there construction and maintenance jobs created, there are ancillary businesses and jobs that will be created, too. The local tax revenues will increase without tax rates increasing. As the federal government continues to regulate coal out of our economy, we are fortunate to have a good and plentiful replacement in natural gas. Technology has given us an almost inexhaustible supply of this fuel which translates into lower energy costs which will help us continue to have low electricity rates and allow our manufacturers to stay competitive. Our long-term, local economy is more likely to be robust and everexpanding due to low energy costs and greater availability in Franklin and Montgomery Counties due to the two additional taps. Our area will have cleaner air and water in the future as natural gas use becomes a bigger slice of the energy-source pie and I believe technology will make natural gas usage even cleaner in the future. There is no doubt that pipeline transport of natural gas and petroleum of all types is safer and more cost-effective than rail or highways. Our nation is about \$20 trillion in debt. We must use our natural resources to create wealth if we want to continue to provide state and federal benefits to the neediest among us. Additionally, state and federal tax revenues will rise without having to raise tax rates because this newly created wealth will be subject to taxation. Lastly, the MPV is a boost to our national security and the security of our European allies. Once this pipeline gets to the Atlantic Coast, it can be liquefied, shipped and sold to our European allies who, in some countries, are at the mercy of Russia for their natural gas. We can open/expand our markets in Europe and make these allies more secure at the same time. Also, it is no secret we have been sending our wealth to the Middle East for decades in order to get their oil. Much of that money has been used by our political and cultural enemies to do harm to our country. The MPV is a vital tool in making our country safer and energy self-sufficient. Gene Rose 5902 Bighorn Dr., Roanoke, VA 540-904-7391

IND666-1

Comments noted

Individual Comments

INDIVIDUALS

IND667 – Jilian Pramas

20161219	9-5033 FERC PDF (Unofficial) 12/18/2016 4:31:11 PM	
IND667-1	Jillian Pramas, Medford, MA. I am absolutely appauled and embarassed for our country of the United States that after the controversy of the Dekota Pipeline you would have the audacity to even consider a natural gas pipeline through the Appalachian trial how dare you. Our country has little to no memories no wildlife areas, no great outdoors, no places for people to take their children to teach them about our precious land. How about speaking with countries in Northern Europe on how to make energy instead of using natural gas. I'm ashmaded as an American born educated woman. Shame on the Federal Energy Regulatory Commission.	
	P.s coal from Santa for all the people in this commission for the pipeline	
	By the way this website is horrible get your act together if I chose the incorrect "docket" number is because of your delinquent website I am writing in comment on the MOUNTAIN VALLEY PIPELINE	

IND667-1

The Dakota Access Pipeline is proposed to transport oil, with a permit to be issued by the COE. The MVP pipeline would transport natural gas, regulated by the FERC. The two projects have nothing in common. Impacts on the ANST are discussed in section 4.8 of the EIS.

INDIVIDUALS IND668 – Douglas D. Martin

DORIGINAL Dr. Douglas D. Martin 7720 Virginia Avenue, SEORETHINGESTER 2016 GEC 19 P 4:48 NEGULINI Newport, Virginia 24128 December 16, 2015 Ms. Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE Room 1A Washington, D.C. 20426 **Dear Secretary Bose: Re: Mountain Valley Pipeline Project Docket** Number PF15-3-000, the proposed EQT/NextEra As the proposed Mountain Valley Pipeline project identified above continues to IND668-1 pose a serious threat to our Newport, Virginia comunity, I have prepared and attached my rationale for the pipeline not coming through Newport Village and the Newport and Greater Newport Historical Districts in Giles County, Virginia along with some alternative suggestions. There are less invasive routes if there was a willingness to seriously consider alternatives that go beyond the minor tweaking of the original route, My request is that someone along the way recognize that "Economics as if people count" needs to be in the deliberation. Many submissions have been made from a number of qualified individuals stating that the proposed pipeline route with current alternatives is not acceptable. Yet, there is not any affirmation that these submissions are seriously part of any deliberation or consideration. With best regards, Douglas D. Martin Atch

IND668-1

The Greater Newport Rural Historical District is discussed in section 4.10 of the EIS.

INDIVIDUALS IND669 – Erica Rupp

20161221-5114 FERC PDF (Unofficial) 12/21/2016 10:21:40 AM erica rupp, swannanoa, NC. I am writing to express my ardent opposition to the construction of the IND669-1 Mountain Valley Pipeline, proposed to carry natural gas across sections of the Appalachian Trail, from West Virginia to South Virginia. This project would require the unlawful destruction of land that is protected under the Forest Service's "roadless rule", thereby setting a dangerous precedent for other protected natural habitats and waterways. We already know, from the last several decades of pipeline leaks, breaches and explosions, that the threats they pose to our environment are grave. I, therefore, stand firmly against the addition of yet another faulty pipeline that is sure to imperil the safety and health of the disproportionately low-income citizens in it's proximity.

IND669-1

The Roadless Area Conservation Rule and impacts to roadless areas under this regulation are discussed in section 4.8 of the EIS. See the response to comment IND2-1 regarding safety. See the response to comment IND92-1 regarding leaks. The EIS provides a discussion of environmental justice in section 4.9.

INDIVIDUALS IND670 – Robin Scully Boucher

20161221-5119 FERC PDF (Unofficial) 12/21/2016 10:06:11 AM 2155 Mount Tabor Road Blacksburg, VA 24060 December 20, 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426 Cc: Bureau of Land Management Re: Mountain Valley Pipeline proposal, Docket No. CP 16-10 Dear Ms. Bose and Members of the Commission, I am writing about my concerns that The Federal Energy Regulatory Commission did IND670-1 not provide adequate public comment periods to the citizens in the New River Valley and that the resulting Draft Environmental Impact Statement does not accurately represent issues expressed by stakeholders living in communities that the Mountain Valley Pipeline is proposed to traverse. One meeting was held in Elliston, VA (May 15, 2015) in an area of Montgomery County not centrally located to the geographic area it was meant to represent. Based on the results of the Draft Environmental Impact Statement, the general consensus from attendees is that impacted residents were not heard. The second meeting was held in Roanoke, VA (November 3, 2016), which is a 45 minute or more drive for most people in the New River Valley. Both locations more than likely, discouraged attendance. Furthermore, the "open" comment period held on November 3 was not "open." It was held in a small room where a stenographer took notes from a single person who was "allowed" to speak to a FERC representative about their concerns in an allotted timeframe. This was an intimidating scenario for many who were in attendance from what I was told. It also slowed down the process. Many who had made the trip to Roanoke left early because of time constraints. I was unable to attend because of the location, but heard and read numerous reports from those who did and am reporting as an intervenor. Later FERC posted the comments made by citizens during the November 3 meeting online, effectively excluding public participation by people who are not computer literate,

IND670-1

See the response to comment LA2-1 regarding the comment sessions.

INDIVIDUALS IND670 – Robin Scully Boucher

20161221-5119 FERC PDF (Unofficial) 12/21/2016 10:06:11 AM		
IND670-1 conťd	or who have limited access to a computer. Posting comments online also eliminated an open, inclusive, public dialogue on the subject.	
IND670-2	The Bureau of Land Management (BLM) has made a statement that they are open to slowing down the rapid paced timeline of the MVP approval so that they may adequately research the impacts of the project on the region. They also stated that they would be available for public forums so they may gather data from multiple stakeholders.	
	We expect, and are entitled to an actual public dialogue with government officials that is ultimately reflected in the DEIS. I ask that we not be ignored nor our concerns minimized or trivialized. The Draft Environmental Impact Statement does not adequately address multiple important facts and concerns that citizens have repeatedly voiced to FERC, especially in respect to our karst terrain in the Slusser's Chapel Cave Conservancy. Although the route has been moved several times, it <i>still</i> impacts the Mount Tabor Sinkhole Plane. The Draft Environmental Impact Statement submitted by MVP does not adequately reference research about our region's drinking water and how it will be impacted by building the pipeline near this geologic feature. It also ignores the number of families living within the blast radius of the pipeline.	
	In an article published in the Huffington Post (12/17/16, "This Proposed Pipeline Would Cut Right Through the Appalachian Trail," <u>http://www.huffingtonpost.com/entry/mountain-valley-pipeline-appalachian-</u> <u>trail us 5855aa4e4b0b3ddfd8d265e</u>), the author states "multiple environmental groups said this month that they refused to even comment on the government's Draft Environmental Impact Statement for the project because the draft has so many errors."	
	I am requesting that BLM come to the New River Valley and provide an open forum where well-researched concerns, concerns from the heart, and cultural diversity are respected. I believe that there would be a wellspring of important information shared in such a forum and hopefully it would be included in an Environmental Impact Statement which would protect our water, air, and land.	
	Respectfully,	
	Robin Scully Boucher	

IND670-2

See the response to comment CO6-1 regarding the Mount Tabor Variation. The BLM has received requests for additional public meetings on the Mountain Valley Pipeline Project. In lieu of additional public meetings, the BLM will be soliciting comments on the final EIS specific to impacts on federal lands.

INDIVIDUALS IND671 – Nelson Bailey

ND671-1	Nelson Bailey, Buckingham, VA. This proposed pipeline crosses the Jefferson National Forest in Giles and Montgomery Counties in Virginia and Monroe County, West Virginia. The Mountain Valley Pipeline sources the same fracked gas and has the same delivery destinations as the ACP.
	The route passes through the Appalachian National Scenic Trail Corridor and would cross the Appalachian Trail a half-mile south west of Peters Mountain Wilderness Area.
	MVP, LLC has identified the Atlantic Coast Pipeline route as an alternate route in information provided to the Federal Energy Regulatory Commission. The ACP route was rejected due to "steep terrain".
	Because the ACP and the MVP are being evaluated simultaneously the impacts of both of them should be also considered at the same time and their environmental impacts combined in all present and future analysis. This includes impacts related to fracking the gas, burning the gas, methane releases on climate, and hindering the development of renewable energy systems in our national energy policy.
	energy systems in our neeronal energy portor.

IND671-1

The ACP Project is considered in the EIS as an alternative in section 3, and cumulative impacts from both the ACP and MVP are discussed in section 4.13. See the response to comment IND2-3 regarding hydraulic fracturing. Climate change is discussed in section 4.13. Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to

comment IND40-1 regarding renewable energy.

INDIVIDUALS IND672 – Anthony Mietus

20161221-5138 FERC PDF (Unofficial) 12/21/2016 10:55:35 AM Anthony Mietus, Union, WV. December 21, 2016 Kimberly Bose FERC 888 First St. NE, Rm 1A Washington, DC 20426 Docket # CP16-10 MVP Dear Ms. Bose, We have multiple concerns regarding the recently released Draft IND672-1 Environmental Impact Statement (DEIS). The DEIS does not identify a single spring in Monroe County (table 4.3.1-2 page 4-73) although MVP survey crews had access to properties where these features are present and individuals and groups have submitted this information. Why is this omitted in the DEIS? The groundwater for these springs does not adhere to property boundaries. Without an extensive hydrogeologic study of the aquifers, a FERC decision on the MVP's impact on these systems is purely guesswork. The construction of this pipeline will include massive excavation, blasting, deforestation, compaction of soils, soil erosion, sedimentation, etc. All of these factors will affect the recharge areas for the aquifers and groundwater. In section 5.1.3.1 page 5.3 of the DEIS it states " ... we have IND672-1 recommended that prior to construction the applicant should file with the Secretary 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 above ground facilities." THIS SHOULD BE A REQUIREMENT, NOT A RECOMMENDATION. " In the event of construction- related impacts, the Applicant would provide an alternate water source." THE APPLICANT SHOULD BE REQUIRED TO PROVIDE DETAILED PLANS ON HOW THEY WILL REPLACE SOMEONE'S WATER SUPPLY IF THAT SOURCE IS CONTAMINATED OR LOST. "Given the Applicants proposed measures, we conclude that potential impacts on groundwater resources would be minimized." WITHOUT KNOWING THE SIZE, LOCATION AND INTERCONNECTIVITY OF THE GROUNDWATER RESOURCES, HOW CAN FERC MAKE SUCH A CONCLUSION? The DEIS submitted by MVP was grossly deficient in its scope. Required surveys were incomplete and inaccurate. Sincerely, Anthony Mietus and Diane Skellie 1436 Glenwood Drive Union, WV 24983

IND672-1 Springs are discussed in section 4.3 of the EIS. See the response to comment LA15-14 regarding water wells and blasting. See the response to CO34-1 regarding hydrogeologic studies. See the response to comment IND70-1 regarding erosion. A revised discussion of sedimentation and turbidity can be found in section 4.3 of the EIS and in the response to comment FA11-15.

IND672-2 See the response to comment IND147-1 regarding recommendations. Section 4.3 of the final EIS has been revised to provide additional details regarding water system replacement due to project damages. The draft EIS was prepared by FERC staff, not Mountain Valley.

INDIVIDUALS IND673 – Anthony Mietus

20161221	1-5140 FERC PDF (Unofficial) 12/21/2016 10:58:45 AM		
	Anthony Mietus, Union, WV. December 21, 2016		
	Joby Timm; Forest Supervisor Jefferson National Forest 5162 Valleypointe Parkway		
	Roanoke, Va. 24019		
	Docket # CP16-10-000		
	Dear Mr. Timm:		
IND673-1	We would like to comment on the four (4) proposed amendments to the Forest Service Land and Resource Management Plan (LRMP) contained in the Notice of Availability of the DEIS for the proposed MVP Project dated Sept. 16,2016. We would like to go on the official record as opposing all four of the	IND673-1	See the response to comment FA10-1 regarding Amendment 2.
	proposed amendments. Proposed Amendment 1: Until the location and interconnectivity of the aquifers and groundwater of Peters Mountain in WV is known, any decision by the FS to amend its LRMP could affect the drinking water supply of over 5000 residences in southern Monroe County. THIS AMENDMENT SHOUD BE DENIED.	IND673-2	The applicable mitigation measures designed to minimize the potential for soil movement and to ensure adequate restoration and revegetation are identified in the Erosion and Sediment Control Plan (POD, Appendix C), Landslide Mitigation Plan
IND673-2	Proposed Amendment 2: The ability to construct a 42" pipeline on the steep slopes of Peters Mountain where depth to bedrock is minimal will negatively impact the first order streams in the area and alter the recharge characteristics of the watersheds. The FS is aware of these challenges as evidence in their letter to Ferc dated October 24, 2016 File Code 1900; 2720. THIS AMENDMENT SHOULD BE DENIED.		(POD, Appendix F), the Site Specific Design of Stabilization Measures in High Hazard Portions of the Route (POD, Appendix G), the Restoration Plan (POD, Appendix H), and the Winter Construction Plan (POD, Appendix L).
IND673-3	Proposed Amendment 3: The LRMP should not be amended to allow MVP to remove any old growth trees. West Virginia has a history of clear cutting old growth trees and the impacts have been severe in regard to biological diversity. Old growth forests can never be replaced once they have been eliminated.	IND673-3	See the response to comment FA10-1 regarding Amendment 3.
IND673-4	Proposed Amendment 4: The Scenic Integrity Objective of the LRMP should not be downgraded from High to Moderate for private profit. Thousands of hikers have walked the Appalachian Trail along Peters Mountain; it is a meaningful, even spiritual experience, not to mention the financial impact that tourism has on the local economy. Having a deforested ROW for a pipeline would be a blight on the viewshed. THIS AMENDMENT SHOULD BE DENIED.	IND673-4	See the response to comment FA10-1 regarding Amendment 4.
	Every citizen of Monroe County, WV must have access to a clean water supply. The Forest Service and FERC's decisions are critical to maintaining that access. We insist that you give due consideration to our recommendations.		
	Sincerely		
1			

INDIVIDUALS IND674 – Heather Becker

20161221-5261 FERC PDF (Unofficial) 12/21/2016 1:48:46 PM		
IND674-1	Heather Becker, Christiana, TN. I'm filing to object to the Mountain Valley Pipeline, which proposes to cross the Appalachian Trail. This is land administered by the government and preserved for the people and to protect the environment.	
	Allowing this pipeline means that it's not a matter of if, but when there's a leak or disaster which will cause lasting damage. This construction will only provide temporary jobs, but lead to permanent damage to the land and ecosystem, and cause harm in the form of limiting tourist interactions with the area due to the scar of the pipeline. We've already seen multiple pipeline leaks during the protest of the DAPL, so it's ludicrous to believe that the same will not happen here.	
	Please don't allow this pipeline to mar one of the most beautiful wildlife and hiking preserves in the country!	
		1

IND674-1 The ANST is discussed in section 4.8 of the EIS. See the response to comment IND92-1 regarding leaks. See the response to comments IND281-2 and PS1B2-34 regarding jobs. Tourism is discussed in section 4.9 of the EIS.

INDIVIDUALS IND675 – Marika Svolos

2016122	1-5147 FERC PDF (Unofficial) 12/21/2016 11:03:00 AM
ND675-1	Marika Svolos, Omaha, NE. I am opposed to the construction of the Mountain Valley Pipeline. Last year, I was fortunate enough to be able to spend time in beautiful West Virginia. The landscapes of Appalachia are like nothing else. Their beauty is priceless. They should not be destroyed for commercial interests.
	While in West Virginia, I also had the opportunity to speak with persons who were negatively affected by coal mining. One woman told me that coal mining had contaminated the water she drank. Now, she was afraid that she would not be able to have children. What I took away from this was the importance of protecting clean and safe water. We should not take the risk of this pipeline potentially contaminating groundwater. People's health and the integrity of our environments are more important than the financial gain of the fossil fuel industry.

IND675-1

The landscape of Appalachia would not be destroyed by the MVP. See the EIS, which assesses impacts; especially section 4.8. See the response to comment IND3-1 regarding drinking water.

INDIVIDUALS IND676 – Larry Thompson

20161221-5157 FERC PDF (Unofficial) 12/21/2016 11:19:31 AM Larry Thompson, Pembroke, VA. We're recent arrivals to Virginia. We've only been here for 20 years. For IND676-1 some, living in one place for 20 years would be a very long time. But, this is a region where people don't count years. Rather, they count generations on the land, or centuries on the land. But, even though we're newcomers to this area we highly value the land we have. The property we own, which is slated to be crossed by the MVP pipeline, was in the Reynolds family for nearly 200 hundred years. The log home on the property was built in 1840. The covered bridge, one of only seven remaining in Virginia, was built in 1919. We consider it a privilege to own this land. Our main concern with the MVP pipeline is the water resources. During the 200 years that the Reynolds family had the property, they never had a water well. Instead there is wonderful spring house, built of native stone, which sits on the banks of Sinking Creek. That spring has been the sole source of water for the homestead. The spring house is old, and the spring is even older, with water flowing from it for hundreds, probably thousands of years. But, I fear the spring may not survive the MVP pipeline. The water comes from the mountain, and the mountain is where the pipeline will go. The water flows out of that mountain, down through caves and crevices in the limestone, until it arrives on the banks of Sinking Creek, where many generations ago, the Reynolds family built the small stone spring house. And although the spring house was the source of water for the Reynolds family, it's more than a water source for people. The water doesn't stay in the spring house. It flows through it, and into Sinking Creek. It lowers the temperature of the creek, so the rainbow trout can survive. What happens if the blasting and digging disrupts the flow of the water? What if the cool water stops? What if in the course of construction the aquifer becomes polluted? What use is a spring house without the pure water flowing through it? How do you mitigate the damage to a spring? How do you purify the water once it's polluted? You can't. The report authored by Ernst Kastning clearly shows that damage will likely not be limited to the narrow easement which MVP has requested. The subsurface interconnections are widespread and fragile. Action at one point can affect areas miles away. The MVP should not be allowed to use the proposed route for its pipeline.

IND676-1

Springs are discussed in section 4.3 of the EIS. Blasting is discussed in sections 2, 4.1, and 4.2. See the response to comment IND3-1 regarding drinking water. See the response to comment IND62-1 regarding Dr. Kastning's report.

INDIVIDUALS IND677 – Christina McIntyre

20161221-5158 FERC PDF (Unofficial) 12/21/2016 11:23:30 AM Christina McIntyre, Eggleston, VA. I am a resident of Giles County Virginia. Our home relies on a well for IND677-1 our water. I explore the trails, caves and rivers of the region. The environmental impact study for the Mountain Valley Pipeline has many inaccurate assessments. Walking the trails and viewing the historical remnants of landslides (both natural and man-made) and crawling underground and experiencing the currently stable yet precarious underground caverns gives one a sense of how delicate the ecosystem here is. It is this very beauty that also attracts visitors from all over the world. Visitors that have helped to create a livelihood for many of my neighbors. I have met folks who specifically travel to fish the New River, Walker Creek and the numerous small creeks that still provide native environment for Brook and Brown trout. Throughout the year people from all walks of life pass through this region on foot through the Appalachian Trail corridor, for solitude and community. The students from the nearby universities hike the Cascades trail to view the falls. There is a wealth of wildlife that relies on the area to sustain its ecosystem. Our camera traps have caught charismatic megafauna such as bear, bobcat, deer and coyotes. But the microfauna is also in danger - changes and major physical disturbances in caves and exposure to toxins can wipe out unique species of salamander and other smaller life that contribute to the balance of an ecosystem. What I don't understand is why the MVP is not proposing to use existing corridors and working with stakeholders who would not be opposed to the pipeline IF they were more upfront with us. At each turn I feel the citizens have been dismissed and deceived. I was in a meeting in Giles Co. High School where the MVP lawyers dismissed the residents' concern for their well water. The statement that still haunts me is: "IF we break it, we will fix it" ... Admittedly they have more lawyers (and money to cover legal fees) than any of Giles Co. citizens. The burden of proof of a well going dry or being contaminated would be on the land owner, not MVP. And even if it was accepted (in court) that "they (MVP) broke it" ... how does one "fix" a water source? Bottled water? How do they "fix" the health implications (short- and long-term) from exposure before the contamination is discovered? I ask FERC to protect the surrounding landscape and communities. Please IND677-2 evaluate the comprehensive need for pipeline development to transport natural gas from the same Marcellus shale plays in a single Programmatic Environmental Impact Statement so that this infrastructure can be appropriately sited and the cumulative impacts to our National Parks, National Forests, and private lands can be understood before moving forward. It is FERC's responsibility to do the right thing - the alternative will be a turning point for the worse in an area that serves as home for many and offers recreation and inspiration for millions of people. Sincerely, Christina M. McIntyre

IND677-1

The EIS discusses the ANST in section 4.8; water wells in section 4.3. See the response to comment IND3-1 regarding drinking water. The EIS address the use of existing corridors in the alternatives section 3. See the response to comment IND92-1 regarding leaks.

IND677-2

See the response to comment FA11-12 regarding need. See the response to comment FA11-3 regarding a programmatic EIS. Cumulative impacts are discussed in section 4.13 of the EIS.

20161221	1-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM		
IND678-1	Edgar Martin, Catawba, VA. My farm is located in Catawba Valley, the western part of Roanoke County, and consists of approximately 140 acres: 40 acres cleared for crops 20 acres of pasture, and 80 acres wooded. It's identified as Roanoke County Tax Map # 031.00-01-25.00-0000, and otherwise known as, 8698 Blacksburg Road, Catawba, Virginia 24070. I voice my concerns, both from a personal standpoint and one of that of other Catawba Valley landowners. "Will the pipeline affect Catawba Valley?" Yes, of course it will. Constructing and operating a pipeline that divides the upper Catawba Valley would be devastating to the farmers and destroy the uniqueness and tranquility of the rural country side. It will become an unacceptable environmental hazard and noise polluter, obliterating the historical significance of the oldest settled area of Roanoke County. Furthermore, it's a predisposed fact that a pipeline should not be constructed through Catawba Valley. Concerns pertaining to Catawba Valley and other topics are outlined below; HISTORY, UNIQUE PHYSICAL CHARACTERISTICS, KARST TOPOGRAPHY, POLUUTION, RESTRICTING LANDOWNER'S USE OF OWN PROPERTY, SAFETY CONCERNS. SUMATION	IND678-1	The commentor appears to be more than 4 miles from the proposed pipeline route.
IND678-2	1. HISTORY: Catawba is thought to be the oldest settled area of Roanoke County. Catawba, an unincorporated community in the northern section of Roanoke County, Virginia, occupies the Catawba Valley, bound on the south by the north slope of Catawba Mountain and on the north by several mountains which form the border between Roanoke County and Craig County. Catawba is thought to be the oldest settled area of Roanoke County. A cabin-fort was built in 1722, and property owners are listed as early as 1740. The area also is the site of the first known Baptist church in the greater Roanoke Valley. The church reportedly began in 1780 somewhere along the creek. The Catawba Hospital, a mental health facility operated by the Commonwealth of Virginia, is near Route 311 and traces its history back to a resort established in 1857 to take advantage of the believed healing properties of a sulfur and limestone spring. No one knows how the name "Catawba" originated, "According to legend, the Catawba Indians camped along creeks or streams, so it's not unreasonable to assume that's where the name originated. It is a known fact that Native Indian artifacts are distributed over the entire valley. These artifacts will be lost or destroyed forever if the pipeline is constructed across Catawba Valley.	IND678-2	Catawba Hospital appears to be more than 10 miles from the MVP.
IND678-3	 UNIQUE PHYSICAL CHARACTERISTICS: Catawba is unique: someone can physically observe two streams, both beginning from springs less than one-fourth mile apart, feeding two different rivers, the James River and the Roanoke River, thus flowing into the two largest estuaries in the United States. The freshwater stream, which heads south paralleling 	IND678-3	Streams are discussed in section 4.3 of the EIS.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM Route 785, is referred to as Catawba Creek, and drains into the James IND678-3 River, thus following the James River/Potomac River watersheds to the cont'd Chesapeake Bay (largest estuary). The other freshwater stream, which generally flows north, also paralleling Route 785, is referred to as the North Fork of the Roanoke River, and flows into the Roanoke River watershed to Albemarle/Pamlico Sound (second largest estuary). These springs are located approximately two miles east of my property where he MVP proposed routing of the pipeline. Mostly, the property owners located in the path of the proposed MVP route are full-time farmers and/or older retirees living on fixed incomes trying to supplement their meager incomes by limited farming, mostly consisting of raising and selling beef cattle on farms not larger than 200 acres. Constructing and operating a pipeline that divides the upper Catawba Valley would be devastating to these farmers, destroy the uniqueness and tranquility of the rural county side, and become an unacceptable environmental hazard and noise polluter to the oldest settled area of Roanoke County. 3. KARST TOPOGRAPHY: In Virginia, generally, every stream will get IND678-4 larger as it flows downhill and other streams flow into it, ultimately forming rivers and reaching the Gulf of Mexico or the Atlantic Ocean. The one Virginia exception is in karst topography, where streams might disappear or "sink" into the ground and flow underground through porous limestone and the volume of the water in the stream channel may get smaller rather than larger, until the stream dries up completely or sinks. Some surface streams also lose water to a subsurface conduit, and can even appear to dry up before reaching a river. A classic "losing stream" is Sinking Creek in Giles County. Most of the water in the stream sinks underground about a mile before the stream reaches the New River, leaving a rocky streambed at the mouth of the creek that is filled with water only during storms. Subsurface conduits occur on my property and other properties in the Catawba Valley and surrounding communities. Sink holes are common in limestone, other carbonate rock, salt beds, or in other rocks, such as gypsum, that can be dissolved naturally by circulating ground water. Sink holes can also occur in sandstone and quartzite topography. As the rock dissolves, spaces and caverns develop underground. These sink holes can be dramatic, because the surface land usually stays intact until there is not enough underlying support, then, a sudden collapse of the land surface can occur. The "Catawba Murder Hole," in Botetourt County, an oblong hole in the earth 120-feet long, 75-feet wide and 120-feet deep, is a prime example of this collapse. Many of the Catawba Valley residents derive their water from karst aguifers. The Virginia Department of Transportation (VDOT) was dumping waste debris from road work into a sink hole on my sister's property, and some local residents began complaining about their wells becoming dirty. Dye was poured into the sink hole and dyed water was identified in several karst aquifers, some as far away as one mile. Constructing a pipeline across Catawba Valley will disturb these underground caverns and impact karst aquifers for miles around. Catawba Valley and the surrounding areas are pocketed with sink holes and underground caverns, some very visible from the surface, others not so apparent. Dixie Caverns in Salem, Virginia, is a prime example of an immense cavern that

IND678-4

Karst is discussed in section 4.1 of the EIS.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM makes up the karst topography in this area. Roanoke County has IND678-4 identified 81 caves, and there are many more that residents don't cont'd identify as being significant enough to merit attention. Streams flowing downhill in karst topography sometimes disappear or "sink" into the ground and flow underground, thus, the volume of the water in the stream channel may get smaller until the stream dries up completely The only source of running water on some Catawba Valley properties for livestock originates at the top of the mountain, enters caverns, and reemerges at springs at the bottom of the mountain, i.e., karst aguifers. MVP has proposed constructing the pipeline over some of these springs. Any disturbance of these springs or the general areas surrounding these springs could stop the flow of the only source of running water on these property, rendering the properties totally useless for raising livestock unless a well is dug. This requires a forever continuing expense to the farmer to maintain and operate the well, an additional cost to older retirees living on fixed incomes. Karst aquifers also provide water to my home. Our family had a well dug (over 100-feet deep), as a back-up to the spring; however, the well contains sulfur and can't be used in the home without the installation of an expensive filtration system, because some family members are allergic to sulfur. This also applies to surrounding farms as well. POLLUTION: This proposed pipeline would literally cut through our IND678-5 IND678-5 The right-of-way would be restored and revegetated following community, and the damage to private yards, farms, creeks, wetlands, and forests would be devastating and leave long term scars, pollution, and construction (see section 2.4.2 of the EIS). Acreage impacts for safety concerns. When pipeline companies make claims they'll restore aboveground facilities is described in section 2 of the EIS. Noise native habitats, waterways, and wetlands back to their original state following pipeline construction, that statement is an absolute, boldis addressed in section 4.12.2 of the EIS. See also the response to faced lie. I've been associated with pipeline design and operation for over 35 years. The very nature of a pipeline-such as the route of the comment IND375-4 regarding noise. pipeline and the right-of-way restriction associated with it, the installation of control valves, pig launchers/receivers, meter stations and compressor stations that require vast above-ground areas-produce an unacceptable environmental eyesore and noise pollution. This precludes the restoration of the environment to the original pre-construction state and impedes property use thereafter, by restricting the installation of any structures, storing anything that could be an obstruction, planting trees or shrubs along the right-of-way, moving heavy equipment over the pipeline or anything the pipeline company deems a right-of-way encroachment. The rather narrow Catawba valley between the two large mountain ranges, where the proposed MVP crosses, causes any loud noise to resonate against the mountains, thus amplifying the sound. The hydraulic gradient shows the location of a compressor station (it appears to be within one-half mile from my property), that not only will be an environmental evesore, but an environmental noise polluter as well. Any noise produced by the compressor station will resonate off the mountains and clearly be heard many miles away. This noise will not only have an adverse impact of the residents living in the valley, but will also impact livestock. IND678-6 RESTRICTING LANDOWNER'S USE OF OWN PROPERTY: The installation of IND678-6 this pipeline across Catawba Valley property restricts the use of the See the response to comment IND12-1 regarding property values. land, lowers land value and reduces the ability to sell, subdivide or The commentor's statements that the landowner must pay to further develop the land. Factually, the proposed pipeline across my access their land is incorrect. See the response to comment IND332-1 regarding heavy equipment.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM property almost renders my property useless because the pipeline reduces IND678-6 my cleared or crop land by about 50% and cuts off farm equipment access cont'd to the remaining cleared crop area, wooded area and pasture land. Based on what MVP has stated, temporary equipment crossing may be permitted, but only with permission and with all cost borne by the landowner. MVP will perform an engineering evaluation to determine the effects of any proposed equipment, e.g., farm equipment, and the necessary steps to be taken to protect the pipeline. Mats, timber bridges or other protective materials deemed necessary by MVP must be purchased, placed and removed by the landowner. In other words, the landowner has to bear the cost to gain access to their own land in order to continue current use of their land. And, not just a single time, but each time the landowner wants to mow the pasture lands, move crops from the fields and even to harvest firewood! I can't fathom the cost associated with bridging the pipeline if the landowners wanted to harvest the timber. At our expense, even pipeline markers erected on our property becomes our responsibility to protect and maintain. Further, the pipeline is often maintained by aerial spraying of herbicides, which IND678-7 cause many health problems, including Parkinson's disease and can also be harmful to livestock and crops. Some landowners currently use no herbicides or pesticides on their cropland and farm organically. Cattle on my land are free-range, organic. The aerial spraying of these herbicides over the pipeline would introduce unwanted and dangerous chemicals into my farming process and destroy my organic practices. I technically own the land and pay taxes on it, but I wouldn't be able to do much with it if the pipeline is installed in the proposed manner, bisecting my farm and that pertains to many of the other farmers in Catawba Valley. SAFETY CONCERNS: The Office of Pipeline Safety (OPS), Department IND678-8 of Transportation, reports that from 1984 to 1999, in Virginia alone, there were 57 gas pipeline accidents, which resulted in 2 deaths, 16 injuries and \$15,763,890 in property damage. OPS also reports that from 1986 to 2000 the total number of transmission and distribution incidents was 3,240 with 334 fatalities, 1,434 injuries, and \$502,389,152 in property damage for the country. Federal data reveals that a gas pipeline in rural Kentucky, constructed in karst topography, had 26 incidents in the past 10 years, ranging from costly leaks and broken equipment to an explosion on a corroded pipe. Columbia Gulf Transmission, the company that operates the pipeline, says shifting earth caused a 2012 explosion. Natural gas transmission lines only-the pipelines that deliver large quantities of gas from production areas to distribution hubs and population centers nationwide-accounted for more than 80 explosions and fires in 2012, according to the Pipeline Hazardous Materials Safety Administration (PHMSA), a branch of the US Department of Transportation that inspects and regulates the nation's pipelines. Of the 80 incidents, 38 were classified as significant, PHMSA data show. The 2012 accidents and fires reportedly caused seven injuries, no fatalities, and more than \$44 million of damage. Since 2001, natural gas pipeline explosions and other accidents have resulted in the loss of at least 45 lives and many more serious injuries, usually from burns. This list is not considered comprehensive, and there may be additional accidents,

IND678-7 The Applicants would be responsible for installing and maintain pipeline markers. See the response to comment LA1-7 regarding herbicides.

IND678-8 See the response to comment IND2-1 regarding safety. See the response to comment LA1-4 regarding existing 42-inch-diameter pipelines in karst terrain.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM deaths and injuries that are not known. According to the General IND678-8 Accounting Office (GAO), the investigative arm of Congress, an average of cont'd 22 people died annually from 1988 to 1998 and the number of accidents were increasing 4% per year. The GAO found the OPS has not enforced 22 of 49 safety regulations passed by Congress since 1988, including periodic inspections of pipelines. At the same time, the federal government is imposing fewer fines on the pipeline industry, relying instead on "letters of concern" as an enforcement tool. Sam Koplinka Loehr, of the Clean Air Council, said that all gas pipelines leak-that there are fugitive emissions at compressor stations, valves, and stemsand that every step has an impact on air quality. Ralph W. Ewers, who holds a Ph.D. in hydrogeology and geomorphology of karst, believes any pipeline carrying natural gas through areas with karst topography is a risky proposition. Ewers, who is an Eastern Kentucky University professor emeritus and a consultant of karst topography to industry and government agencies around the world, said in a report that there are two major concerns associated with karst and pipelines: The first is that geological change continually occurs beneath the ground. Karst areas are among the most dynamic areas in the United States. Both the surface and subsurface of these areas change at a rapid pace, well within the span of a human lifetime, Ewers wrote. Ewers explained that areas with karst landscape are marked by tens of thousands of existing sink holes, and new ones appear often. Ewers stated, "Newly forming sink holes are the most concerning for pipelines because the collapse can be catastrophic, that is to say, a major collapse may occur in minutes or hours." That is what happened in dramatic fashion at the National Corvette Museum in Bowling Green, KY, when a sink hole opened up on the site. In other cases, the collapse is more gradual and continual. Even when pipelines are carefully laid out, they often rest on underground rock pinnacles that can create stress on pipes as the soil washes away around them. These stress points could eventually rupture from corrosion, Ewers contends. "The tension stress of an unsupported pipeline or one supported at a point creates a well-known and wellunderstood predisposition to corrosion and failure," said Ewers. A huge boom and a large fire were reported by the people of rural Adair County, KY, on Feb. 13, 2014. Two years ago, the same pipeline ruptured and caught fire in another part of rural Kentucky, sending a pulsing flame into the dark sky. A spokeswoman for Columbia Gulf Transmission, the company that operates the pipeline, says shifting earth caused the 2012 accident, but the company hasn't said what caused the 2014 explosion. A research of federal data found this pipeline had 26 incidents in the past 10 years, ranging from costly leaks and broken equipment to an explosion on a corroded pipe. This is an example of what will eventually happen in karst topography because of the well-known and well-understood predisposition to corrosion and failure of pipelines in karst topography. IND678-9 Another more disconcerting problem with pipelines in karst areas is what might happen to the liquids and gasses released in the event of a leak or rupture. The natural conduits in karst topography provide routes for both liquids and gasses to move freely. Testing has revealed conclusively that those velocities equal to ordinary walking and jogging

IND678-9

See the response to comment IND92-1 regarding leaks. The proposed pipelines would transport vaporized natural gas, not gasoline.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM speeds are not uncommon for waters coursing through conduits in karst IND678-9 topography. Thus, locations a mile or more from a leak site could be cont'd affected before a leak site is identified. Experience with gasoline leaks from underground storage tanks has shown that vapors from the karst conduits have invaded homes and schools with explosive vapors. Sink holes fill with gasoline fumes displacing the air, and caves have become explosion hazards that have killed exploring children and their rescuers. Flammable vapors released during a natural gas pipeline leak would react similarly. Sink holes can swallow infrastructure, including roads, building and pipelines, creating a risk that hazardous liquids could be released and then move swiftly through subterranean rivers and streams, polluting water sources a mile or more away. Deadly vapors also could settle into underground caves. Additional to the risky proposition of a pipeline carrying natural gas IND678-10 through areas with karst topography, MVP is compounding the problem by increasing the diameter of the pipe to 42 inches-a size never constructed in mountainous topography and a size that should never be tried in karst topography. When performing pipeline hydraulic calculations and in designing a pipeline, three basic factors govern this design: desired daily flow rate (for MVP, 2 billion cubic feet per day), available pressure to move the product, and pressure lost due to friction. Velocity and pressure are trade-offs in constructing and operating a pipeline; therefore, in a larger diameter pipeline, the flow of product results in a decrease in velocity and an increase in available pressure along the pipeline for a given flow rate. Consequently, the flow of product in a smaller diameter pipeline results in a velocity increases and a decrease in available pressure along the pipeline to move the product. To obtain the velocity of 23,148 cubic feet per second (2 billion cubic feet per day) and minimize their cost of construction and operating compressor stations, MVP designers propose to use a larger diameter pipe to reduce velocity, thus reducing friction, to obtain the 2 billion cubic feet per day flow rate. This cost-cutting proposal is a major risk to the public along the pipeline route due to the higher cross-section operating pressure of a large-diameter pipe. Pascal's Principle states that the pressure in a closed container is distributed equally throughout and acts on every square inch of the area of the container. A 30-inch diameter pipe has a circumference of 94 inches; a 42-inch diameter pipe has a circumference of 132 inches. Since Pascal's law allows forces to be multiplied, the larger the cross-section area of the 42-inch pipeline, the larger the mechanical advantage, or we should say in this case, the larger the mechanical disadvantage, because the high pressure pipeline operating at 1,440 pounds per square inch (PSI), exerts 1,440 PSI across every square inch of the pipeline. In this case, a cross-section area that is 196% larger than the 30- inch, thus, increasing the propensity to fail because a sudden change in velocity can causes a pressure wave to propagate within the pipe. Water hammer or hydraulic hammer is the term used to describe the effect that occurs when the velocity of the product moving through a pipe suddenly changes. The equivalent of water hammer is usually not

that occurs when the velocity of the product moving through a pipe suddenly changes. The equivalent of water hammer is usually not noticeable in natural gas pipelines because the gas, being compressible, normally absorbs the changes in pressure over a period of time. However, it can transpire in pipelines when the gas behaves like an incompressible IND678-10

See the response to comment LA1-4 regarding existing 42-inchdiameter pipelines in karst terrain.

20161221-5167 FERC PDF (Unofficial) 12/21/2016 11:37:50 AM liquid where large load changes occur in a small volume of pipe. The IND678-10 rise or fall in pressure in a pipeline can be caused by the gradual or cont'd sudden closing of a valve or other changes such as the unanticipated shut down of a compressor. This sudden change in velocity causes a pressure wave to propagate within the pipe. This pressure wave creates unexpected pressure forces on the pipeline. Therefore, a larger diameter pipe produces a greater likelihood that a rupture would occur over a smaller diameter pipe. Profit margin over public safety is the sole factor driving the selection of the 42 inch diameter pipe. IND678-11 | Karst topography presents an idiosyncratic perplexing siltation to both the residents of Catawba Valley and to a pipeline carrying natural gas through areas with karst topography. First, many of the Catawba Valley residents derive their water from karst aquifers. Constructing a pipeline across Catawba Valley will disturb these underground caverns and impact karst aquifers for miles around, possibly depleting or severely restricting water sources. Second, federal data reveals that gas pipelines constructed in karst topography have higher incidents of leaks or ruptures than those constructed in non karst topography. In karst topography, the tension stress of an unsupported pipeline (or one supported at a point) creates a well-known and well-understood predisposition to corrosion and failure because both the surface and subsurface of these areas change at a rapid pace. Karst landscapes are marked by tens of thousands of existing sink holes and new ones appear often. Newly forming sink holes are the most concerning for pipelines because the collapse can be catastrophic, that is to say, a major collapse may occur in minutes or hours. Additionally, sink holes can swallow infrastructure, including roads, building and pipelines, creating a risk that hazardous gasses released, in the event of a pipeline leak or rupture, could move freely through the natural conduits in karst topography. Thus, locations miles from a leak site could have deadly and explosive vapors before a leak site is identified. In addition to the risky proposition of a pipeline carrying natural gas liquids through areas with karst topography, MVP is compounding the problem by increasing the diameter of the pipe to 42 inches; a size never constructed in mountainous topography and a size that should never be tried in karst topography. SUMATION: Profit margin over public safety is the sole factor IND678-12 driving the selection of the 42 inch diameter pipe, a size never constructed in mountainous topography, a size that should never be tried in karst topography, and a size that is predisposed to failure if constructed in the Catawba Valley area. One does not need to ask the question, "Will the pipeline fail?" It's a predisposed fact that a pipeline constructed and operated in karst topography will eventually fail. Rather, the question that need to be asked is, "How soon, how many deaths, how many injuries, and how much property damage must be destroyed before the government decides enough is enough?" Apparently in Virginia, 2 deaths, 16 injuries and \$15,763,890 in property damage is not enough. The state and federal government agencies that permit the construction and operation of a 42 inch diameter pipeline in karst topography, that is predisposed to failure, are engaging is a reckless endeavor. Just how many incidents must happen before the state and federal governments prohibit the construction and operations of pipelines in karst topography?

IND678-11

The EIS provides a discussion of karst and sinkholes in section 4.1. See the response to comment LA1-4 regarding existing 42-inch-diameter pipelines in karst terrain.

IND678-12

See the response to comment IND2-1 regarding safety.

INDIVIDUALS IND679 – Teri Pettipiece

20161221-5170 FERC PDF (Unofficial) 12/21/2016 11:44:08 AM Teri Pettipiece, Roanoke, VA. IND679-1 | In MVP's DEIS our property isn't even mentioned as having concerns, however there are several. There is a large cave nearby that wasn't documented. There are also 4 historical structures on the property. A pole barn, trace road, cemetery, and the Appalachian Trail. The Trace road was part of the Cumberland Gap Turnpike. The cemetery has family members from the Civil War era as well as James Alexander Jones who was a decorated Civil War veteran. There is also a mountain spring that provides water to five families living close by. A local archeologist has studied this area very closely. He stated that the land is karst and unfit to build a pipeline on, therefore very dangerous. This man is a professor at Radford University and has shared his concerns. Please listen to the concerns of the people that know the land and not MVP who only wants to make money off of this venture.

IND679-1

The commentor does not appear on the impacted landowner list. Karst is addressed in section 4.1 of the EIS. See the response to comment LA1-4 regarding existing 42-inch-diameter pipelines in karst terrain.

INDIVIDUALS IND680 – Eleanor A. Lasky

 Independent and resident in Roanoke County, Virginia and Trely on water from a well. I am quite concerned that a leak or other incident with the pipeline could pollute my water and make it unusable. What would lot her? There is no assurance about "safety" that the pipeline company can provide that would be adequate. There is simply no way to prevent all pipeline accidents, as history has demonstrated. IND680-2 I further object to the destruction of the viewsheds from the Appalachian Trail. They are a national treasure and should be protected. Finally, I object to the failure of the draft environmental impact statement to consider the full effect that the proposed pipeline would have on climate change. We should be leaving fossil fuels in the ground, not digging them up and burning them. We certainly should not be obtaining them through the environmentally destructive and poisonous 	2016122	1-5178 FERC PDF (Unofficial) 12/21/2016 11:56:39 AM		
 Trail. They are a national treasure and should be protected. IND680-3 		I oppose the construction of the Mountain Valley Pipeline and I object to the Draft Impact Statement as being cursory and unrealistic. I am a property owner and resident in Roanoke County, Virginia and I rely on water from a well. I am quite concerned that a leak or other incident with the pipeline could pollute my water and make it unusable. What would I do then ?? There is no assurance about "safety" that the pipeline company can provide that would be adequate. There is simply no	IND680-1	Well water is discussed in section 4.3 of the EIS. See the response to comment IND3-1 regarding drinking water. See the response to comment IND92-1 regarding leaks. See the response to comment IND2-1 regarding safety.
not digging them up and burning them. We certainly should not be obtaining them through the environmentally destructive and poisonous process of fracking. And we should not be cutting down hundreds of acres of trees for a pipeline. We should be putting our efforts into transitioning to sustainable energy sources. Please consider the need of the people of Virginia for clean water and a safe environment over the need of a corporation to make a profit. Do a fair and realistic investigation of the full environmental consequences of the MVP and then refuse to let it go forward. Thank you,	IND680-2 IND680-3	I further object to the destruction of the viewsheds from the Appalachian Trail. They are a national treasure and should be protected. Finally, I object to the failure of the draft environmental impact statement to consider the full effect that the proposed pipeline would	IND680-2	The visual analysis of the ANST has been revised in the final EIS.
		not digging them up and burning them. We certainly should not be obtaining them through the environmentally destructive and poisonous process of fracking. And we should not be cutting down hundreds of acres of trees for a pipeline. We should be putting our efforts into transitioning to sustainable energy sources. Please consider the need of the people of Virginia for clean water and a safe environment over the need of a corporation to make a profit. Do a fair and realistic investigation of the full environmental consequences of the MVP and then refuse to let it go forward. Thank you,	IND680-3	Climate change is discussed in section 4.13 of the EIS. See the response to comment IND2-3 regarding hydraulic fracturing.

INDIVIDUALS IND681 – Dana Dickson

20161221	-5185 FERC PDF (Unofficial) 12/21/2016 12:02:30 PM
	Dana Dickson, Atlanta, GA. . The DEIS fails to meet the regulatory standard to justify crossing the
IND681-1	Jefferson National Forest. The applicant is required to show that there
	is NO reasonable alternative to crossing Forest Service lands or the request must be denied. The applicant and FERC have merely given the
	opinion that the route crossing the Forest is preferable - this does not satisfy the law. The DEIS makes no attempt to assess the impacts of this
IND681-2	proposed pipeline on the Appalachian Trail in context with other
	pipelines and projects that would damage the AT's character and value. This failure violates FERC's duty to perform an adequate cumulative
1	impacts analysis under NEPA. The DEIS must be revised to include analysis
IND681-3	of impacts and the ability of the applicant to avoid or mitigate resource damages in what the Forest Service has designated High Hazard areas. The
	combined risks of high landslide potentials, highly erodible soils, very steep slopes, sensitive species and habitats, and other factors calls
	into question whether the MVP can be built at all in a way that protects
	public resources. The Draft EIS is legally and technically inadequate. It omits important information, misrepresents facts and findings, and fails
IND681-4	to support conclusions with credible scientific and technical analyses. A revised DEIS must be prepared and the public must have the opportunity
1110001-4	to review and comment on a version that is complete and accurate.

IND681-1

IND681-2

IND681-3

IND681-4

Section 3.0 Alternatives describe alternatives that would avoid

Section 4.13 of the EIS provides a discussion of cumulative

We did not produce a supplemental draft EIS. We produced a final EIS that addresses new information and comments on the

See response to comment IND401-7. The EIS provides a discussion of threatened and endangered species in section 4.7.

the Jefferson National Forest.

impacts to the ANST.

draft.

INDIVIDUALS IND682 – John D. Wellman

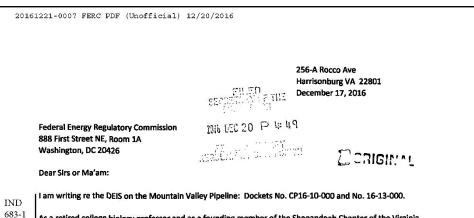
	L-5128 FERC PDF (Unofficial) 12/21/2016 10:38:31 AM	
IND682-1	John D. Wellman, Lovingston, VA. I am opposed to the massive overbuilding of natural gas pipelines going on across the U.S. In our region, at least 2 pipelines, the MVP and ACP, are being pushed through with inadequate justification and little attention to the cumulative impacts on the environment and economies of the areas they pass through, including the Monongehela and George Washington national forests, the Blue Ridge Parkway, and the Appalachian Trail.	IND682-1
IND682-2	Beyond their direct impacts, the huge investment in these pipeline projects will serve to lock us into reliance on natural gas for generating electric power, flying in the face of the world's need to wean ourselves from fossil fuels in order to slow global climate change. Instead, we should be leading the way as quickly as possible to shift to renewable sources of energy. Instead of self-destructively investing many billions of dollars in NG infrastructure, we should be investing in solar, wind, geothermal and other power sources, while upgrading our ancient electricity delivery system. Renewables are the true keys to the energy independence now being falsely claimed by the natural gas advocates.	IND682-2
IND682-3	Specifically, the DEIS for the MVP makes no attempt to assess the impacts of this proposed pipeline on the Appalachian Trail in context with other pipelines and projects that would damage the AT's character and value. This failure violates FERC's duty to perform an adequate cumulative impacts analysis under NEPA. It also represents an assault on protected natural areas of long history and lasting value that would establish a precent for future violations of our natural and cultural heritage.	IND682-3

IND682-1 Section 4.13 provides a cumulative impacts discussion for the MVP and the ACP Project. The Commissions would decide if these projects are necessary for regional natural gas supplies in the Project Orders.

ND682-2 Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1 regarding renewable energy.

ND682-3 Section 4.13 of the EIS provides a discussion of cumulative impacts to the ANST.

INDIVIDUALS IND683 – Anne W. Nielsen



As a retired college biology professor and as a founding member of the Shenandoah Chapter of the Virginia Native Plant Society, I have spent a great deal of time in the George Washington National Forest and have come to value its biodiversity and value to this community and others in the area. I also worked as a travel councilor for the City of Harrisonburg for some years, and realized how many of our visitors also value the recreational possibilities of the GWNF. For three years, members of the native plant society worked with GWNF staff to patrol areas that were to be sprayed with herbicide to control woody growth along the many hundreds of miles of roads. We identified areas where it could be done without lasting harm and also populations of sensitive and less common native plants that should be avoided. As we walked these roads we observed that everywhere there were roads in the forest there were invasive exotic plants and insects. So I'm well acquainted with the forest and its inhabitants, as well as its challenges. Bottom line: No more of this. Wild areas in the west are frequent and extensive. Not so on the east coast. This ribbon of forest along the Appalachians, Blue Ridge and Massanutten Mts. is valuable to all of us.

I understand that the path of the Mountain Valley Pipeline will negatively impact several areas within the forest, and urge you to oppose any amendments to the Forest Plan that allow a pipeline or utility corridor. The GWNF staff spent many months—twice—developing this plan, and it didn't come easily because of their mandate for multiple use; in the end it was concluded that fracking should not be allowed, and pipelines and utility corridors should be restricted to areas where such corridors had already been established.

There is a planned designated old growth site that would be impacted by the MVP, and important (and rare) roadless area, and an important riparian zone along Craig Creek as well as multiple other stream crossings that would be impacted by the opening, the erosion from removal of plant cover and permanent risk of fire and explosions from a pipeline. We have just seen in the Great Smoky Mountains that climate change is increasing fire risk on the east coast. Homes, forests, and businesses are far more frequent and closer together here.

Thank you. Please consider these comments, and make them a part of the permanent file.

-liene W. Thelsen

IND683-1

The MVP pipeline route does not cross the George Washington National Forest. Impacts from the MVP on plants and forest is discussed in section 4.4 of the EIS; stream crossings in section 4.3; and erosion in sections 2 and 4.2. Climate change is addressed in section 4.13 of the EIS.

INDIVIDUALS IND684 – Brian Dickman

IND684-1	Brian Dickman, Charleston, WV. Information on impacted wetlands is very general and difficult to assess. Are more detailed maps available?
IND684-2	Table 4.4.1-4 on invasive species seems incomplete. Johnson grass was only encountered in one county? Japanese stiltgrass is listed as a dominant in both forested and emergent wetlands, yet is only recorded in three counties.
IND684-3	Stream and soil stabilization should include geotextiles not enclosed in plastic netting. My observations have been that numerous small mammals and reptiles get stuck in the plastic mesh. Please avoid using these materials.
IND684-4	References are cited by author only. The DEIS should have a section with the complete citation.
IND684-5	The Gauley River is proposed to be constructed using the wet open-cut method, yet mussel surveys were waived due to dangerous conditions. If mussel surveys are deemed too dangerous, how is heavy equipment going to cut a trench without significant impacts? That doesn't even get into putting workers at danger.
IND684-6	Avoidance of Mill Creek Springs Nature Preserve in Virginia should not impact the same forest type protected by the preserve. Otherwise, avoidance would accomplish little.
IND684-7	Impacts to the viewshed of the Appalachian Trail seem significant. Yes, the pipeline itself would be screened, but gashes in neighboring mountains would not be.
IND684-8	Impacts to core forests, WV Core-10 and VA Core-01, appear excessive. There may be no way to reduce this without impacting forests elsewhere. Core forest preservation elsewhere, though not legally required, would mitigate this damage.

IND684-1	Wetlands can be located on alignment sheets.
IND684-2	Table 4.4.1-4 provides invasive species identified during field surveys.
IND684-3	The Applicants would adhere to our Procedures which state that synthetic monofilament mesh/netted erosion control materials should not be used in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife.
IND684-4	Complete citations can be found in appendix V of the EIS.
IND684-5	Section 4.3 of the final EIS has been revised to provide site- specific construction methods for major waterbody crossings.
IND684-6	Section 3.5 of the final EIS has been revised to discuss an alternative route which would avoid the Mill Creek Springs Natural Area Preserve.
IND684-7	The visual analysis of the ANST has been revised in the final EIS.
IND684-8	See the response to comment FA15-5 regarding forest impacts.

INDIVIDUALS IND685 – January Handl

20161221-5191 FERC PDF (Unofficial) 12/21/2016 12:12:22 PM January Handl, Guerneville, CA. Hello, As a concerned citizen of the US and the world, I think the time for IND685-1 fossil fuel extraction, transportation, refining and use must be on the wane, for the sake of the planet. Science and experience is showing us this is no longer sustainable for the planet. literally every pipeline winds up leaking and the planet cannot hold any more poison. We need you to protect our people, living things, and planet by refusing ANY projects that pprovde at heart to our collective well-being. If however, there are projects providing infracstruct for water, or veal energies of wind, solar, gel-thermal or wave, I will raise my voice in support. Its time we turn away from what is no longer working. Please also ensure that any projects have thorough and non-political or commercial slants to the important/r and rigourous studies about impact, not just on the land and water, but in the communities right's to selfdetermination and well-being. Thank you for your consideration, A concerned citiizen January Handl

IND685-1

FERC-regulated buried welded steel transportation pipeline rarely leak. Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1 regarding renewable energy.

INDIVIDUALS IND686 – Rachel Rugh

20161223	1-5201 FERC PDF (Unofficial) 12/21/2016 12:23:30 PM]	
	Rachel Rugh, Blacksburg, VA. To Whom It May Concern,		
IND686-1	I am writing to voice my strong opposition to the proposed Mountain Valley Pipeline. The Federal Energy Regulatory Commission has recently released the Draft Environmental Impact Statement (DEIS) for this project, and a number of alarming facts have come to light. More research is needed to address the following pressing issues: 1) Regarding Groundwater: Private and domestic drinking water wells	IND686-1	See the response to comment IND401-5 regarding information pending about water wells.
IND686-2	within the pipeline route have not yet been identified. FERC cannot determine the impact of blasting on water wells without this information. All water wells within the impact zone must be identified in the DEIS.2) Regarding Aquatic Resources: The DEIS does not adequately assess impacts of construction on aquatic life. MVP has not submitted the results of their analysis on sedimentation and turbidity from wet crossing methods. This information must be included in the DEIS.	IND686-2	A revised discussion of sedimentation and turbidity can be found in section 4.3 of the final EIS. If Mountain Valley crosses all waterbodies using dry techniques, there would be a low potential for downstream sedimentation and turbidity
IND686-3	 3) Regarding Geologic Hazards: The DEIS identifies 94 karst features, or caves, to be crossed by MVP. FERC has requested route variations to avoid some of these features. A study to determine interconnection between karst and water resources has not been completed. FERC must require a final route that avoids all karst features. In conclusion, the DEIS for the MVP project has significant and troubling 	IND686-3	Section 4.1 of the EIS has been revised to provide additional details regarding karst features in the project area. Section 3 discusses alternatives to reduce impact on the Mount Tabor Sinkhole Plain.
IND686-4	gaps in information that must be addressed. The health and wellbeing of the people of this region, as well as its robust tourism industry, will experience significant adverse affects if the MVP's construction moves forward as planned. I passionately urge the FERC to consider alternates to the current proposed MVP that mitigate damage to the humans, wildlife and economy of Virginia and West Virginia. Thank you for your time and consideration,	IND686-4	Tourism is addressed in section 4.9 of the EIS.
	Rachel Rugh rachelgrugh@gmail.com 828.273.5937		

INDIVIDUALS

IND687 – Dainez

20161221-5214 FERC PDF (Unofficial) 12/21/2016 12:36:41 PM		
Dianez, Silver Spring, MD. I vehemently object to this pipeline. The threat of water pollution from fracking and oil spills into the water stream threaten the local population and all visitors on the Appalachian trail. Pipelines are superfluous at this point and oil prices are low. To jeopardize the ability for families to enjoy the mountains and nature threatens the physical and mental health of thousands of Americans that visit each year. Going outside increases physical well-being because of exercising	IND687-1	See the response to comment IND2-3 regarding hydraulic fracturing. The proposed pipelines would transport natural gas, not oil.
<pre>and mental health because Americans learn outdoors skills, and reduce stress. These projects need to stop. They do not create an abundant number of jobs, due to automation, and they are put in places the disturb the wild life of the ecosystem. The local flora, fauna and animals ingest these dangerous chemicals which we eat. Do not let the Appalachian trial go the way of the gulf coast and other areas ravaged by oil spill and chemical spills. No money can buy the Appalachian mountains and trails.</pre>	IND687-2	See the response to comment IND270-1 regarding wildlife. See the response to comment IND277-11 regarding chemicals.
IND687-3 No company can fully repair the damage from fracking. The number of earthquakes increase significantly from fracking. People do not want pipelines. No Dakota Pipeline, No Keystone XL Pipeline and no Mountain Valley Pipeline. Americans are tired of being prayed upon and taken advantage of for money. These companies need to evolve and work on clean	IND687-3	See the response to comment IND2-3 regarding hydraulic fracturing.
energy projects.		
	J	

INDIVIDUALS IND688 – Martin Russell

20161221-5219 FERC PDF (Unofficial) 12/21/2016 12:43:45 PM Martin Trussell, Roanoke, VA. Kimberly Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426 Re: FERC Docket Nos: CP16-10-000 and CP16-13-000. Dear Ms. Bose, I am a resident of Roanoke, VA, and I am writing to comment on the IND688-1 proposed Mountain Valley Pipeline seeking to construct a 42-inch diameter pipeline that would transmit natural gas at high pressure through the Virginia mountains. The source of the gas would be hydraulic fracturing wells in the Appalachian Basin. I understand that FERC needs to approve of the project for it to proceed. I am requesting that FERC deny the request to build this pipeline. Such a project will bring little if any economic value to the region. However, there are major downsides. For example, Montgomery County, VA, observed that the pipeline would travel more than 19 miles through that county, "razing 191.3 acres of forest - 68.4 acres permanently - and irreparably scarring the viewshed, destabilizing (through blasting of shallow bedrock, among other things) treacherous karst-ridden terrain already susceptible to landslides and seismic activity, and forever encumbering numerous parcels of private property with unnecessary infrastructure that will be abandoned in 20 years." There is also the issue of FERC's own flawed environmental impact IND688-2 statement, that suggested that the construction and operation of the pipeline "would result in limited adverse environmental impacts, with the exception of impacts to forest." I believe that the impact to the forest would be quite significant, as described above. Furthermore, this report was issued before Mountain Valley proposed several route revisions before field surveys were complete and before the pipeline company responded to numerous requests for more information from FERC, the U.S. Forest Service and others. Finally, it should be noted that MVP is in the process of getting a IND688-3 Certificate of Public Convenience and Necessity from FERC which would allow MVP to go on people's private property to survey and then to install this 42-inch pipeline without the property owner's permission. Eminent domain defines that no private property may be taken without the owner's consent when the primary purpose of the taking is economic development that will ultimately result in ownership or control of the property transferring to another private entity. It was reported in a West Virginia Supreme Court decision that denied MVP the access to private property without the owner's consent that up to 95 percent of the gas that will be shipped through MVP's pipeline will be owned and produced by MVP's affiliated companies. This is "crony

See the response to comment IND281-2 regarding jobs and tax revenue for Virginia. The EIS provides a discussion of forest impacts in section 4.4, visual impacts in section 4.8, and karst, blasting, landslides, and seismic activity in section 4.1.

IND688-2

IND688-1

The EIS stated, "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, we conclude that the projects would have significant impacts on forest."

IND688-3 See the response to comment IND1-3 regarding eminent domain.

INDIVIDUALS IND688 – Martin Russell

2016122	1-5219 FERC PDF (Unofficial) 12/21/2016 12:43:45 PM
IND688-3 cont'd	capitalism" writ large. No wonder the only parties that seem to be in favor of the project are those who have ties with this company.
	Please honor this request to deny approval for this project.
	Thank you,
	Martin Trussell

INDIVIDUALS IND689 – Traci York

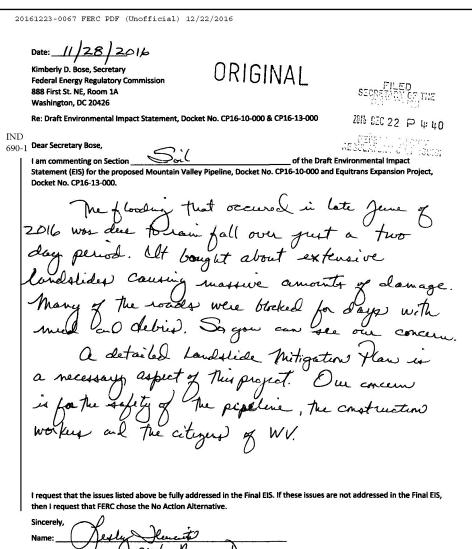
20161223	-5220 FERC PDF (Unofficial) 12/21/2016 12:44:28 PM	
IND689-1	Traci York, Coupeville, WA. I am deeply concerned about this pipeline proposal as well as the many that are in progress or in planning stages across the US and Canada. Instead of investing in cleaner energy, ie: roof-top solar, we're marching on with dirty, older technologies to fuel our economy moving forward when the consequences are clear. This project does nothing to mitigate Climate Change or our continuing onslaught and destruction of our environment.	
	We cannot continue in our old ways/habits in an effort to drive the economy machine. Our governments, federal, state and local must work in the interests of citizens, not corporate America, to find solutions to our energy problem.	
IND689-2	Environmental impacts are of concern. The construction process involves heavy truck traffic, clear-cutting, and crossing and tunneling beneath waterways, which leads to sedimentation and stream disturbances. Both the MVP and ACP would also traverse fragile karst topography, a porous limestone bedrock that amplifies the risk that groundwater would be affected.	
	The risk of groundwater contamination is an absolute deal breaker.	
	Please stop this dangerous pipeline. Invest in Solar Now!	

IND689-1 Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1 regarding renewable energy. Climate change is addressed in sections 4.11 and 4.13 of the EIS.

IND689-2

See the response to comment IND3-1 regarding drinking water. The EIS provides a discussion of karst in section 4.1; and cumulative impacts in section 4.13. A revised discussion of sedimentation and turbidity can be found in section 4.3 of the final EIS and in the response to comment FA11-15. Since Mountain Valley would cross all waterbodies using dry techniques, there would be a low potential for downstream sedimentation and turbidity. Traffic is addressed in section 4.9; and tree clearing in section 4.4.

IND690 – Lesley

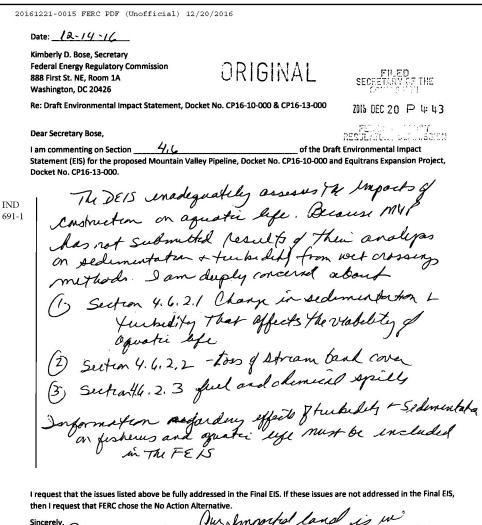


270 Address: WV engela City & State: 2490 Zip Code:

IND690-1

A revised discussion of flash flooding is provided in section 4.3.2 of the final EIS. See the response to IND177-1 regarding landslides and Mountain Valley's revised *Landslide Mitigation Plan*.

INDIVIDUALS IND691 – Peggy Burkhardt



then I request that FERC chose the NO Action Alternative. Sincerely, Ow Importal land is w Name: Placy Burthault Summus County Address: 1007 Orubox Dr City & State: Beckly, W Zip Code: 15801 IND691-1

A revised discussion of sedimentation and turbidity can be found in section 4.3 of the final EIS and in the response to comment FA11-15. Since Mountain Valley would cross all waterbodies using dry techniques, there would be a low potential for downstream sedimentation and turbidity. See the response to comment CO14-3 regarding spills. Loss of stream bank cover, including temperature changes, is discussed in section 4.6.2 of the EIS.

INDIVIDUALS IND692 – Peggy Burkhardt

20161221-0016 FERC PDF (Unofficial) 12/20/2016 Date: 12-14-16 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission ORIGINAL 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 2016 DEC 20 P 4: 42 Dear Secretary Bose, of the Draft Environmental Impact I am commenting on Section Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. This section addresses water of The DErS. 9 an concerned about impact on my and surrounding properties in Summus douty in O Section 4.3.4 - contamination of groundwater (2) Section 4.3.1.1 Contamination of spring forces water #3. IND692-1 There is no way to quarantee that leakage or damage to pipeline will not occur, Without such guarantee FERC must Choose the no action alternation

I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative.

Sincerely an Buckhard Name 1004 ANI Lost Dr Address City & State: _Bullin , WV Zip Code:

IND692-1

See the response to comment IND3-1 regarding drinking water. See the response to comment IND92-1 regarding leaks.

INDIVIDUALS IND693 – Peggy Burkhardt

20161221-0017 FERC PDF (Unofficial) 12/20/2016 Date: 12-14-16 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission ORIGINAL 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 2016 DEC 20 P 4: 42 Dear Secretary Bose, I am commenting on Section of the Draft Environmental Impact Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. Under this section & UNdhip of the DECS I am deeply concerned about the impact of MUP on mineard surounders property IND 693-1 () Section 4. 3. 2.3 - Noise import on wild life (2) Sector 4.5.2.4 - Light impact on weldlige + resupta (3) Sector (3) 4.5.2.6 - import on migratory birds The MUP will have long term impact on all wild by in its path and this impact has not been sufficiently addressed in the DETS. FERC must require this information be included in the DETS

I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative.

Den impacted land is in Jummers Counky Sincerely Fear Bullardt Name: Address: 1007 Ovulood Dr City & State: Beckly UN 2582 Zip Code:

IND693-1

See the response to comment IND270-1 regarding wildlife. We disagree that these impacts were not adequately addressed in the EIS.

INDIVIDUALS IND694 – Dean Woodall

20161221-0019 FERC PDF (Unofficial) 12/20/2016		
Dec. 15 2016		
Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426 Re: CP16-10-000 and CP16-13-000 Dear Ms Bose: CRIGIIAL		
IND694-1 I strongly oppose the application for a Special Use Permit to cross the Jefferson National Forest and the requests for amendments to the Forest Plan. I believe the Bureau of Land Management (BLM) and the Forest Service must reject these proposals, and I urge you to do so as well.	IND694-1	See the response to comment IND681-3 regarding high hazard areas.
The DEIS must be revised to include analysis of impacts and the ability of the applicant to avoid or mitigate resource damages in what the Forest Service has designated High Hazard areas. The combined risks of high landslide potentials, highly erodible soils, very steep slopes, sensitive species and habitats, and other factors calls into question whether the MVP can be built at all in a way that protects public resources.		
D694-2 Advocates for the wilderness as well as area residents have documented the existence of springs and wells around the MVP route in the Peters Mountain area that were not discovered or disclosed in the DEIS. These omissions are serious breaches of FERC's duty to identify and assess the environmental impacts of the project. In addition, they call into question the applicant and FERC's overall effort to find and protect water sources that could be affected by the pipeline.	IND694-2	See the response to comment IND401-5 regarding pending water wells.
The DEIS makes no attempt to assess the impacts of this proposed pipeline on the Appalachian Trail in context with other pipelines and projects that would damage the AT's character and value. This failure violates FERC's duty to perform an adequate cumulative impacts analysis under NEPA.	IND694-3	Section 4.13 of the EIS provides a discussion of cumulative impacts to the ANST.
ID694-4 Finally, a report by Synapse Energy Economics concluded : "Additional interstate natural gas pipelines, like the Atlantic Coast and Mountain Valley projects, are NOT NEEDED to keep the lights on, homes and businesses heated, and existing and new industrial facilities in production."Therefore I urge you again to reject this application for a Special use Permit.	IND694-4	See the response to comment FA11-12 regarding need.
Diana Woodall, PO Box 322 Dayton VA 22821		
Dann Uno duce		

INDIVIDUALS IND695 – Anne L. Henley

20161	1221-0018 FERC PDF (Unofficial) 12/20/2016	
	Ms. Kimberty D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426	101110
	re: project docket no. CP16-10-000 or CP16-13-000 U 🔿	
	December 13th, 2016	2016 DEC 20 P 14 11
IND 695-1	I most emphatically oppose the application for a Special Use Permit to cross the Jeffer to the Forest Plan. I implore you to require that the Bureau of Land Management (BLM) and the Forest Service firmly reject these proposals.	son National Forest and the requests for amendments
IND 695-2	First of all, the applicant and FERC have failed to show that there is no reasonable alta assertion that it is their <i>preferred</i> option is insufficient not only legally, for its distortion violation of environmental and cultural imperatives.	
IND 695-3	Despite decades of verified research proving the perils of massive disturbance, the wil alarming rate. Together with roads and the virtually inevitable development that follo the process of their implementation and management: they threaten forest ecosystems degrading water quality, changing hydrologic cycles, promoting invasion of harmful non-native species, and eradicating other forms of forest habitat.	ws, such pipelines will incur indelible destruction in
	The MVP will cause irrevocable damage to the region, incapacitate the ecosystems the and thereby dissipate us ALL; it is not possible to "mitigate" the massive damages to s drainage, wildlife habitat, and the virtual annihilation of countless indigenous species biosphere that gives us life. Nature can <i>not</i> survive on a "pacemaker," installation of t suicide for us humans, and to murder of the innocent species who suffer for our actions.	ioils, (not to mention human inhabitants) who support the
IND 695-4	The Draft EIS omits key information; distorts its findings and conclusions; and fails to repercussions of these actions. As just one example, the DEIS neither discovered nor around the MVP route in the Peters Mountain area. The impacts on these and other he environmental systems, are scantily inventoried, much less afforded the consideration breaches of FERC's duty to identify and assess the environmental impacts of the proje applicant and FERC's overall effort to identify and protect water sources that could be FERC's duty to perform an adequate cumulative impacts analysis under NEPA.	disclosed the presence of existing springs and wells adwater streams, the <i>lifeblood</i> of the area's they deserve. These omissions alone are serious sci. Moreover, they undermine the credibility of the
IND 695-5	Setting aside for a moment the massive environmental hemorrhage that would be set i concert with pre-existing pipelines and municipal projects, would further compromise Trail. Construction damage along the outskirts of the Peters Mountain and Brush Mov people there to immerse themselves in these increasingly rare and endangered wildern dependence on Wilderness, but aside from its ecological necessity, knowledge of its p in countess, anecdotal but largely underestimated ways. Shall we then cut out our he the machinery that is killing us?	our most beloved regional treasure, the Appalachian intain East areas would descerate views that draw ess areas. Many people take for granted humans resence supports our individual and collective psyche
IND 695-6	Instead of tying ourselves to the mast of this rapidly sinking ship, isn't it time for us to profitable) energy alternatives that have for decades been ready and waiting for us to a	
	I hope you will think carefully before leaping into this deadly chasm; avoid the inevita contributed to destruction; and choose instead to fly. Choose LIFE.	able remorse that will come from knowing you
	Yours sincerely,	
	Anne L. Henley Oxne L. Heally	
	Keswick, VA	
	PS I have tried in vain to post this onlinea cumbersome process that has consumed a to the correct channels. Below is the downloaded list of others who apparently need to	

IND695-1	Comments noted.
IND695-2	Alternative crossings of the Jefferson National Forest can be found in section 3.5 of the EIS. Given the start and end points of the MVP, crossing NFS lands cannot be avoided.
IND695-3	The EIS provides a discussion of water resources in section 4.3, invasive species in section 4.4, wildlife in section 4.5, and forest impacts in section 4.4.
IND695-4	See the response to comment IND401-5 regarding pending information about water wells.
IND695-5	A revised visual analysis of the ANST can be found in section 4.8 of the final EIS.
IND695-6	Renewable energy alternatives are discussed in section 3 of the EIS. See also the response to comment IND40-1 regarding renewable energy.

IND696 – Josh Lipton

20161221-0020 EFC PDF (Unofficial) 12/20/2016 Date: 12/10/10	
Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426	
Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000	
Dear Secretary Bose, 1 am commenting on Section <u>4.3.2</u> of the Draft Environmental Impact Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. IND <i>I</i> have great concern about how [ND <i>G</i> 96-1 <i>mup plans</i> to make rike crossings. There <i>I ess disruptive methods from The oppon-cut</i> <i>Net cross method. Mup most be required</i> <i>Wet cross is method. Mup most be required</i> <i>to minimise impacts to nivers and</i> <i>streams. Orderivant supplemental EIS are</i> <i>Reduct to determine least mpact.</i>	
ORIGINAL	
I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely, Name: <u>PoBox 194</u> City & State: <u>Frimule Final WV</u> Zip Code: <u>24938</u>	

IND696-1

There would be no open-cut wet waterbody crossings.

IND697 – Debbie Naeter

Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-00 Docket No. CP16-13-000.	Draft Environmental Impact 10 and Equitrans Expansion Project,
IND 697-1 important to this state for the beauty + natural A on concerned about to pepelere construction	ng ave most Tooriests come activities ' the effects of
	RIGINAL
I request that the issues listed above be fully addressed in the Final EIS. If these is then I request that FERC chose the No Action Alternative. Sincerely, Name: <u>Pelluie</u> <u>Nace Acc</u> Address: <u>375 Helloat A</u> <u>Pass</u> City & State: <u>Provide Acc</u> <u>WV</u> Zip Code: <u>24938</u>	Sues are not addressed in the Final EIS, SECRETARY OF THE CONTACTORY OF THE FEDERAL LATIONY OF THE FEDERAL LATIONY OF HESTON

IND697-1

Impacts on aquatic resources are discussed in section 4.6 of the EIS.

IND698 – Debbie Naeter

20161221 /2014 (PERC PDF (Unofficial) 12/20/2016 Date:	
Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426	
Re: Draft Environmental Impact Statement, Docket No. CP16-10-0	D0 & CP16-13-000
Dear Secretary Bose, Jam commenting on Section <u>4.32</u> Statement (EIS) for the proposed Mountain Valley Pipeline, Docker Docket No. CP16-13-000.	t No. CP16-10-000 and Equitrans Expansion Project,
1) Pan noust couce 8-1 Crassings of renews, FE additional analyses of methods + know the life, poelution at an would be difficult to	RC mest require these crossing migrate a aquiater
would be difficult to	motigate
	ORIGINAL
I request that the issues listed above be fully addressed in the Fina the rina the rina the rina the request that FERC chose the No Action Alternative.	I EIS. If these issues are not addressed in the Final EIS,
Sincerely, Name: <u>Deblice Marter</u> Address: <u>375 Héllocite</u> Pasa	SECRET SECRET 2016 DEC RECULATOR
City & State: Transford WV Zip Code: 24938	нсер Скуретие 20 Р и: 51 20 Р и: 51 20 Ланание 20 Ланание
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IND698-1

Crossings of waterbodies are discussed in sections 2 and 4.3 of the EIS. Impacts on aquatic resources are addressed in section 4.6. Air pollution is discussed in section 4.11.

INDIVIDUALS IND699 – Carol Brighton

20161221-5240 FERC PDF (Unofficial) 12/21/2016 1:09:32 PM Carol Brighton, Virginia Beach, VA. IND699-1 I am concerned about the proposed Mountain Valley Pipeline. This project would negatively impact pristine ecosystems that should be protected from such harm. In addition to damage to the natural environment caused by IND699-2 clearing for the pipeline, viewscapes enjoyed by Appalachian trail hikers would be irreparably scarred. In addition, the landscape subject to | tremors and sinkholes is unsuitable for such infrastructure increasing IND699-3 the risk of an accident and much greater environmental damage. The environmental costs of this project do not outweigh the public benefit of access to cheap energy. Please do not approve the Mountain Valle Pipeline project. Thanks for your attention, Carol Brighton Virginia Resident

IND699-1	We conclude that with mitigation, the project is not likely to have significant impacts on most environmental resources (except forest).
IND699-2	A revised visual analysis of the ANST can be found in section 4.8 of the final EIS.
IND699-3	The EIS provides a discussion of seismic activity and sinkholes in section 4.1.

IND700 – Debbie Naeter

20161221 00 20 20 20 20 20 20 20 20 20 20 20 20	of the Draft Environmental Impact -10-000 and Equitrans Expansion Project,
	ORIGINAL
I request that the issues listed above be fully addressed in the Final EIS. If th then I request that FERC chose the No Action Alternative. Sincerely, Name:	SEC REGUL

IND700-1

See the response to comment LA15-14 regarding water wells and blasting.

IND701 – Debbie Naeter

IND701-1

See the response to comment IND209-1 regarding the permanent fill of wetlands.

20161221-5250 FERC PDF (Unofficial) 12/21/2016 1:39:42 PM Maury W Johnson, Greenville, WV. IND Please download the following Document and make it part of the FERC Record for CP16-10-0000. https://pubs.usgs.gov/pp/1355/report.pdf THE GILES COUNTY, VIRGINIA, SEISMIC ZONE SEISMOLOGICAL RESULTS AND GEOLOGICAL INTERPRETATIONS

IND702-1 The report referenced by the commentor is in FERC's eLibarary and has been reviewed by FERC staff. Seismic issues are addressed in section 4.1 of the EIS.

IND703 – Debbie Naeter

201612217 2016 PDF (Unofficial) 12/20/2016 Date: PDF (Unofficial) 12/20/2016 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-00	00 & CP15-13-000
Dear Secretary Bose, 1 am commenting on Section <u>4.2</u> Statement (EIS) for the proposed Mountain Valley Pipeline, Docket Docket No. CP16-13-000. IND 703-1 <u>38%</u> of the road to landolide. Anyone flooding rate of the road flooding rate of the road mittigateon may not the mittigateon plan of 7	of the Draft Environmental Impact t No. CP16-10-000 and Equitrans Expansion Project,
	ORIGINAL
I request that the issues listed above be fully addressed in the Fina then I request that FERC chose the No Action Alternative. Sincerely, Name: Delive Nasler Address: <u>375 Hillstole Papa</u> City & State: <u>Troc. Je Jord</u> W V Zip Code: <u>24938</u>	al EIS. If these issues are not addressed in the Final EIS,

IND703-1

See the response to IND177-1 regarding landslides and Mountain Valley's revised *Landslide Mitigation Plan*.

INDIVIDUALS IND704 – Lauren Wadsworth

20161221-0026 FERC PDF (Unofficial) 12/20/2016 Date: Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 Dear Secretary Bose, I am commenting on Section 4, 6 of the Draft Environmental Impact Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. The PEIS about the MVP does not adequately 252555 impacts on aquatic life from the construction process, much less the impacts of a potential explosion. The MVP has use submitted the results of their analysis on sedimentation & turbidity from Wet crossing methods. FERC is not able to drow conclusions regarding the effects of turbidity & redimentation on fishenes & aquatic life. This information Mus be included in the FEIS. IND 704-1 -nelfablal I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely, 2015 CLC 20 (2) (+ 51 Lauren Wadsworth Name: Address: 309 19 Are City & State: Lewisburg, W. Zip Code: 24901

IND704-1

A revised discussion of sedimentation and turbidity can be found in section 4.3 of the final EIS and in the response to comment FA11-15. Since Mountain Valley would cross all waterbodies using dry techniques, there would be a low potential for downstream sedimentation and turbidity. Safety is addressed in section 4.12 of the EIS.

IND705 – Debbie Naeter

20161221-0027 FERC PDF (Unofficial) 12/20/2016 Date: Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 Dear Secretary Bose, 4 I am commenting on Section of the Draft Environmental Impact Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. FER (must essue a supplemental ES which the fenal voute and study results before concluding this well not impact konst gealogy. many coves and konst features are crossed. IND 705-1 di Kanal I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely, Name: 2 4 ct 03 51 42 375 Helpid Pass Address: City & State: Frankhard WV 9 24 Zip Code:

IND705-1 The proposed route is analyzed in the final EIS. We would not supplement the draft EIS, but the final EIS addresses comments on the draft and new information filed after the draft was issued.

Karst is addressed in section 4.1 of the EIS.

INDIVIDUALS IND706 – Jennifer McGuire

Demnifer McGuire, Blacksburg, VA.IND706-1I am a resident of Appalachia, and a hikor of the Appalachian Trail (AT), and I am deeply concerned about the Montain Valley Pipeline. The proposed pipeline would marr the spectacular views and peaceful solitude the AP provides. The natural bacuty and resources that the area is rich in provide ecoromic benefits to the area, which will be diminished with an ugly pipeline. Additionally, the area is unstable karst in a seismic zons. This instability raises the risk of a pipeline water resources that serve the people of Appalachia and the wildlies unrounding us. In the name caves embedded in the nontrains, contless unique species live. These could easily cease to exist if construction disturbs their cavern habitats or if a pipeline spill seeps into the caves.IND706-2IND706-2The EIS provides a discussion of karst and seismic activity section 4.1 and water resources in section 4.3.			_	
For those reasons, and our National Parks and icons that FERC has a responsibility to protect, I hope you will consider not routing the pipeline through our irreplaceable mountains. Thank you for your consideration, Jenn McGuire	20161223 IND706-1	I am a resident of Appalachia, and a hikor of the Appalachian Trail (AT), and I am deeply concerned about the Mountain Valley Pipeline. The proposed pipeline would marr the spectacular views and peaceful solitude the AT provides. The natural beauty and resources that the area is rich in provide ecoromic benefits to the area, which will be diminished with an ugly pipeline. Additionally, the area, which will be diminished with an ugly pipeline. Additionally, the area is unstable karst in a seismic zone. This instability raises the risk of a pipeline to water resources that serve the people of Appalachia and the wildlife surrounding us. In the many caves embedded in the nouttains, countless unique species live. These could easily cease to exist if construction disturbs their cavern habitats or if a pipeline spill seeps into the caves. For these reasons, and our National Parks and icons that FERC has a responsibility to protect. I hope you will consider not routing the pipeline through our irreplaceable mountains. Thank you for your consideration,		The EIS provides a discussion of karst and seismic activity in

20161221-5356 FERC PDF (Unofficial) 12/21/2016 3:25:16 PM

COMMENTS OF INTERVENOR AND IMPACTED LANDOWNER BETTY JANE CLINE ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (FERC DOCKET NOS.: CP16-10-000 and CP16-13-000)

I. INTRODUCTION

IND707-1

Mrs. Betty Jane Cline ("Mrs. Cline") is the owner of approximately 100 acres of property in Forward Township, Allegheny County, Pennsylvania (the "Property") which may potentially be needlessly impacted by the H-318 Equitrans, LP ("Equitrans") Pipeline Project (notably, one of the proposed pathways for the II-318 pipeline crosses over an already encumbered and environmentally fragile area of the Property). Mrs. Cline has timely intervened in this matter and has previously filed two separate sets of comments setting forth detailed objections to the potential placement of the H-318 pipeline over a portion of her Property. These previous comments are hereby incorporated herein.

As a preliminary matter, Mrs. Cline reiterates her position that the preferred choice of locating the H-318 pipeline over a portion of the Property creates significant — and perhaps insurmountable —geological and legal challenges. Notably, any routing of the H-318 pipeline through an already encumbered and environmentally fragile area of the Property constitutes an unnecessary taking of private property given that Equitrans has already secured the necessary property rights to locate the H-318 pipeline from willing landowners who have been duly compensated by Equitrans through privately negotiated agreements. Specifically, Sunoco Pipeline, L.P. ("Sunoco") has condemned the portion of the Property which Equitrans proposes to use for the construction of the H-318 pipeline (the area being condemned is referred to herein as the "Mariner East Easement"). As a result of this condemnation and a subsequent agreement reached with Mrs. Cline, Sunoco has constructed one pipeline on the Mariner East Easement have been challenging to say the least and have resulted in destabilized slopes, excessive runoff and Sunoco's unanticipated discovery (and subsequent illegal removal) of coal.

Mrs. Cline notes that pursuant to the Mariner East Easement Agreement, neither she nor Sunoco can provide Equitrans with any right to conduct construction activities within the Mariner East Easement. Furthermore, any additional construction by a third-party within the Mariner East Easement will disturb an already fragile environment and raise a number of questions regarding whose responsibility it is to address environment and raise a number of questions regarding whose responsibility it is to address environmental issues associated with the construction. For example, among other potential problems is the potential issue of which party – Sunoco or Equitrans – will be responsible for the likely adverse impacts associated with the channeling of water over the face of a non-active mine leading to excessive trenching and washing of mine residue toward Kelly's Run Creek. Should Equitrans be allowed to move forward with the project on the Property, there is also the issue of which party – Sunoco or Equitrans – will be responsible in the event the hillside erodes, destabilizes Rippel Road, blocks Raecoon Run Road and/or results in violations of the Clean Streams Law when debris is pushed into Kelly's Run Creek. In light of the extremely viable alternatives – including the Cline Minor Route Variation Route – which create less environmental impact and prevent Mrs. Cline from being drawn into potentially unnecessary legal battles, Mrs. Cline strongly believes that IND707-1

Section 3.5.3 has been revised in this final EIS to provide updated information regarding the Cline Minor Route Variation.

20161221-5356 FERC PDF (Unofficial) 12/21/2016 3:25:16 PM Equitrans should not be allowed to route the H-318 pipeline over her Property as described in the IND707-1 Draft Environmental Impact Statement. In addition to this concern, Mrs. Cline has several cont'd concerns with the information presented in the Draft Environmental Impact Statement. В. SPECIFIC COMMENTS TO THE DRAFT ENVIRONMENTAL IMPACT STUDY As a preliminary matter, Mrs. Cline notes that an application should not be considered IND707-2 complete and ready for review until ALL information has been received by the Federal Energy Regulatory Commission and made available in its entirety to interested parties. It should not be deemed acceptable for requested information to be answered - such as Equitrans has done here with a simple proposal that the information will be responded to "at a later date" while the clock on the public comment period continues to "tick." In this case, the Draft Environmental Impact Statement was prepared before all required information was received from Equitrans and although partial supplemental information was submitted by Equitrans subsequent to the publication of the Draft Environmental Impact Statement, Equitrans only declared the intent to respond to the feasibility of the Cline Minor Modification (as proposed by the Federal Environmental Regulatory Commission) by December 22, 2016 (the end of the comment period). Hence Mrs. Cline is unable to respond to any comments which Equitrans offers on the Cline Minor Route Variation before the comment deadline and therefore expressly reserves the right to file Supplemental Comments to the Draft Environmental Impact Statement after the comment deadline should she deem it necessary. In the alternative, due to the technical nature of the supplemental information which Equitrans will presumably provide on the Cline Minor Route Variation, the time remaining in the public comment period must be extended for a full fourteen days beginning on the first day that ALL information (including Equitrans' position on the Cline Minor Route Variation) is available to the public. 1.0 Project Impacts and Mitigation (Page ES-3) IND707-3 Mrs. Cline notes that supplemental survey results regarding endangered species were not received in time for inclusion and evaluation in the Draft Environmental Impact Statement. These survey results - which were not provided with enough time for full evaluation by the Federal Energy Regulatory Commission demonstrate that EQT has not given any serious consideration to the potential impact which the H-318 pipeline project may have on endangered species. Notably, in comments received from Equitrans (which were posted to the Docket on November 1, 2016), a growth of Nodding Rattlesnake Root was located in the impact corridor on the Property. This plant is currently listed as endangered under Pennsylvania law. 17 Pa. Code 45.12. Any proposed plan for relocating/replanting this fragile and endangered plant cannot ensure the survival

Inder Feinsylvana law, 17 Fa Cole 45.12. Any proposed plan for relocating/replanting this fragile and endangered plant cannot ensure the survival of the plant during relocation, and disturbance and/or relocation cannot be undertaken without the consent of the plant owner/land owner. Equitrans has yet to formally notify Mrs. Cline that endangered species are located on her Property and has not approached Mrs. Cline to discuss ways to preserve and protect the same. In addition, the extensive due diligence conducted by Sunoco (in anticipation of the above-referenced placement of the Mariner East Pipelines on the Property) revealed other rare species wildflowers on the Property. These IND707-2

The statements regarding Equitrans' filings and the comment period are noted.

IND707-3 Section 4.7 has been revised to address nodding rattlesnake root.

Individual Comments

20161221-5356 FERC PDF (Unofficial) 12/21/2016 3:25:16 PM species would not exist if not for the protection of the habitat that fosters them. IND707-3 This protection will not be possible if Equitrans is allowed to clear cut pathways cont'd through the mature forest lands on the sloped area of the Property adjacent to Kelly's Run. In short, Equitrans has failed to undertake the due diligence necessary to identify, protect and avoid the endangered and threatened species on the Property. Incomplete Field Surveys (Page ES-5) 2. The Draft Environmental Impact indicates that Equitrans has yet to complete IND707-4 "field surveys to identify water wells and springs within 150 feet of construction workspaces (500 feet in karst terrain) . . . " Mrs. Cline once again reiterates that there are prolific springs located in the vicinity of the H-318 pipeline project which directly impact several families (Sawyers, Detwiler, Cline and Prentice). Contrary to the suggestions made by Equitrans and despite self-identification of the existence of springs supplying these landowners. Equitrans has made no effort to identify the existence of the springs for purposes of inclusion in the Draft Environmental Impact Statement. These vital springs, and protections for the same, should not be ignored for purposes of environmental impact discussion and mitigation. 3. Impact on Interior Forests (Page ES-6) In the last full paragraph on Page ES-6, Equitrans states that: "Construction of IND707-5 the EEP H-318 pipeline in Pennsylvania would affect one tract of interior forest of about 50 acres." Equitrans has not provided requested maps and/or coordinates to support this contention despite being requested to do so by Mrs. Cline on multiple occasions: therefore, based upon the extremely limited information available, Mrs. Cline can only surmise what specific activities Equitrans intends to undertake which impact interior forest land. Based upon the limited information available, it appears that Equitrans proposes to clear-cut a 100 ft. wide path of mature trees (including an area zoned "Conservation") for a permanent right of way and temporary workspace. The limited information provided to Mrs. Cline also indicates that Equitrans intends to use the surface of the Mariner East Easement for temporary work space. This area has been prone to landslides and is subject to ongoing negotiation between Mrs. Cline and Sunoco regarding erosion and drainage. Moreover, as discussed in detail above, the legally-binding Easement Agreement prohibits Sunoco and Mrs. Cline from granting any third- party (such as Equitrans) use of the easement for any purpose other than construction and maintenance of the Mariner East pipelines. The Draft Environmental Impact Statement fails to take into account the existence of the Mariner East Easement Agreement (notably the fact that neither Mrs. Cline nor Sunoco can legally allow Equitrans to utilize the Mariner East Easement for any purpose (including but not limited to work on the H-318 pipeline).

IND707-4

Comments noted. As stated in section 4.3 of the EIS, Equitrans has not yet identified all water supply wells due in part to lack of access. We have included a recommendation that Equitrans file this information prior to construction.

IND707-5 The interior forest discussion in section 4.4 of the EIS has been revised.

20161221-5356 FERC PDF (Unofficial) 12/21/2016 3:25:16 PM Cline Minor Route Variation Map (Page 3-87) 4. Equitrans incorrectly concludes that the Cline Minor Route Variation is IND707-6 Section 3.5.3 has been revised in this final EIS to provide IND707-6 problematic because of steep topography, vertical rock walls, and a lack of updated information regarding the Cline Minor Route Variation. suitable workspace. Mrs. Cline notes that the steep topography of property above Kelly's Run is not unique to the proposed Cline Minor Route Variation. The topography is virtually no different on the Cline Minor Route Variation than any other area where Equitrans proposes to install the H-318 pipeline. In addition, Equitrans has again ignored the significance of the Mariner East Easement. The Cline Minor Route Variation would distance the H-318 pipeline from the compromised Mariner East Easement and the potential for acid mine drainage as a result of its insufficient water-handling. In addition, use of the Cline Minor Route Variation would: (1) avoid impact to the springs affecting the Sawyers, Detwiler, Cline and Prentice families; (2) prevent the clear-cutting of Mrs. Cline's hardwood, income-producing tree crop: (3) protect the currently state-endangered wildflower species located on Mrs. Cline's property (most notably the Nodding Rattlesnake Root); (4) allow Equitrans to avoid all of the previously mined area in the proposed H-318 corridor on the Property; (5) eliminate the crossing of four closed coal mines identified in Table 4-1-1.6; and (6) cause Equitrans to avoid approximately a mile of significantly steep slopes in areas highly susceptible to landslides. Simply put, use of the Cline Minor Route Variation would shorten the length of the H-318 pipeline and significantly reduce the environmental impact of the H-318 pipeline project. 5. Bedrock Geology Crossed and Springs (Table 4.1.1-4; Page 4-51) IND707-7 Comment noted. See the response to comment IND707-4. The table indicates that the H-318 pipeline will cross the Permian and IND707-7 Pennsylvanian-aged Monongahela Group, Waynesburg Formation and Casselman Bedrock Formations. Mrs. Cline notes that the Waynesburg Formation is the source of one of the most prolific springs in the area (and hence the potential exists that Equitrans will disturb a significant water source for several families in the area including Sawyers, Detwiler, Cline and Prentice). To the extent that any of these formations would need to be removed by blasting, the damage could be irreversible. Despite having knowledge of the potential impact, Equitrans has yet to send anybody to the Property to locate the springs and/or discuss the springs with Mrs. Cline. 6. Soil Impacts (Page 4-59; Page 4-61) IND707-8 Comment noted. Section 3.5.3 has been revised in this final EIS Construction of the H-318 pipeline in the Equitrans' proposed location would IND707-8 to provide updated information regarding the New Cline Minor affect: (1) 126 acres of soils rated as being prone to erosion by water and (2) 134 Route Variation. acres of soils classified as having poor vegetation potential. While this disturbance is challenging enough, Equitrans should not be permitted to exacerbate the situation by clear-cutting trees from the steepest sloped areas of the proposed route (prone to landslides) in proximity to prolific springs that produce 4

IND707-8 cont'd	water from the crest of the slope year-round. Allowing the H-318 pipeline to be placed on areas of steep slope with perpetual water flow and over an abandoned mine with soil that has "poor revegetation potential is a recipe for disaster. At a minimum. Equitrans should be required to select a more viable route (such as the Cline Minor Route Variation) which would, if nothing else, decrease the amount of acreage adversely affected.
	7. Landscape Fragmentation (Page 4-145)
ND707-9	The extended width of clear-cut deforestation experienced to accommodate Equitrans' proposed H-318 pipeline route would remove trees from a steeply sloped area. According to the United States Geological Survey soil survey, trees are the only suitable crop for these areas as they are the only vegetation with roots deep enough to hold the soil to the slope. The proposed H-318 pipeline project will prohibit forest revegetation in the right of way, and the regeneration of trees in temporary workspaces will not occur in our lifetime. The fragmentation and, therefore, the erosion-prone area will be extended by the proposed H-318 pipeline project (notably, the poorly-conceived Mariner East Project has already led to ongoing erosion and it would be irresponsible to exacerbate this problem by widening the area prone to erosion, slippage and landslides).
	8. Forest Fragmentation (Page 4-147)
IND707-10	The proposed H-318 pipeline project would permanently convert about 22.6 acres of mostly fragmented upland forest to a maintained herbaceous right of way. Construction and operation of the II-318 pipeline in Pennsylvania would affect one tract of interior forest of about 50 acres. Typically, interior forest tracts of about 50 acres or less would be expected to contain few to no species dependent on interior forest; rather most species in a 50-acre forest tract would likely be generally tolerant of edge habitat. The forest fragmentation on the Property only occurred within the last 5 years as a result of the Mariner East Easement. The previously forested area, which appears to be permanently fragmented in a 100 foot path includes 50 feet of temporary right of way that has not been given time to regenerate. The creation of more clear-cut area designated as "temporary" would have a permanent negative impact on the adjacent mature, dense forest in this area which is habitat to species dependent on forest interior. Species considered prime hardwood trees (such as cherry and walnut) require dense, mature forest to grow. In the impacted area of the Equitrans' proposed II-318 pipeline route, there are over 100 cherry trees, many of which measure greater than 30 feet in height. This will cause significant negative impact to the forest habitat and significant economic loss to Mrs. Cline. This erop of trees will be permanently impacted and will not regenerate during our lifetime if Equitrans is permitted to locate the II-318 pipeline project within and/or adjacent to the Mariner East Easement.

5

IND707-9

Forest fragmentation is discussed in section 4.4 of the EIS.

IND707-10

Forest fragmentation is discussed in section 4.4 of the EIS.

IND707-11

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9. Farm Issues (Page 2-242)

Equitrans has failed to conduct due diligence with respect to identifying speciallyprotected farms within the proposed H-318 pipeline project corridor which will be adversely impacted. Specifically, Equitrans indicates that its proposed H-318 pipeline route will impact only a single farm enrolled in the Pennsylvania Agricultural Land Preservation Program; however, Equitrans' proposed H-318 pipeline route will actually adversely impact many more similarly-protected farms. Equitrans indicates that it will only adopt best management practices (as established by the Pennsylvania Department of Environmental Protection's Erosion and Sedimentation Pollution Control Program Manual) to reduce the negative impacts to the single preserved farm it has identified to date within the H-318 corridor. Equitrans must commit to utilizing the same best management practices for any and all specially-protected farms (i.e., farms designated as an agricultural security area or enrolled in the Pennsylvania Agricultural Land Preservation Program) which are either directly or indirectly impacted by the proposed H-318 pipeline project.

10. Potential Impact Radius (Table 4.12.1-2)

IND707-12 Table 4.12.1-2 shows the potential impact radius in feet of the Equitrans' proposed II-318 pipeline route based on calculations including the pipeline diameter, pressure and point of failure radius. This is an oversimplification and fails to include considerations for volatility of pipeline contents, topography or contributory factors that might increase potential failure impact (such as proximity to potentially three Mariner East high pressure hazardous fuel lines containing ethane (12"), propane (20") and butane (20"). In the event of catastrophic failure, it is prudent to contemplate that a potential explosion would be significant enough to compromise the other lines in the adjacent Mariner East Easement. Maps have been provided to Forward Township showing that the "Affected Area" corridor is 1,260 feet off center in each direction for the first and smallest of its three lines (12").

11. Projects Contributing to Cumulative Impacts (Figure 4.13-2)

IND707-13

"Projects Contributing to Cumulative Impacts" should not be limited to projects approved by the Federal Energy Regulatory Commission. Figure 4.13-2 fails to show the location of the Mariner East Easement which would be directly adjacent to the Equitrans' proposed II-318 pipeline route. Although other projects are discussed in the narrative that follows, the projects are not plotted on the Figure 4.13-2 to show their locations and, therefore, their cumulative impacts on the Equitrans' proposed H-318 pipeline route and the Property. IND707-11

Section 4.8 provides a discussion of agricultural lands and has been revised to include a discussion of the Pennsylvania Agricultural Land Preservation Program.

IND707-12

Comment noted. The potential impact radius is discussed in section 4.12.

IND707-13 The Mariner East project is already included on figure 4.13-2. The number in parenthesis following the project name in appendix U corresponds to the numbers listed in figure 4.13-2 (see footnote "a" of appendix U). The Mariner East project is number 017 as listed on page 3 of figure 4.13-2.

6

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III. CONCLUSION

IND707-14

14 In light of the reasons set forth above, Mrs. Cline urges the Federal Energy Regulatory Commission to fully evaluate all of the proposed environmental impacts of Equitrans' proposed H-318 pipeline route on landowners. After a full evaluation, Mrs. Cline is confident that there can be no other decision than to require Equitrans to adopt the Cline Minor Route Variation should the Federal Energy Regulatory Commission approve the pipeline project.

IND707-14

Section 3.5.3 has been revised in this final EIS to provide updated information regarding the Cline Minor Route Variation.

IND708 – John Rubel

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE. Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-00D Dear Secretary Bose, 4.1 |Fam commenting on Section _ of the Draft Environmental Impact IND Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, 708-1 Docket No. CP16-13-000. A supplemental EIS is needed before concluding that a pipeline would not harm the 94 caves. Would the route variations really solve these problems? Thanks I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely, 02.020 John Rubel Name: Pob 1087 Address: WV Lewisburg. City & State: 2490 11 Zip Code:

IND708-1

Section 4.1 of the final EIS has been revised to provide additional details regarding karst features in the project area. The FERC would not produce a supplemental draft, but the final EIS addresses comments on the draft and information filed after the draft was issued.

INDIVIDUALS IND709 – Pamela P. Humphrey

20161221-5272 FERC PDF (Unofficial) 12/21/2016 2:06:09 PM Pamela P. Humphrey, Newport, VA. 20 Dec. 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulator Commission 838 First Street, NE Washington, DC 20426 Ms. Bose and Members of the Commission IND 709-1 Subject: MVKKP C16-10-000 Draft Environmental Impact Statement Both of the following quotations are taken from DEIS page 3-78, Section 3.5.3.1. "Mountain Valley slightly modified the conceptual route we developed deviating away from the proposed route near MP 211.3 and extending southeast (placing the route about 900 feet south of the Mayapple School along Highway 42 - Blue Grass Trail " paragraph 1. "Mountain Valley noted that the Mount Olivet United Methodist Church, located about 400 feet south of the Mayapple School paragraph 2. If the route is now "900 feet south of the Mayapple School" and the Newport Mount Olivet United Methodist Church is "located 400 feet south of the Mayapple School" the new route would be 500 feet south of the church. That would have the pipeline crossing the Newport Village Green or even coing through residences on Mill Lane. No Mill Lane property owners have received any notification at any time. IF MVP intends to place the pipeline there they are out of compliance. If they don't intend to place it there they are feeding you false data. If MVP is feeding faulty data to The FERC, why isn't The FERC catching it. I find it pathetic a 73 year old woman, sitting in her living room with a football game blaring and a cup of hot tea laced with bourbon in her hand, can find these errors and The FERC can't.

> On that happy note, how can you trust any environmental monitoring data presented when MYP can't communicate accurately where they intend the pipeline to go? If they can't get it right how can their hired lackeys survey appropriate areas for endangered species, cultural artifacts or karot topography?

Pamela P. Humphrey 157 Placid Lane Newport, VA 24120 IND709-1

The draft EIS text read: "Mountain Valley noted that the Mount Olivet United Methodist Church, located about 400 feet *south of the Mayapple School Minor Route Variation*, would qualify as a High Consequence Area (HCA) (see section 4.12.1 for more detail regarding HCAs) [emphasis added]." Mountain Valley's adopted the Mayapple School Variation into its proposed route in an October 14, 2016 filing with the FERC. Section 4.1 of the final EIS has been revised to provide additional details regarding karst features in the project area.

IND710 – John Rubel

20161221-032 FIPT DEF (Unofficial) 12/20/2016 Date: 7, 2016 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 OPICE 1 Dear Secretary Bose, 4.3.2 I am commenting on Section of the Draft Environmental Impact Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Docket No. CP16-13-000. We are wonried about the Elk, Gauley, & Gueenbries Rivers, which the DEIS says would be crossed with open-cut wet crossings. This is the worst way. Please FERC must make MVP Minimize river crossing impact, Reduce the construction area to a minimum! Require construction area to a minimum! Require more analysis of river crossing methods — to reduce impacts IND 710-1 I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely, LS = c1 02 02 912 Name: John Rubel Address: POB 1087 City & State: Lawrening WV 24901 Zip Code:

IND710-1 See the response to comment FA11-15 regarding waterbody crossings.

INDIVIDUALS IND711 – Pamela P. Humphrey

20161221-5280 FERC PDF (Unofficial) 12/21/2016 2:15:41 PM Pamela P. Humphrey, Newport, VA. 20 Dec. 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulator Commission 838 First Street, NE Washington, DC 20426 Ms. Bose and Members of the Commission Subject: MVKKP C16-10-000 Draft Environmental Impact Statement IND 711-1 The following quotation is from DEIS p. 2-9, section 2.1.1.1, paragraph 22 "For about 89 miles (29 percent of the route) the MVP pipeline would follow existing rights-of-way......" The following quotation is from DETS p. 2-10, Table 2.1-3. "Overhead power Lines/Electrical Transmission Line Rights-of-Way distance (miles) 26.5, percent 8.3" Do these figures include MVP's mythical use of the overhead power

Line/electric transmission line right-of-way through the Greater Newport Historic District and the equally mythical passage of the pipeline over the Newport St. Rt. 42 crossing site. We now trust no data MVP presents. And we no longer have any faith in

the efficiency and tructworthyness of The FERC given your blind acceptance of any lie, mistake or onission in their data.

Pamela F. Humphrey 157 Placid Lane Newport, VA 24128 IND711-1

As quoted by the commentor, section 2.2 in the draft EIS states that the pipeline would follow existing rights-of-way for about 88 miles as totaled in table 2.1-3. As noted in both the EIS text and the table, existing rights-of-way are not limited to only overhead power lines/electric transmission lines. Crossing over a right-of-way does not count as collocation. Table 2.1-3 in the final EIS has been revised due to minor route modifications filed in October 2016. The MVP pipeline would follow existing rights-of-way for about 89.5 miles.

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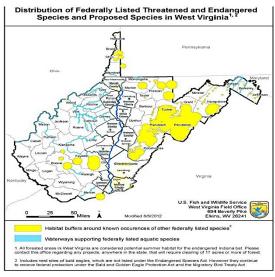
DECEMBER 22, 2016

Final Comments to the DEIS for the Mountain Valley Pipeline (Docket CP16-10-0000) Crossing Monroe County, West Virginia & Surrounding Areas

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

FROM: Maury W. Johnson 3227 Ellison's Ridge Road Greenville, West Virginia 24945





20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM

IND 712-1 Dear Secretary Bose, Members of the FERC, the USFS, the US Army Corps of Engineers, the Bureau of Land Management and others Whom It May Concern,

In June of 2015 I submitted over 60 pages to the FERC as my scoping comments (Accession # 20150617-0016) to the Mountain Valley project; this was titled (all bold, italicized text in the following statement is the previously filed comments): "Comments to The FERC Concerning the Mountain Valley Pipeline (Docket PF-15-3-000) Crossing Monroe County West Virginia and Surrounding Areas"

In the current, (incomplete) DEIS for the MVP (current docket # CP16-10-0000) many of these issues are not addressed or completely ignored. Therefore I am once again going to resubmit these comments with commentary. (The commentary is not bold or italicized.)

On Pages 1-29 I wrote "I will try to briefly state some of the main environmental, cultural, historical and socio-economic impacts that the Mountain Valley Pipeline will cause if it were approved and built in Monroe County or the surrounding area.

First and foremost, I do not believe that this project is even necessary. There will be NO positive benefits to the people it would most affect. This is a transmission line that is designed to get gas from point A to point B, which will most likely end up being Liquefaction Plants for export.

Secondly, I have personally walked several sections of the corridors through Monroe County that MVP, LLC has proposed. In my opinion, these corridors would be environmental and social disasters of epic proportions.

With that said, let me go point by point with the reasons I have this opinion.

Hans Creek Valley and Ellison's Ridge

I will start with the area that I call home; Hans Creek Valley and Ellison's Ridge. These areas are located in south central Monroe County, West Virginia, near the small town of Greenville. Going north to south, the proposed preferred route would cross Indian Creek just 1.5 miles from Greenville, and ascend Ellison's Ridae. It will follow the ridge for approximately one mile and then descend into the Hans Creek Valley, crossing a small feeder stream known as Dunlap Creek or Anne's Branch, then ascend back onto the Ellison's Ridge; it then follows another one of the ridges for one mile before descending back into the Hans Creek Valley, crossing two other feeder streams know as Left Fork of Slate Run and Shanklin's Branch. Next, it will ascend a small, very steep hill with some parts of the slope nearing 75%. Once it gets to the top it almost immediately descends into another valley which is known as Monahan Run. Then it ascends back onto Ellison's Ridge, crossing some very steep slopes, passing along a sensitive area on top and then again descends down a very steep long slope, with many rock outcropping, large boulders, small to large cliffs and caves. It finally ends, crossing Hans Creek in what is known locally as the upper part of "The Narrows of Hans Creek". Every ascent and decent provides stream runoff which will drive soil debris and possible contamination into the valleys, fields and streams below. This will add to turbidity and degraded water for the citizens of the area and all points downstream — which, since we are headwaters for both the Mississippi and James River watersheds, is truly a lot of impacted people.

IND712-1

In general, most comments are addressed in the final EIS, where they relate to environmental impacts on specific resources.

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INDSince these comments were made in 2015, much data concerning impacts to the numerous streams,
springs, wetlands and water resources have been made by Indian Creek Watershed Association and
others to FERC and MVP, but most if not all of this information has not been included in the DEIS.

The Narrows of Hans Creek is a very sensitive area and will be addressed in a separate part of this statement

IND 712-2

Hans Creek Valley and Ellison's Ridge is the area were my family has lived for more than 200 years; some of the land settled by my ancestors is still owned and inhabited by my family. Over the years we have been offered money for this land, but refused because it would be like selling a family member. We are attached to this area and land as part of our being.

If this line were to cross this area it would endanger the livelihoods of several individuals. Two of the most prevalent on Ellison's Ridge would be Mountain Meadows Game Preserve and Grandview Cottage. This 1200 acre hunting preserve would be dissected by this line; and the pipeline would totally interrupt this business and without question would severely impact if not put it out of business. Many people travel to this preserve to hunt, relax and get away from the infrastructure, power lines, highways, noise, pipelines, air pollution and all the other things we call progress. It has became so popular with those wanting to just "get away from it all" that a couple of years ago they built two additional lodges that are known as Grand View Lodges. These adjacent lodges on a high peak of Ellison's Ridge over look different valleys. One looks over the Hans Creek Valley and the southern part of Peters Mountain, this view would be severely impacted by the proposed route. The second lodge overlooks the Indian Creek and Laurel Creek Valleys and the northern Peters Mountain and would be severely impacted by the Alternate 110 route. These lodges are less than 2000 feet from the proposed corridor and lees than 1.5 miles from the Alternate 110 Corridor (just across the valley)

Also, as the proposed line treks across this area it would cross near several houses including my own. It would endanger many major and minor springs that supply water to people's homes, animals and crops. It would also threaten wells that are fed by these springs. Being in a karsts area, groundwater supplied to the wells would almost certainly be affected in adverse ways. One spring on top of Ellison's Ridge is very historic in nature. It has been reported that King George deeded this spring to the Ellison's. It was so important to the Ellison Family that over 150 years ago when they sold the top part of their land, they kept the spring. The corridor on top of Ellison's Ridge in this area would pass within 400 feet of this spring and be directly above it. Also in this area is important and sensitive Black Bear Habitat.

I have documented and photographed 14 streams that the pipeline would cross or come very near in this corridor. Also on my farm it would pass right through one seasonal spring and very near 12 permanent springs and one wetland area. It would impact several other wetlands and ponds along the ridge, and more than 50 permanent springs. It would impact more seasonal springs than can be counted.

In January (2015) I allowed EQT to survey my family's farm as did some neighbors. I walked with the survey crew as they established the corridor on this survey and as it crossed some very narrow, steep ridges. I asked the EQT representative how they could possibly build a 75 foot wide corridor on these ridges, much less a 125 foot construction corridor. The reply was they would have to "cut it down". After subsequent investigation I have discovered that the ridges would have to be cut down by 50 feet IND712-2

Mountain Valley is proposing to use an existing and new temporary access road through the Mountain Meadow Preserve. As stated in section 2.4.2 of the EIS, construction would generally proceed in an assembly line fashion with construction crews moving down the construction right-of-way as work progresses. Construction and restoration at any particular point along the pipeline route would take about 3 weeks to complete; although progress could be delayed by topography, weather, or other factors. The pipeline would not be located within the Mountain Meadow Preserve. See the response to comment IND3-1 regarding drinking water. As stated in section 2.4.2.8, after backfilling the trench, the topographic contours would be restored to their original pre-construction condition as close as possible, using graders and bulldozers; except where drainage patterns may cause erosion.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND or more and the valley filled to allow for construction of such lines. This issue would be repeated all over the area as it crosses many narrow steep slopes. 712-2 cont'd Again, since these comments were made in 2015, much data concerning impacts to the numerous streams, springs, wetlands and water resources have been made to FERC and M∨P, but most if not all of this information has not been included in the DEIS. Information concerning unstable soils and slopes has also been shared. I will address this issue on my own property in a separate submission. Another issue faced by building this line is sensitive wildlife areas, I have already mentioned Black IND Bear Habitat, but on my farm there is a certified American Woodcock nesting area. This has been 712-3 reported and recorded to the WV Dept of Natural Resources and they have it listed as one of the few certified nesting areas in the State of WV. Also there is an area on the farm that is a "probable" nesting area for Whippoorwills. It is known locally as having more Whippoorwills than any place in the immediate area. I have been managing this area from more than 30 years, using no sprays of chemicals and not bush hog the area but once every three or four years. I allow small trees and shrubs to grown on this area for critical habitat for both of these species. Recently I have observed young birds and will report this to WV DNR which will elevate it to certified nesting area, making it one of only four or five found in WV. (Photos taken by Maury Johnson) Photos of Nesting Woodcock on my farm from March of 2014)

I know that there is a Migratory Bird Conservation Plan, but it does not adequately cover this particular area, which I have put many, many hours and years in maintaining

IND712-3

See the response to comment CO49-22 regarding black bears. Sections 4.5 and 4.7 have been revised as appropriate.

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Photo of American Woodcock Eggs in Nest



IND 712-3 cont'd In the Hans Creek Valley, which lies directly below the proposed corridor and on Ellison's Ridge directly above the proposed corridor, are two businesses that could be severely impacted or even destroyed by this project. Larew Cottage is a bed and breakfast that depends upon the rural nature of this area for its business. Grand View Lodge is a subsidiary of Mountain Meadows and depends upon its great views of the area as part of its allure. It is part of the nearly million dollars worth of business that Mountain Meadows did last year. Another attraction in the Greenville area that depends upon the rural, quiet unspoiled scenery is Creekside Resort. Without the valued attraction that is provided by this pristine and unspoiled, sacred area and vistas, these businesses will suffer severely, if not just disappear.

Another business in the lower Hans Creek Valley I want to mention is the Helmick Organic Dairy Farm. Mr. Helmick lives here and is raising his family in the valley. He owns or leases over 450 acres in the Hans Creek Valley where he operates an organic dairy farm. His milk is transported to Wisconsin and distributed by a national distributor of organic milk and milk products. Hans Creek runs through all of the properties that he owns or leases. Any contamination of the waters of Hans Creek springs or the wells he relies on, even by a diesel fuel or fertilizer spill, would seriously impact his business and could potentially put him out of business. The WV Department of Highways recognizes this designation and refrains from using chemicals or sprays near his farm to control weeds and brush.

This designation costs him over \$1200.00 annually and he has to pass numerous tests by the designating agency. It took him several years to develop this business. He is organic and even aerial spraying of the corridor in this area would impact him greatly and would have similar effect as a water contamination.

There are many other organic farms and gardens in Monroe County. Another one located very near the pipeline corridor belongs to my neighbor Beth Covington and Mike Murphy. This farm produces organic milk, cheese, eggs, meat and vegetables. My own farm is organic as is my Uncle and Aunt's farm that is adjacent to the proposed pipeline near their property to control weeds and brush.

Another organic farm found in the Hans Creek Valley is the Ernie Long Blueberry Farm and Orchard. There are several farmers, many of them organic, that participate in the Monroe County Farmers market and sell their produce as far away as the Charleston and Kanawha County area of WV. There is also an organic district being formed in Monroe County, in which I intend to participate.

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- IND Agriculture, especially the Organic District and Organic Farms in Monroe County have become
- 712-3
 recognized statewide, recently there have been USDA Grants awarded totaling more than ONE

 cont'd
 HUNDERD THOUSAND DOLLARS to renovate a cafeteria building on the Old Greenville School site and to expand the Monroe County Farmers Market Co-op. A neighboring county is exploring joining this already successful program. There is a possibility of over a million dollars of economic activity from this project. The MVP would be a huge detriment to the farmers of our area, many who are organic or working towards that goal. Most if not all of the information supplied to FERC concerning this area was either overlooked or simply cast off as unimportant in the DEIS.
- IND
 Other impacts to the Ellison's Ridge and the Hans Creek Valley would be to historical buildings, views and graveyards. The cultural attachment that I and hundreds if not thousands of people have with this Valley is not measureable. I will note only two families that are not my own who inhabit the area.

The Ellison Family has lived in the Hans Creek Valley since the mid 1700's. They own and still operate a nationally recognized Bicentennial Farm. Their land is adjacent to the proposed pipeline. Currently there are 4 generations of the Ellison family living on this land.

The other farm is the Larew Farm. This farm has been owned and operated by the Larew family for over 200 years. Currently there are several of the Larew family members who live on the farm or in the immediate area. Each year they have a large family reunion on community property that they donated to the community many years ago. This reunion attracts a couple of hundred or more (4 generations) of the family and friends from all over the US, as well as from all over the world as many foreign exchange student and other International exchange participants who have been hosted by the family return as often as they can. It is held during the 4th of July weekend and has been held annually since the mid-sixties. A couple of years ago the family had t-shirts made that read, "Some Call it Hans Creek ----- We just call it Home", which reflects their love of their heritage.



IND712-4

Organic farms that would be crossed by the MVP pipeline route are discussed in section 4.8 of the EIS.

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IND 712-4 cont'd

Other families who have lived in the area for more than 200 years and still live on family lands are the Mann's, Miller's, Johnson's, Shanklin's, and Wickline's. The Cultural and Historical nature of their lands are very important to them.

The issue of Cultural Attachment or Sense of Place or as Thomas King (ED 1916, subrooks), Newsay of Oxfanis Diversite Antackglaterands & California Marcana System China Infragramment, to both infinite Jonal antackglaterands is an antack of the subrook of the su

Many areas in Summers, Monroe, Giles and Craig Counties, including but not limited to Pence Springs, WV, Hans Creek—Ellison's Ridge—Greenville area in WV, and the Peters Mountain areas in WV and VA, should be avoided due to their historical significance and the <u>traditional cultural places</u> eligibility, entitling them for consideration under Section 106 of the National Historic Preservation Act. The Greater Newport VA Historic District has 106 designation and should be included in this list of very significant places. I would further submit that these areas together would qualify as a World Heritage Site.)

(From Wikipedia, the free encyclopedia — A World Heritage Site is a landmark which has been officially recognized by the <u>United</u> <u>Nations</u>, specifically by <u>UNESCO</u>. Sites are selected on the basis of having cultural, historical, scientific or some other form of significance, and they are legally protected by international treaties. UNESCO regards these sites as being important to the collective interests of humanity.

More specifically, a World Heritage Site is an already classified landmark on the earth, which by any of being unique in some respect as a geographically and historically identifiable piece is of special cultural or physical significance (such as either due to hosting an ancient ruins or some historical structure, building, eity, complex, desert, forest, island, lake, monument, or mountain) and symbolizes a remarkable footprint of extreme human endeavour often coupled with some act of indisputable accomplishment of humanity which then servers as a surviving evidence of its intellectual existence on the planet. And with an ignoble intent of its practical conservation for posterity, but which otherwise could be subject to inherent risk of endangement from human or animal trespassing, owing to ummunitured/uncomfunde/uncentrical-intervent of access or thread by natural or accelerated estinction oxying to local administrative negligence...)

(I would finally like to re-submit the follow study by Tom King, which was submitted to the FERC on 8/30/2016 with the accession number 20160830=5133 and has a direct correlations to the areas mentioned about. *It can be found at*:

http://www.academia.edu/28181249/Traditional Cultural Places in Appalachian Virginia And The Mountain-Valley Pipeline)

"The Narrows of Hans Creek"

 IND
 The Narrows of Hans Creek, including the area where the corridor would cross the creek, is a unique,

 712-5
 environmentally sensitive area that is located between the ridges of Ellison's Ridge and the adjacent

 Ridge know as the Oak Hill Ridge
 Ridge

Hans Creek starts at a spring located at the base of Peters Mountain and travels through a wide fertile valley near Lindside, Coulters Chapel, Assurance (also called Cooks Run, although Cooks Run actually runs into Indian Creek near Greenville and has its own separate issue with possible impact by the proposed pipeline). It is then squeezed by these two ridges into a canyon with cliffs and steep slopes IND712-5

Cultural attachment is discussed in section 4.10 of the EIS. Threatened and endangered species surveys would be conducted (if the landowner has granted access). As discussed in section 2 of the EIS, the pipeline would be installed beneath the streambed. Following construction, baptisms could resume.

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IND 712-5

found on both sides. It then exits the canyon and spills into the lower Hans Creek Valley filled with large, historic, organic and family farms.

cont'd

There are also rare and unique plants found in this area such as various types of Lady Slippers, rare or unique ferns, Mountain Laurel, Rhododendron, Jack-in the Pulpit, Trilliums, both Pink and Orange Honeysuckle (wild azaleas), unique mosses, fungi and lichens. I also think we have found at least one plant that is on the Federal List of Endangered Plant. I took a picture of what I believe to be the Small Whorled Pogonia recently and have sent it to the WV Dept of Natural Resources botanist Paul J. Harmon a few weeks ago and am awaiting his positive identification. This area would be destroyed if a pipeline corridor were placed across it in any location. The current corridor would also cross directly across at least one major spring. It would impact very sensitive habitat, hibernation and breeding areas for black bears. Also bolecat and foxes take refuge in this remote area as do many kinds of owls, hawks, wild turkeys, and other birds, mammals, amphibians and reptiles. I believe a thorough study of this entire area should be conducted before a pipeline project of any kind progresses. I think the uniqueness of this area would surprise even the most knowledgeable botanist or biologist.

Showy Orchid / Purple Hooded Orchid in the Narrows of Hans Creek



Since I first wrote about this area, I have done extensive research in this biological, geological and scenic area, I have logged many hours, taken hundreds of pictures and videos, one such video is on YouTube at the following link: <u>https://www.youtube.com/watch?v=Xe2IIABTH9s</u>

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IND 712-5

Along with the Indian Creek Watershed Association, we have identified many tens of springs in the Narrows of Hans Creek, including an extrem ely pure spring directly in the path of the MVP proposed corridor. I have documented many rare plants and even believe that there could be endangered species cont'd in this unique ecosystem. The Narrows of Hans Creek is a very popular hiking area for area families and others. It should be avoided due to its extreme importance to many many people. Baptisms occur at the spot where the Pipeline proposes to cross Hans Creek. Destroying this area would be more than criminal. I invite FERC officials to contact me to further discuss avoiding this area.

Pink Lady Slipper in the Narrows of Hans Creek



Bees

IND 712-6

Another unique business found in the area near the upper part of the proposed corridor near Oak Hill Ridge and The Narrows of Hans Creek is the Deano and Patti Chlepas Organic Bee Farm. Domestic Honey Bees are extremely important for the production of food and the US Department of Agriculture recognizes the crisis that Honey Bees are under in this country. Some of the reasons for the decrease in honey bees are believed to be due to environmental reasons, including the use of chemicals and air pollution. The Chlepases have 135 hives with 6 million active bees in the area. Due to the pristine nature of the area they have very active and healthy bees. They transport hives to organic farmers in

IND712-6

We were unable to determine the location of the organic bee farm in relation to the MVP. See the response to comment LA1-7 regarding herbicides. See the response to comment IND76-1 regarding bees.

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IND the area to help in pollination. This pipeline will put their operation at risk, thus putting others who 712-6 depend upon their bees at risk.

cont'd

IND

712-7

Recently the USFWS has taken comments about the possible inclusion of the Rust y Patch Bum blebee on the endangered species list. Although not listed as being reported in WV, a number of local people made the comments that this bee is indeed in this area. The Chlepas are one of the several people who have reported this bee, next spring entomologist Paul E. Marek, Assistant Professor Department of Entomology, Virginia Tech University will help to confirm or not confirm their existence in this area. They have received some information late this fall and believe we have a perfect habit for them. I have also had discussion with Barbara Douglas Senior Endangered Species Biologist, WV Field Office, U.S. Fish and Wildlife Service in Elkins WV about this insect. Nonetheless, the Issues of the habit for bees in our pristine area has not been addressed in the DEIS as far as I can ascertain.

Yellow Lady Sipper in the Narrows of Hans Creek



(Pictures of Orchids/Lady Slippers courtesy of my cousin, Norvel P. Mann)

The proposed corridor progressing into either side of the canyon is full of steep slopes, some approaching 65% or more. Also rock outcroppings, caves and springs are prevalent in this area. The corridor going up to Oak Hill Ridge, opposite Ellison's Ridge, crosses the very steep slope diagonally. Storm runoff would be a particular, important issue here"

IND712-7

We were unable to determine the location of the these features in relation to the MVP.

Individual Comments

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"Smoke Hole" and "Black Pond"

IND 712-7

cont'd

As you rise out of the The Narrows of Hans Creek Canyon, near the top of Ellison's Ridge there is a hole in the ground that produces fog at certain times. This small opening is surely an entrance to a below ground cavern or cavity that is near water as the water vapor can be seen from time to time especially in the warmer times of the year as the cool, moisture laden air hits the warmer air of the outside. The second feature of note is "Black Pond". This naturally accurring pond is located on top of the high slope overlooking The Narrow of Hans Creek. It used to be at the edge of woodland, although I believe it to be in more in an open area now, after some land clearing that took place by a former or current owner.

According to my late grandfather, W. D. Mann, there is a lot of local history surrounding this pond and my relatives who owned it in the past. This history was recorded in the book: <u>Jacob Mann Jr.: Early</u> <u>Pioneer of Monroe County West Virginia and his Descendents</u>, written by Merilyn K. Fleshman, published 2003.

But of more importance is the fact that the proposed corridor passes very close to this pond. It would almost certainly change the hydrology of the area and very likely affect this pond to the extent of possibly draining it.

(Again, there is nothing that I can find that would address these areas, granted the actual "smoke hole" may not be within the consider, but the fractured sandstone that has formed it is evidence of a very unstable landscape on the top of Ellison's Ridge)

Eagles in the Hans Creek and Indian Creek Valley

 IND
 In the past few years, beginning around 2006 or 2007 Bald Eagles began to frequent the area around

 712-8
 Greenville in Monroe County (as well as some other parts of the county). These sightings became more frequent over time and in the past three or four years Bald Eagles have even taken up nesting in the Indian Creek Valley (I have a picture of one such nest). There have been as many as 9 juvenile Bald Eagles pictured near the proposed pipeline. It is almost a certainty that more than one nest occurs in the area, within a few feet of the corridor if not in it. I have much information from numerous people documenting this and I also have collected many pictures of Bald Eagles, both juvenile and adult Bald Eagles in the area, very close or in the corridor. So Bald Eagle Nesting and Habitat is a critical concern with the MVP Corridor in this area.

The following letter is from local bird and Eagle expert Jim Phillips; he sent this to me in preparation with a meeting with the USFWS and WV DNR in Elkins WV on Dec 8th 2016. I feel that it is relevant to the issue of Eagles in the area around the MVP Corridor.

"To whom it may concern

When I was the park naturalist at Pipestem State Park, Pipestem, WV, I organized a winter eagle count (2006) using local birdwatchers as site leaders. Sites were established along the New River and several tributaries in Monroe, Summers and Raleigh Counties in southern West Virginia. Each site kept record of number of eagles, age of eagles, duration of eagle sightings, eagle activity and weather during a four hour period in early January.

IND712-8

Bald eagles are discussed in section 4.5 of the EIS. Surveys for bald eagles were conducted in consultation with the FWS.

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 IND
 Iwo years later (2008), we added a second cagle survey during the first half of March. Basic methods were

 712-8
 maintained as much as possible but with focus on bald cagle breeding behavior so as to locate nests in the vicinity.

 cont'd

Through the years, we have established that we have a winter population of both bald and golden eagles and a breeding population of bald eagles. Our winter counts have ranged from four bald eagles in the beginning to at least 56 in 2015. Golden eagle numbers have ranged from one to six individuals. On the March counts we have ranged from two to 33 bald eagles and one to six golden eagles.

As of the 2016 season, we are monitoring eight hald eagle nests in West Virginia and to a lesser degree six nests in neighboring Virginia counties. Locations for these nests have been provided to the appropriate sources in each state.

In 2013, the area of Indian Creek along Rt. 122 west of Greenville, Monroe County, West Virginia was added to our two annual surveys. The January counts have ranged from no bald eagles to ten and the golden counts have ranged from none to two. The March counts have ranged from zero to eight bald eagles with no golden eagles. We have one confirmed nest and one with unknown results in West Virginia. There is an active nest on the Virginia side at Maggie, Craig County. On one December trip through this area, 1 encountered 27 bald eagles.

Also, in Monroe County, several of us monitor the fall raptor migration at the Hanging Rock Tower Migration Observatory on Peters Mountain. Good records go back as far as 1974 for this site with some scattered reports going back as far as the 1950s. In the last ten years this site has experienced an increase in both eagles and peregrine falcons. The high count for a day for the 2016 season has been 27 bald eagles on October 27 and 10 golden eagles on November 4. For complete information go to <u>hangingrocktower org</u>.

Jim Phillips Pipestem, WV"

https://www.facebook.com/Hanging-Rock-Raptor-Observatory-146135922074805/7ffef=ts (The following pictures is of Bald Eagles in the Indian Creek Valley near Greenville and in the area of

Proposed Pipeline – Pictures Courtesy of Nancy



Prince

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Juvenile Eagles in a Sycamore Tree





Baid Eagle Nest (This is one of the nest refer to in the Jim Phillips Letter)



I have many more pictures and reports concerning Bald Eagles in Monroe and surrounding counties that will be impacted by the proposed or Alternate 110 corridors.

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IND 712-8 cont'd

Also, as of this past winter (2015), at least a pair of Golden Eagle has taken up residence in the area. According to the WV Dept of Natural Resources, they are only here from October 2014) to April (2015), but in recent days they have been observed in the area. Therefore they may have also taken up permanent residence.

Picture of Golden Eagle taken in the area this past winter



I recently create a place where people of the area could report and share data about Eagles in Monroe County and have received several responses which I will be glad to share with FERC. Sensitive Eagle Nesting area and Habitat is located in the proposed route in the Hans Creek, Indian Creek and Ellison's Ridge area of the proposed corridor. The same is true of the Alternate 110 Route across Peters Mountain, Potts Mountain and the Waiteville Valley of Monroe County as well as in Craig County, Va.

There are also reports of Eagles in the Waiteville Valley and I know of nesting Bald Eagles in nearby Craig Co. on Potts Mountain near the Monroe Co. line on the Alternate 110 Corridor near Maggie.

Finally, even though it isn't an Eagle, there are reports of either a Fakon or Osprey seen in the Indian Creek and Hans Creek Valley over the past year. I have a picture of one of the taken last summer (2014).

(I believe that the entire region is sensitive and that the construction and operation activities would severe impact or even destroy the habit that these birds have found in the Hans Creek-Ellison's Ridge-Indian Creek area of Monroe County and the Aklerson-Pence Springs- Talcott area in Summers County)

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IND 712-9

Endangered Bat Species

In April of 2015 The FERC received letters from the United States Department of the Interior, Fish and Wildlife Service in their respective states. The Field Office did a fair job of identifying Endangered Species in their area. I take exception to the report compiled by the WV Field Office. In the Virginia Field Office report it took a pretty strong position about endangered bats in the area. In Giles County, Va. for instance, on page 3 of that report they spoke about Tawney's Cave:

"The proposed route intersects with Tawney's Cave in Giles County, a known hibernaculum for Indiana and Northern long-eared bats. We recommend a minimum 5 mile buffer from known hibernaculum opening and mapping passages."

No such mention about the Greenville Saltpeter or Laurel Creek Cave in the Greenville area of Monroe County, which has the same issues as Tawney's Cave in nearby Giles County, Va. The proposed Route will pass within 1 mile or less of these very sensitive caves and Alternate 110 will pass within a mile or less of these caves. Both of these caves have been well documented for these and other endangered or very rare species.

Due to the extremely fragile nature of the habitat in the Greenville Saltpeter Cave, the Institute for Earth Education received a grant from the federal government to construct a "Bat Fence" around all the entrances of these caves to protect the hibernating bats. This is just one example of how protected these caves are.

Instead of writing all the issues between the two reports I will submit both of them with this EIS and Highlight all the things that are relevant to WV that is in the VA Report. I will list the pages at the end of this letter.

All of the following bats can be found in the area: Indiana Bat, Big Eared Bat, Virginia Bat and Gray Bat. (I submitted a separate comment about Bats on December 20^{th} 2016 accession # TBA)

Rare and Federally Listed Endangered Plants and Animals

There are a number of Rare Plants in the area, including:

Buffalo Running Clover: This clover was once thought to be extinct until it was discovered in Monroe County WV in the 1970's.

Virginia Spiraea: Known to exist in the Waiteville Valley, Peters and Potts Mountain as well as possible locations within Monroe County. This plant was only identified to exist in the 1980. A complete survey of Monroe, Craig and Giles Counties should be undertaken before any project of this magnitude.

Peters Mountain Mallow: Only place in the world where it is known to grow, on Peters Mountain in southern Monroe County and adjacent Giles County VA, the area to be crossed by the proposed corridor.

Small Whorled Pogonia: Recently while researching various segments of the proposed corridor I believe I have found this plant directly in the path of the proposed corridor. I have submitted a picture of this to Paul J Harmon, Botanist for the WV DNR and am waiting positive identification. I found this IND712-9

Golden eagles are discussed in section 4.5 of the EIS. Surveys for golden eagles were conducted in consultation with the FWS. The Indiana bat, big eared bat, Virginia bat, and gray bat are all discussed in section 4.7. In response to stakeholder comments sections 4.5 (wildlife), 4.6 (aquatic resources), and 4.7 (special status species) would be updated as appropriate in the final EIS.

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 IND
 plat in "The Narrows of Hans Creek while documenting the rare plants and other animals found in this

 712-9
 unique area. Others from the Save Monroe, Preserve Monroe and the Border Conservancy may have

 con('d)
 seen a similar plant on Peters Mountain and we are awaiting more information from Mr. Harmon.

Flying Squirrels: Some species of flying squirrel, if not multiple species exist in Monroe County. I have them on my property in Monroe County, which could be crossed by the proposed pipeline. They are also reportedly seen in many other areas of Monroe County including but not limited to Ellison's Ridge, Peters Mountain, Potts Mountain, Waiteville Valley, Swope's Knob, Hans Creek, Indian Creek and Laurel Creek. Some people say they are Northern Flying Squirrels, some claim they are WV Flying Squirrels, while others claim they are Carolina Flying Squirrels. Regardless of the species, I believe all of these are on the Federally Endangered Species List.

James River Spiny Mussel: The most important habitat for this Federally Endangered Species is one stream in Monroe County, in the Waiteville area, between Peters and Potts Mountain. The other 4 streams are located in nearby Craig County, Va. All of these streams would be impacted by the Alternate 110 corridor. Regardless of what MVP will claim, there is no way to build a pipeline corridor of this magnitude and not severely impact if not wipeout these endangered mussels.

Allegheny Wood Rat: The Allegheny Wood Rat is a "Species of Concern" for the US Fish and Wildlife Service. It is found in Monroe and Greenbrier County and is quite prevalent in our area (I live in a wooded area and I actually found one with young in my house a few days ago.) Their habitat is rapidly declining and may soon be listed as federally endangered or protected. We have prime, critical habitat for this species. We sometime refer to these as field mice.

Eastern Cougar: Although there is debate as to their existence in WV, too many credible people in the Eastern Mountains of WV and nearby VA have reported sightings over the years for them not to exist. I have seen them in Potts Mountain (1979) and also in the Elison's Ridge area (2005). Recently (November of 2014) a group of people including a county commissioner observed one near Lindside WV, near the proposed pipeline corridor, very near to Peters Mountain. (Even though these were declared extinct, people in our area still report a large cat, which is larger than a Bobcat, having a long tail in the area.)

Other Water Dwelling Animals:

Other endangered Mussels, Perch and possible other endangered aquatic animals exist in streams crossed by the Mountain Valley Pipeline Corridors in West Virginia and Virginia. A comprehensive study of critical habitat in Monroe, Summers and Greenbrier County WV and Craig, Giles, Montgomery, Roanoke and Franklin Counties in Virginia for aquatic species, should be undertaken in all streams large and small where the proposed or any alternate pipeline could impact the stream. These unspoiled and understudied areas hold whole hosts of life, many of which are still probably not fully known.

Shale Barren Rock Cress: This Federally endangered plant has been reported on the highest peak of Peters and Potts Mountain in Monroe Co., WV, Giles Co. and Craig Co. Counties of Va.

Bentley's Coralroot: This plant, a type of wild orchid, wasn't even discovered until 1999; it only occurs in five counties of WV and VA, two in WV and three in VA. The plant was first discovered in the Waiteville area of Monroe County, WV when a group of people was working on a project to turn the

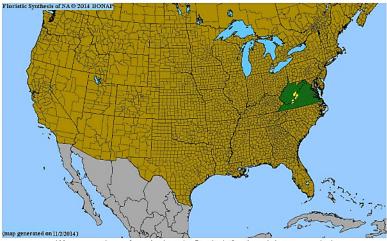
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 IND
 old railroad trail into a walking/hiking trail. This rare plant also occurs in Craig and Giles County VA.

 712-9
 The occurrence of this plant in these counties is proximate to the pipeline corridors that cross the old cont'd

 pristine forest of the area.
 Pristine forest of the area.

(Corallorhiza bentleyi, commonly known as Bentley's Coral Root, is found only in Virginia and West Virginia where it was discovered in 1999 in Monroe County, at the base of Peters Mountain in the Waiteville Valley; it is limited to about 15 populations spread over 5 counties. These counties are Monroe, like other members of the Corallorhiza genus; this orchid is myco-heterotrophic: it primarily obtains nutrients not from photosynthesis but through mycorrhizal fungi. It lacks leaves, has reddish to yellow stem, and produces up to 20 small, inconspicuous flowers of the same color. It is most closely related to C. striata, which is the only other Corallorhiza species to have an unlobed labellum with thickened, inward turning margins; however, C. bentleyi flowers later in the summer (July-August), while C. striata flowers earlier (May-June). It grows in deciduous forests, often near disturbed edges of forests or along roadsides (Global Rank Critically Imperiled) Once again let me stress that this plant is extremely rare with a GLOBAL RANK of CRITICALLY IMPERILED. It is imperative that areas like Peters Mountain, Ellison's Ridge and the Narrows of Hans Creek where it could possibly exist are carefully studied and that study should extend at least 500 ft from each side of the corridor as that would be the area of impact if you fragment the forest.)



(Above map shows the only place the Bentley's Coralroot is known to exist.)

Candy Darter: This is found in the Greenbrier watershed.

Northeastern Bull Rush: This protected plant exists along the Greenbrier River and other streams and marshes near the existing pipeline routes through the area of Southern WV and South Western VA.

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	Other Plants and Animals			
	Native Brook Trout: The Alternate 110 crosses two significant streams that are critical to Native Brook Trout and are the only two streams in Monroe County where they reproduce naturally. These two streams are Turkey Creek and Potts Creek. Native Brook Trout streams are rapidly disappearing from all areas of the US, especially in the East.			
	Turkey Creek starts on the Western Slopes on Peters Mountain, near Zenith and continues through a narrow valley and empties into Indian Creek just south of Union and Saft Sulphur Springs. Potts Creek is a 46 mile long creek starting on Potts Mountain and also receives water from Peter Mountain and runs through the Waiteville Valley and empties into the Jackson River near Covington Va. It is part of the James River Watershed. It crosses part of Monroe County WV and two counties (Craig and Alleghany) of VA.			
	These two streams will be severely impacted by tree and vegetation removal, increased sunshine on the waters that feed the streams and possible pollution during and after, should construction occur in these areas. This would threaten this critical Native Brook Trout Habitat.			
	Bio Diversity: The bio-diversity of the Southern West Virginia and South western VA area, including the counties of Summers Monroe, and Greenbrier in WV, as is the South Western portions of VA, including the counties of Giles, Craig, Montgomery, Franklin and areas of Roanoke. A full comprehensive study of the plant life of this area should be completed for the entire area which will be impacted by the proposed pipeline. Not just the 200 or 300 ft construction corridor but an area far more encompassing, because the impact of this project would affect a far greater area than the construction corridor. The introduction of invasive species itself is a serious, but not the only potentially devastating effect that the construction and operation of such a project would have on the forest, meadows and streams of the area.			
	From the document included after this statement you can see that Monroe County is recognized as being prime habitat for endangered and or protected species, including the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act			
	It shows the areas of high concern where known species exist and the buffer zones established around these zones. It would be impossible to build a pipeline across this Monroe County WV without impacting these areas.			
	Even though some of the comments made by my Scoping Comments addressed both the proposed route and the Alternate 110, I believe that the DEIS does not adequately address the fragile habit of these species especially in the many core forest including the Jefferson National Forest that it wishes to fragment and allow corridors for invasive species. Also the spraying of herbicides along the route would impact these species and the water that all living things along the line depend upon.			
	Extremely Unique and Sensitive Areas: I am sure there are many more plants and animals that would be severely impacted by such a project, some of which may not even be known to exist as of yet or may be thought to be extinct There should be an extensive study conducted in the unique and pristine areas, especially the sensitive and pristine areas such as Johnson's Cross Roads, Ellison's Ridge and surrounding valleys, "The Narrows of Hans Creek", Peters and Potts Mountain in Monroe County, WV and Giles and or Craig Counties in Va. When I say a study should be completed, I am not just talking			

IND712-10

Field surveys for threatened and endangered species were conducted along the proposed pipeline route.

experts.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM about a study of the corridor, but the entire area, as we all know that animals move and plants are IND impacted by what happens in the area. 712-10 cont'd Distribution of Federally Listed Threatened and Endangered Species and Proposed Species in West Virginia^{1,2} around known occurrences of other federally listed ave supporting federally listed aquatic species red potential summer habitat for the are in the state, that will require do Includes next sites of baid segles, which are not listed under the Encangered Species Act. However they contrained bails and bailer of a March and Content Franke Funder for and the Marchael Act. IND Native American Artifacts: The areas of Greenbrier, Summers and Monroe counties in WV are full of 712-11 Native American Artifacts, from hunting grounds, encampments, trails and burial grounds. On land owned by my family on Ellison's Ridge we have found many of these artifacts over the years. According to my late father and uncle there are a couple of graves located on the family farm. These graves are just a few hundred feet from the center line of the corridor. On June 10th 2015 I accompanied a person with some vast knowledge of Native American Artifacts on my property and another property to look for Native American Artifacts. Although we found just a few in our cursory examination, We did determine that artifact previously found on my property adjacent to and in the proposed corridor and property owned by my aunt and uncle adjacent to the pipeline date back as much as 5 to 8 thousand years. They have artifacts from several different time periods, including burial beads from two different time periods that were found on both of our properties. We

> have pretty significant evidence that this area may have been used for thousands of years for hunting and maybe even a seasonal encampment. It would need more extensive examination by independent

> The same experts found over 80 artifacts on another part of the proposed pipeline on a property near

the crossing of Indian Creek and the historic Seneca Trail.

IND712-11 Cultura

Cultural resource surveys were conducted along the proposed pipeline route. Three isolated finds were recorded on the property of Maury Johnson; all evaluated as not eligible for the NRHP.

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IND 712-11 cont'd

The Alternate 110 route crosses a significant Native American Area that dates back, according to local history, to the Adeana and Hopewell Era. This area is near Historical Salt Sulphur Springs near the mouth of Turkey Creek.

Pictures of Native American Artifact and other Fossils found on or near my family's farm, either in or adjacent to the proposed MVP corridor



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IND 712-11 cont'd



I addressed the Artifacts and others issues around the Historic Nature of my Farm in a filing on 12/5/16 with accession # 20161205-5227.

IND 712-12 Water Resources: This is one of the most important topics of concern in this statement. Although much can be said about the corridor passing across the Greenbrier River, the nation's longest free flowing stream, of the potential hazards to other streams along the proposed corridor I will concentrate on what is possibly the largest fresh water source in the eastern United States, Peters Mountain.

This mountain supplies the fresh water to thousands of people in Monroe Co WV and Craig and Giles Counties in VA These three counties all have one or more possible corridors crossing this and other important aquifers. Blasting a ten foot deep ditch, clearing hundreds of acres of forest land, and all other construction activities will certainly harm or completely devastate the hydrology of these aquifers.

According to some experts, the mere makeup of Peters Mountain and to a smaller extent Potts Mountain will make construction of this pipeline extremely difficult if not almost impossible because the top layers of these mountains consist of the hardest rock found in WV.

This pipeline project threatens some of the most sensitive areas of water resources in WV and VA. It also threatens the important water resources to some of the most productive agricultural land in WV in Monroe County.

Since filing this comment in June of 2015 I have been extremely involved with the Indian Creek Watershed Association, Save Monroe and the Discover Monroe Team in documenting the water resources of the area, especially near my home in Ellison Ridge, Hans Creek and Indian Creek Valley.

IND712-12 See the response to comment IND401-5 regarding information pending about water wells.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND I know that many springs, Tier 3 trout streams, headwater streams, wetland areas both large and small, 712-12 which are in or near the proposed pipeline corridor, yet the DEIS does not identify a spring or wetland conťd within 500 feet of the proposed corridor (DEIS pages 4-73 table 4.3 1-2 page 4-80-81) IND Soils: As a steward of the earth and having over 45 years of farming experience, I can tell you that 712-13 construction of a line such as is proposed will cause irreparable harm to many farms, large and small. There is no way to dia a ditch and replace the soil to its original state. The soils took thousands of years to form and many years of careful tending to be where they are today. Probable problems will be mixing of the strata, soil compaction, slippage, soil subsidence and change in hydrology, to name just a few. Steep slopes on Ellison's Ridge, including my farm is not mentioned in DEIS Page 4-53 table 4.1. 2-2 Giles Seismic Zone IND 712-14 This area is centered in Giles County VA and also includes Monroe County WV and Craig County VA. An earthquake in this zone occurred as recently as December of 2014. It is probably responsible for one of the largest landslides in the eastern United States over 100 years ago, in Craig County Va. This landslide area is crossed by Alternate 110. Instead of wasting my time trying to write about this zone or other seismic zones that are of concern of to this area, I will direct you to the US Geological Professional Paper 1355, written by G.A Bollinger and Russell L. Wheeler in 1985. This is a comprehensive 95 page report that clearly should make the case on its own standing that placing such a hazardous piece of infrastructure in this area would be foolhardy if not downright stupid. I will also add more evidence by including a letter to the Editor from the June 4th edition our local paper, The Monroe Watchman. The article was written by Dr. A.M Ziegler, retired Professor of Geology, University of Chicago. Seismic Hazards and the Mountain Valley Pipeline By Dr. A.M. Ziegler Both of the Mountain Valley Pipeline tracks currently under consideration pass from Monroe County through the "Giles County Seismic Zone" as defined by the Virginia Dept. of Mines, Minerals and Energy. Many residents of these counties have felt earthquakes but few may be aware of the damage that they have caused in historical times, or could cause in the future. According to the VDMME there was "an estimated magnitude 5.5 event in 1897 centered near Pearisburg in Giles County". They go on to say that for fifty miles around "...hardly a chimney was standing". This would include much of Monroe County. The U.S. Geological Survey (Bull. 1839-E) reports that there was a "landslide of considerable proportions", also reported at the time, on the face of Wolf Creek Mountain in Giles Co. The authors of this bulletin, published in 1990, searched for surface expression of "neotectonic" features, such as recently active faults, without success, but did report "a giant rock-slide complex on Sinking Creek Mountain", also in Giles County, and felt that it had been caused by seismic shaking, as had the "numerous other rock falls and slides in the area". They also implied that crustal warping might be indicated by variations in the elevation of terraces along the New River.

IND712-13Table 4.1.2-2 depicts steep slopes with the Jefferson National
Forest only. Seismicity is discussed in section 4.1 of the EIS.
We have revised section 4.1 as appropriate. See the response to
comment IND62-1 regarding Dr. Kastning's report.

IND712-14 As discussed in section 2 of the EIS, the pipeline would be installed beneath the streambed. Following construction, baptisms could resume.

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IND 712-14 cont'd

Of course, a major rock-slide would completely disrupt a pipeline and this prospect would be worse than crossing a fault. This is because a fault is a known quantity with a known location and sense of movement, and could probably be allowed for by the pipeline engineers. The location of rock-slides, however, would differ each time and the effects could not be allowed for, even if they could be predicted.

Geologists are used to thinking in terms of linear seismic zones related to plate tectonic boundaries, but the Giles County seismic zone is blob-shaped so, what could be the explanation for this feature? If we knew, we might have more predictive abilities. The St. Clair Fault along the northwest-facing margin of Peters Mountain is linear and was formed about 260 million years ago. Perhaps it could be reactivated, but this is very unlikely because it is shallow in its angle of dip, and current models show it flattening out at depth. It is just one of a family of "thrust-faults" defining the "thin-skinned tectonic pattern" of the Valley and Ridge Province. These faults are often found in the softer, less "competent" strata like shale and so are not usually exposed at the surface where they can be observed and mapped. On the other hand, they represent zones of weakness and can form the "glide-planes" of major rock-slides. And, because of the fact that limestone forms the valley floors of the Valley and Ridge Province, dissolution can undermine the mountain sides that contain the glide-planes, and this is a recipe for disaster!

The authors of the USGS bulletin were not able to suggest a mechanism for the Giles County Seismic Zone, but it may be explained by the modern geological concept of "erosional unloading". We all know that the New River is deeply incised in the geomorphic sense, indicating that it is eroding a lot of material. This is true of the lower portions of its tributaries and together, this system forms a broad but irregular area of lowlands in Giles County. The seismic zone, as defined, is co-axial with this low area. We know that the earth's crust is light with respect to the mantle beneath, so if material is removed from above, you get rebound and instability. This is according to the long-standing Theory of loostatic Rebound. The conclusion is that, for any area in Giles County, or adjacent parts of surrounding counties, the prospect of catastrophic mountain-side collapse can be expected in the future. Fortunately, people tend not to live on over-steepened hillsides, and fortunately, the MV Pipeline can be rerouted through an earthquake-free zone to the north or south of Monroe and Giles Counties.

Notes: Dr. Ziegler is a Professor Emeritus of Geology from The University of Chicago where he held a teaching/research position for 37 years. He directed the Paleogeographic Atlas Project which integrated traditional geology with the New Global Tectonics and this was supported by both industry and government funding. Among his many PhD students were three who worked on the evolution of the Appolachians with special reference to West Virginia. He retired to Monree County in 2003 where he and his wife own Cooks Old Mill, a historic landmark, in Greenville. He is past president of the Monroe County Historical Society and Current Chairman of the Monroe County Landmarks Commission. References: All of the publications mentioned above are available on-line. The map is from an article entitled <u>Mapping Setsmic Hazards in Virginia</u> published by the Virginia Department of Mines Minerals and Energy, and also is found online.

These studies should be enough for Officials at the FERC, the BLM and the USFS to conclude that a pipeline through this area is just a recipe for disaster. But for good measure another study was prepared by Dr. Ernst H. Kastning Ph.D., P.G. Professor of Geology, Radford University (Retired) Professional Geological Consultant (Accession # 0160713-5029 7/13/2016 10:08:11 AM)

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND 712-14 Kastning Report Executive Summary cont'd The proposed corridor of the Mountain Valley Pipeline (MVP) passes through a significant area of karst as it crosses the mountainous Valley and Ridge Province (the Appalachian Fold Belt) in Summers and Monroe counties, West Virginia and Giles, Craig, Montgomery, and Roanoke Counties in Virginia. Karst is a landscape that is formed by the dissolving of bedrock. Severe karst can create hazards for structures that are built on or across it. The environment, both on the surface and in the subsurface, is more easily degraded in karst than in most other terrains. Karst poses severe constraints on engineering, construction, and maintenance of large-scale structures built upon it or across it. Moreover, the karst in this mountainous region is much different than that in other areas. Siting a pipeline through the Appalachian karst poses significantly greater hazards than in karst a reas where the terrain has lower topographic relief. Karst is a critical factor in siting and management of a highpressure gas pipeline such as the one proposed. However, other potential hazards such as land instability, weak soils, and potential seismicity are also highly significant in this region. When two or more of these elements act together, the resulting environmental threat from the pipeline is compounded and exacerbated. The conclusion of this report is that the karst and associated hazards constitute a serious incompatibility with the proposed pipeline. The effect of these threats on the emplacement and maintenance of the line, as well as the patential hazards of the line on the natural environment, renders this region as a 'no-build' zone for the project. Earthquake Epicenter Density (Num/sq mile) Low Density VIVP begin and end - MVP origina NVP alternate High Density Central Virginia Scismic Zonc Giles County Eastern Seismic Zone Termessee Seismic Zon 100 50 Kilometers 25 -50 -100 Miles

Greenville Senior Living Project:

IND 712-15

This project by the Monroe County Council on Aging is a planned Assisted and Comprehensive Living Facility. The project location will be the grounds of the Old Greenville School. As planned, this multi-million dollar project will house numerous single and double occupancy apartments and a multi-room unit to assist the elderly in their daily needs. This project is nearing the funding stage with construction to hopefully begin before the end of 2015. It will be a unique, one of a kind project, the details of which I will not go into in this statement. It is extremely dependant on the rural, scenic and safe environment that is found in Greenville and Monroe County. The

IND712-15

Sinkholes and karst are discussed in section 4.1 of the EIS. See the response to comment IND62-1 regarding Dr. Kastning's report.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND proposed corridor would be within sight of this project and could threaten the scenic quality and 712-15 safety of the future occupants and employees. It would receive its water from the Red Sulphur cont'd PSD, whose water is at risk from the proposed corridor. This project is of great benefit to the people of this area as it will support several medium and high paying jobs both during construction and operation. This project will provide more jobs to the area than the pipeline construction and operation will provide and they will be much more long term. This project is progressing and would be impacted if the MVP is built through the Greenville Area, also the Greenville area would be eligible for National Historic Preservation under Chapter 106, I believe the area where the MVP is being built is also eligible for inclusion for protection under this rule, The very site where MVP plans to cross Indian Creek is where I and many other have been baptized. This site is important to the history of the Greenville Methodist Church, the oldest continuous Methodist Church west of the Alleghany Mountains. It was established in 1786. IND Caves, Sink Holes and Karsts Topography 712-16 IND712-16 The area around Monroe County is full of sink holes, caves, and other karst land features. Several Groundwater in karst areas, slopes, landslides, and seismicity are portions of the MVP pipeline propose to transverse these areas. The damage this will cause will be addressed in section 4.1 of the EIS. See the response to comment unknown until it has been done and cannot be repaired. Impact to water, unique animals and even to IND70-1 regarding erosion. See the response to comment IND3some rare plants found only in these areas are a certainty. It has been said that a firm specializing in 1 regarding drinking water. this type of construction will be consulted if this project is approved through karst topography. I submit that even though some may say that they can do this with minimal damage, that even "minimal damage" to these areas is actually catastrophic damage. The question has been asked "Can you build a pipeline through this karst topography? My answer is "Should you?" And the answer to that question, in my opinion is NO!!!!!! Once again I refer you to the Dr. Ernst Kastning's Geological Hazards of Mountain Valley Pipeline report FERC Accession # 20160713-5029 filed 7/13/2016 10:08:11 AM with the Federal Energy regulatory Office in Docket CP16-10-0000--pages 2 & 3 **Geologic Hazards** The Mountain Valley Pipeline application is deficient and inadequate because it fails to address IND IND712-17 The natural is lighter than air and would dissipate into the significant environmental hazards that would be created by the pipeline, if constructed as proposed. 712-17 atmosphere. It is not likely to contaminate groundwater. It fails to address geologic hazards that occur within areas in or near the proposed corridor and their potential impacts on the pipeline itself. Geologic hazards that are not adequately addressed by the application include: Groundwater Contamination: Karst terrains are uniquely vulnerable to augmented groundwater contamination owing to the nature of the groundwater aquifers that form in such areas. Thousands of people living in these potentially impacted areas depend on groundwater to supply their homes. The risk of severe groundwater contamination is increased during construction and may occur should a pipeline rupture in this karst terrain. Vulnerability of Groundwater Recharge: Allogenic recharge areas (where surface water from steep, upland mountain slopes enters karst aquifers at the base of those slopes) are especially vulnerable to disruption owing to hydrologic alterations that would be caused by the construction of the pipeline.

Individual Comments

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 IND
 Enhanced Potentials for Surface Collapse: Construction of the pipeline in mountainous terrain would

 712-17
 likely alter hydrologic flows by channelizing subsurface waters. Should the pipeline trench intersect with below-ground karst features, results would include enhanced potential for collapse in the karst.

Accelerated Erosion: Pipeline construction on steep slopes will remove native vegetation, cut into steep slopes, alter soils via compaction, remove surface soil over the pipeline trench and access roads, and will thus create potential for accelerated erosion.

Slope Instability: Unconsolidated geologic material present throughout the area on steep slopes should not be considered as stable. Movement of such materials, especially if stimulated by excess rainfall or by seismic activity, can be expected to threaten the integrity of the proposed pipeline. Over half of the preferred route from Monroe to Roanoke counties has slopes that are 20 percent grade or greater. Almost 20 percent of the slopes long this route are 35 percent grade or greater.

Weak Soils: Even if in the absence of such extreme weather or seismic events, soils on steep slopes can be subject to the slow and persistent downslope movement known as "soil creep". This would threaten the integrity of underground structures such as pipelines, especially where those structures run parallel to a slope. Soils on steep slopes should not be considered as stable. Several soil groups are high in plasticity and shrink-swell characteristic, resulting in poor drainage and low bearing strength that can induce downslope movement.

Seismic Risks: The proposed route of the pipeline passes through an area with a history of severe seismic activity and enhanced seismic risk as determined by recent geophysical studies. A major seismic event would clearly threaten the integrity of the pipeline. However, even moderate seismic activity, in combination with other conditions, such as karst, severe slopes, and weak soils, pose elevated risks. By extension, in karst areas, the quality of groundwater may be threatened as well.

The above hazards occur as a direct result of the terrain typical to the region being traversed by the proposed pipeline corridor. Multiple geologic hazards are inherent to karst in mountainous regions such as that of concern here. Because of their potential to interact synergistically, they cannot be mitigated by engineering practice. For these reasons, large karst systems must be avoided during pipeline construction.

The following info is from the Monroe County Karst Report prepared for the Monroe County Commission.

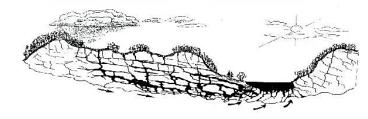


Modern day Monroe County was shaped by the Appalachian Orogeny roughly 270 to 225 million years ago. This area was uplifted, deposition of sediments ceased, and erosion began taking place. Shale outcrops can be found along the southeastern boundary of the county as a result of folding. In front of modern day Peters Mountain, older rock overrides the limestone and shale that dominates the rest of the county. Erosion from this ancient uplift ultimately exposed the Greenbrier formation and also

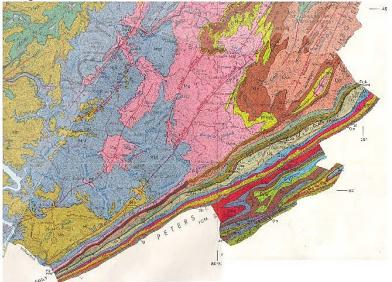
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IND 712-17 cont'd

cracked and rippled it creating synclines, anticlines and lineaments as well as many smaller fractures. This structure, in addition to erosion makes the underground paths of our water even harder to predict.



The Greenbrier limestone formation (pink) dominates the landscape of northern Monroe County covering over 70 square miles. Swopes Knobs is a remnant of the Bluefield formation (blue) comprised of red and green shale with a few thin limestone lenses. It rests on top of the Greenbrier formation, draining onto the Greenbrier karstland to the north, east and west.



In addition to caves, our karst formation also has many cracks tunnels and fissures, some dramatic. The monitor lineament is an easily spotted straight line across the Monroe county landscape. Karst

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND 712-17 cont'd formations are prevalent at the base of Peters Mountain and also near Greenville, where the MVP would have to cross the areas. Sink ole Sink Monroe County is a rural community. Though public water is available from springs and wells in Union, Greenville and Peterstown, most of the county depends on private springs and wells for water. Living on karst formation has advantages and disadvantages. Water in our area often seems abundant. Our groundwater is rapidly replenished by surface water. However, in other watersheds toxins and other contaminants are filtered out of surface water as it works its way slowly through soil and rock into the ground water. Flowing through relatively hollow karst, contaminants from the surface can dump directly into our groundwater. In addition, wells of any sort, shallow or deep, drilled into karst can potentially divert water by providing a crack through which water can be diverted to a deeper conduit in the lim estone.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND Another issue that I believe to be very important, but I have never heard meeting with MVP, FERC or in 712-18 the DEIS. It is basic science to understand that the gas transported through the MVP is heavier than air. It sinks! What happens when a leak occurs underground in karst terrain and gas fills a cavern or underground void with hundreds of cubic ft of EXPLOSIVE gas? Then something, a caver, lightning, static or some other source of a spark ignites the gas into an explosion that could wipe out a huge area like Greenville, Peterstown, Pembroke, or even Blacksburg. Another depiction of Karst Terrain showing voids that could fill with gas in an underground leak Stream disappears underground Debris (soil, rock, etc.) Stream appears rom underground stream Groundwater table The US Geological Survey is just starting a Bore Hole study in Monroe County; recently a geologist from this agency did a preliminary site visit. Next summer the next phase of this study will commence. At this time no one really knows what the underground topography of the area really is. The M∨P or no other project like it should occur until this study; along with a comprehensive hydro-geological study of the area is completed.

Artists, Tourism and Concerns

IND 712-19 Many artists are drawn to the Monroe County area, due to the unspoiled nature and beautiful vistas. After seeing the area many have even moved here, including nationally and internationally known artists and crafts men and women. Many tourists from all over the country and even international travelers come to the area to see what is one of the country's last unspoiled and unscarred areas. The noise, dust and traffic associated with construction will run these people away and then the damage done by the pipeline scar left behind will keep them way.

Other concerns raised by my neighbors are the effect to the quality of life for both people and livestock. Noise, pollution and other impacts will most likely affect the milk and egg production to dairy animals and chickens. People will no longer be able to enjoy their property or the natural resources in the area for recreation without fear, ranging from pollution and traffic on our rural roads to explosions from the pipeline.

IND712-18 Tourism is addressed in section 4.9 of the EIS. The EIS provides a discussion of air quality in section 4.11.1 and noise in section 4.11.2. Traffic is addressed in section 4.9 and dust in section 4.11.1.

IND712-19

Cultural attachment is addressed in section 4.10 of the EIS.

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IND 712-19 cont'd

Noise, dust, traffic, and disruption to the area are problems not adequately addressed in the DEIS. I saw nothing in the DEIS that addresses the concerns from my comments from 2015. The phrase "This will be mitigated." or there will be no problems are common in the DEIS and is not adequate.

Rand McNally

In 2008 I ran across this article in front of the 2007 Rand McNally Road Atlas. I have the Atlas if you would wish to review all the other areas listed along with the drive through Monroe County. Either pipeline corridor will spoil this Scenic Drive.

L	///////////////////////////////////////		
	Ever just want to get in the car and drive? Not every trip has to		24 West Virginia
D	be a dash between two points. Rand McNally editors have collected 26 choice drives,	ge could through	The Farm Heritage Road staggers across West Virginia's Monroe County, alternately wind- ing north and south. True to its name, the
BI	the kind you might take on a Jazy Sunday afternoon. The	wn on I- urricane, 2 toward	road carries travelers through rural land- scapes, made even more authentic by the
	mileages vary, but most don't take more than four hours	al Park. (shuttle	county's utter lack of fast-food chains. Take WV 3 from Sweet Springs to Union, where
	unless you stop at every fruit stand, antique store, and ice cream parlor along the way.	d hiking	you'll see antebellum homes and churches. Then follow US 219 south through the for- mer spa town of Salt Sulphur Springs to WV
	These jaunts are meant to be driven, however, and showcase	This day use from Ass It passes down the Sevent High the shores of Tamagning US Cook lefter to Portug remnant Roa. At swns like	122, a westerly course that will take you to Greenville, home of the 19th-century Old
	scenery that calls for the camera. To orient you on a Road Atlas	offers tidal verse down mountain goant and LSL again sported at Windy Pa Beloga Point, which of northern schemen, and the day	Mill. Head south on WV 12 and end with an orchard tour in Ballard, or continue south to
	map, a page and grid location for each drive's starting point	when a share of the star where more and other and appreciate the steps sharddoos jut a kear a hair day i youn lunch or	Peterstown. Even a round-trip journey will get you home before dinner.
	is provided.	All St miles of the In-4.	Find the starting point on p. 112, 1-7.
ř		All 94 miles of the 17 T. which areaches from M Olda., he within the Force, Afar leaving M will can the Blar Red	Some of Wisconsin's most dramatic rolling

Attached are some additional video links showcasing Monroe County WV, the area that MVP wants to destroy. Their destruction to this area cannot be mitigated. Any corridor whether it be 50 ft or 500 ft will destroy this area forever.

<u>Monroe County Tourism Video</u>, posted in 2014 by the Southern WV Tourism Bureau, has almost 11,000 views in comparison only one county, Summers, comes anywhere close to the same number of views: <u>https://www.youtube.com/watch?v=qUogzISAIPc</u>

Mountain Music Trail Stops in Monroe County, much of this was filmed near Greenville, near the proposed path of the MVP: <u>https://www.youtube.com/watch?v=pitUIH5ueJo</u>

Monroe County – A Video Postcard: <u>https://www.youtube.com/watch?v=5zunC5H5vU4</u>

Monroe Speaks video movie trailor: https://www.youtube.com/watch?v=J3Rmb8vrKbc

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IND 712-20

Peters Mountain!!!!!!!

Of all the impacts I have talked about in this letter, Peters Mountain is the one that stands to receive the greatest, irreparable impacts. In my opinion building a pipeline such as the MVP across this majestic and environmentally sensitive mountain would utterly destroy it. I will not write too much here as it was addressed adequately by letters that my children and I wrote to the George Washington and Jefferson National Forest earlier in the year; I have attached these letters with this statement.

What I will do is attach a few pictures, as a picture is worth a thousand words. Actually words cannot describe the beauty and importance of this mountain.





IND712-20 Comments noted. The FS has worked with Mountain Valley to develop project design features, mitigation measures and monitoring procedures to minimize the impacts to the resources those standards were designed to protect. These mitigation measures and monitoring procedures are described in the POD.

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 IND
 The previous two pictures were taken just north of Zenith WV in February of 2015, and is looking at

 712-20
 Peters Mountain in the area in which the Alternate 110 corridor would cross the mountain. This area has very steep slopes, cliffs, rock outcroppings and many springs and streams.

The following picture of a Bald Eagle was taken this spring, by UNKOWN and was featured on the Local TV Station (WVVA) as "Picture of the Day" recently. It was taken from the Hanging Rock Observatory.



I have many more pictures (and videos) taken from various areas of Monroe and other nearby counties in WV and VA that I would be glad to share.

Cultural Attachments

Cultural Attachments in this area was first raised in 1996, when APCO proposed a 765Kv Transmission line through the area. The National Forest Environmental Impact Statement from that case raises a very important federal issue for this project as well.

Both routes of the MVP proposed corridors cross Peters Mountain, Waiteville Valley in Monroe County and also Sinking Creek Valley in Craig County Va. I respectfully submit that these same cultural attachments occur in many areas of Monroe County, especially along Ellison's Ridge and The Hans Creek and Indian Creek Valleys and the greater Greenville Community.

As evidence I have already submitted letters written by myself and my children, to the Jefferson National Forest this past spring. There were also numerous letters sent to the GW&JNF by numerous people from the area, which have been or will be submitted to you for this scoping process.

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IND 712-20 cont'd

See the notation made concerning this issue on page 7 of this comment. Also see submissions made by Richard Ettelson Accession # 20161121-0301 on 11/21/2016

Comments to GW and JNF Concerning MVP

 IND
 In February and again in April the GW and Jefferson National Forest solicited comments in regards to allowing a survey of the Jefferson National Forest in Monroe Co WV and Craig, Giles and Montgomery Counties of Va. They received over 3500 comments expressing opposition to this, not only to allow a survey, but also construction of a pipeline across the Forest. At the May 13th Scoping meeting in Summersville WV, I spoke about this and delivered over 1200 paper copies of these comments collected by Monroe County groups opposed to the MVP. I was promised a copy of all the comments submitted to the GW and JNF so that I could forward that to THE FERC as part of this statement. Unfortunately the GW & JNF has not completed this and I have been told that it would not be available in time to get the CD and forward it with this Statement. I will forward it as soon as I get it and request that it be made a part of the record. I have been informed that another opposition group that lives closer to the National Forest Headquarters in Roanoke Va., intends to get the CD and Next Day Express mail it to the FERC.

These comments came from across the United States and even some foreign countries, from people who have a Cultural Attachment and love for this area and the National Forest.

I am also attaching letters from myself and my grown children as part of this statement, which also goes to the Emotional Attachment issue as well as other issues surrounding this project.

My letter to the JNF mentions several YouTube Videos. I request that you view these as part of my comments to the FERC. In addition I wish to add the following YouTube Videos as part of this statement.

Discover Monroe Episode 1 -- Alternate Route 110-- Peters Mountain into the Waiteville Valley https://www.youtube.com/watch?v=OVBQ-uodsUM

Discover Monroe Peters Mountain, Discover Monroe Episode 2-Alternate Route 110 -- Potts Mountain into the Waiteville Valley https://www.youtube.com/watch?v=OVBQ-uodsUM&t=11s

Discover Monroe Episode 3—Appalachain Trail Area, along the proposed route April 2015 https://www.youtube.com/watch?v=YMgw_mQLp9s

Discover Monroe Episode 4 – From Hans Creek Crossing in the Narrows of Hans Creek, across Ellison's Ridge across my farm, back up on to Ellison's Ridge and ending in the Hans Creek Valley at Dunlap's Branch, along the proposed route May 2015 <u>https://www.youtube.com/watch?v=5Ru7K-KYe-g</u>

Discover Monroe Episode 5 –Alternate 110 Peters Mountain into the Zenith Valley May 2015 https://www.youtube.com/watch?v=o4Cy0kWp5qA

Discover Monroe Episode 6 – Oak Hill Ridge down into the Narrows of Hans Creek along the Proposed Route June 2015 <u>https://www.youtube.com/watch?v=8eAw4SZ12xc</u>

IND712-21

We are unable to determine where the commentor's aunt lives in relation to the projects. See the response to comment LA1-7 regarding herbicide use. As stated in section 2.4.2 of the EIS, construction would generally proceed in an assembly line fashion with construction crews moving down the construction right-of-way as work progresses. Construction and restoration at any particular point along the pipeline route would take about 3 weeks total to complete; although progress could be delayed by topography, weather, or other factors.

20161221-5284 FERC PDF (Unofficial) 12/21/2016 1:44:51 PM IND Discover Monroe Episode 7 -- Alternate 110 -- The Knobs Area of Monroe County-- June 2015 712-21 https://www.youtube.com/watch?v=xzEY5hOhVFE&t=149s cont'd Discover Monroe Episode 8 -- Proposed Route from Kimbalton in Giles County VA up Peters Mountain, across Mystery Ridge, along the Wilderness Area, across the AT and ending on the Monroe County side of Peters Mountain VERY IMPORTANT HIKE April 2016. https://www.youtube.com/watch?v=RRFDKURW044 I have included the links to all 8 Episodes, even though some deal with the Alternate 110, they are all informative about the landscape and impacts faced in Monroe County WV and in episode 3 & 8 you get a glimpse of the Appalachian National Scenic Trail and the neighboring Giles County VA Area where the USFS is located. The impacts to the County, the ANST, and the JNF are, in my opinion not really addressed in the DEIS. All potential problems are overlooked, dismissed as non problems or inadequately addressed. IND Multi- Chemical Sensitivity & Environmental Illness / Allergies IND712-22 Karst is addressed in section 4.1 of the EIS. See the response to 712-22 comment IND3-1 regarding drinking water. See the response to My aunt, who lives very near the pipeline as it crosses my family's farm and other areas of Ellison's Ridge and Hans Creek area, suffers from environment illness and allergies. She has reactions to many comment FA11-12 regarding need. chemicals, excessive dust, smoke, and diesel and gasoline engine fumes. Living near her means that I have to be very careful when burning brush or even the wrong types of wood in my wood furnace, especially if the air is moving down the valley. Her Multi- Chemical Sensitivity has kept her isolated in her house for long periods of time in the past. The WV Department recognizes her illness and refrains from spraying near her house to maintain weeds and brush. They had to abandon their house a few years ago and build another one out of natural materials to help to detoxify her. The construction, maintenance and operation of this line near her would affect her health immensely. I know that she also made this comment, nothing in the DEIS has addressed this issue for citizens like her who like on or near the pipeline corridor. IND Statements from Neighbors IND712-23 The MVP is not likely to contaminate springs and wells; see 712-23 section 4.3 of the EIS. While compiling info for this statement I contacted several neighbors, including but not confined to Warren and Judy Ellison. I included some of their information in my statement. The following section contains all or part of these people's statements. Statements from Warren and Judy Ellison "Comments related to the Agricultural past and future aspects on families that have cared for the land for generations. Monroe County itself has relied on this way of life, producing and developing an area of beauty and safety - especially in these valleys and mountains. Families have lived and cared for each other for more than six generations. The adjoining farms have worked together, helping each other in troubled times, celebrating always in good times. One particular concern is of contamination of water resources springs and wells, creeks and ponds...

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IND 712-23

Not only families, but livestock, all kinds of wildlife, all kinds of rare plants will be severely devastated. Abandonment of farm lands, area economics, will be changed forever. cont'd

Great, great damage to the land where excavations. Severe explosions have caused fires, permanent land damage in other parts of West Virginia."

Warren and Judy are both 91 (now 92) years old. Warren was raised in the Hans Creek Valley, Judy moved here in the late 1930's. They have been married for almost 71(now 72) years. They have raised a family on their Bicentennial Farm, where 8 generations of their family have lived or are currently living. They both have served on numerous boards, county and state committees. Judy was the first woman elected to the Monroe County Board of Education in the 1960's. They are still actively involved in their farm and community.

Warren and Judy are still alive and operating the farm with their son Robert. In preparing this comment I asked them if they had anything additional to add. They said that they do not believe that this pipeline was in the public good and that a corridor, whether it be for a single pipeline or multiple pipelines should not be permitted. They also agree with the Indian Creek Water Association, Save Monroe, Preserve Monroe, The Border Conservancy and the Monroe County Commission in their call for a comprehensive hydro-geological study of the public and private water resources in Monroe County (especially in areas of karst) before issuing a Revised Draft Environmental Impact Statement or a final EIS, or approving an MVP route through Monroe County. Also because of the vulnerability of critical water resources in the karst areas on Peters Mountain, they also encourage the GW & Jefferson National Forest office to complete such a study per the request of numerous citizens and citizen groups as well as public officials, on Peters Mountain before any decision is made about crossing this unique aquifer.

As I stated in my opening remarks, I do not believe that this pipeline is needed. It is certainly not a good idea to build it or any such pipeline through this area, whether it be the public National Forest or the pristine and sometimes unique private properties of the area. We don't want it. We don't need it. It does us no good-only harm.

YOU CAN NOT MITIGATE THESE PROBLEMS. YOU CAN ONLY DESTROY PROPERTY AND PEOPLE'S LIVES WITH THIS PIPELINE THROUGH MONROE COUNTY AND SURROUNDING AREAS.

Another picture of Peters Mountain where the Proposed Corridor would cross!!!!

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My qualification to make these statements and observation are:

IND 712-23 cont'd

I was born in the area and have been a lifelong resident of the area. I have been active all my life in farming activities. I have hiked, rode horseback and explored much of the area, including explorations of local caves. When I was younger I would often lead groups into the Greenville Saltpeter Cave or Laurel Creek Water Cave.

I attended Greenville Elementary and Junior High Schools. I graduated from Union High School. I attended Concord College, entering as a Science Major. I graduated with a BS Degree in Education. I worked in education for over 20 years. I am an avid reader of history, science and nature. I am an avid hiker and I am a member of the Appalachian Trail Conservancy.

I am deeply invested in the area around me and I take great care and expend much energy in educating myself about the facts of any particular issue that comes about that affects the area.

These are just a few of my qualifications to make these comments.

I would like to thank the many people who assisted me with these comments: Nancy Bouldin, Autumn Bryson, Dave Crowe, Warren and Judy Ellison, Irene Larew, Dorothy Larew, Craig Mohler, the people of Preserve Monroe, Save Monroe, The Border Conservancy, Preserve Craig, and Preserve Giles, to name just a few.

Also I would like to thank the following for allowing me to use their photos: Paula Oliver Mann, Novell P. Mann, Nancy Prince and Robert Larew

Bald Eagle Flying near Proposed MVP Corridor over Indian Creek, January 2015 — with Ellison's Ridge and Peters Mountain in the background

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IND

Page 37 through 52 of this Comment is just a re-submission of my earlier Scoping Comment made in June 2015. I unfortunately have not had the time to cross-reference the DEIS with these comments and wish to reserve my rights to bring these issues to administrative or legal complaint if I do not see them addressed in the Final EIS.

712-23 cont'd

INDIVIDUALS IND713 – Ellen Zinder

20161221-5291 FERC PDF (Unofficial) 12/21/2016 2:24:33 PM

IND 713-1 Ellen Zinder, Midlothian, VA. I'm very concerned about the pipeline that is proposed to go through Virginia. Historically pipelines have leaked, forests have been destroyed, soil has eroded and fracking causes earthquakes. We should be putting time and energy into alternative fuels that don't damage the earth.

IND713-1 See the response to comment IND92-1 regarding leaks. See the response to comment IND70-1 regarding erosion. See the response to comment IND2-3 regarding hydraulic fracturing. Earthquakes and forests are discussed in sections 4.1 and 4.4, respectively. Renewable energy alternatives are discussed in section 3 of the EIS.

INDIVIDUALS IND714 – Thomas Queen

20161221-5293 FERC PDF (Unofficial) 12/21/2016 2:26:47 PM

Thomas Queen, Richmond, VA.

IND The DEIS fails to meet the regulatory standard to justify crossing the Jefferson National Forest. The applicant is required to show that there is no reasonable alternative to crossing Forest Service lands or the request must be denied. The applicant and FERC have merely given the opinion that the route crossing the Forest is preferable - this does not satisfy the law. Therefore I strongly oppose the application for a Special Use Permit to cross the Jefferson National Forest and the requests for amendments to the Forest Plan. I believe the Bureau of Land Management (BEM) and the Forest Service must reject these proposals and I urge you to do so as well.

IND714-1

See the response to comment IND695-2 regarding alternative crossings of the Jefferson National Forest.

INDIVIDUALS IND715 – Pamela P. Humphrey

20161221-5292 FERC PDF (Unofficial) 12/21/2016 2:24:56 PM Pamela P. Humphrey, Newport, VA. 20 Dec. 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulator Commission 888 First Street, NE Washington, DC 20426 Ms. Bose and Members of the Commission Subject: MVKKP C16-10-000 Draft Environmental Impact Statement IND The following quotation is from DEIS p. ES-13, paragraph 5. 715-1 "Because existing systems have their capacities already subscribed, there could not be enough space available on those systems for the additional volumes proposed by Equitrans (0.4Bcf/d) and Mountain Valley (2Bcf/d)." The Paul Washburn submission of 29 Dec 2014 and the Synapse document of 12 Sep 2016 refute this conclusion. The Washburn report was developed from data gleaned by the United States Energy Information Administration. This data alone proved (using data gathered by a nonbiased federal government agency) the pipeline is not necessary since energy needs can be met with existing structure, with some modification, for the next 30 years. The Synapse report came to the same conclusion. This being the case it is unconscionable to create a behemoth of unknown integrity given our steep terrain, seismic potential and slip soil prevalence, to cost landowners their property through eminent domain, or their water quantity and/or quality. We are farmers. Without sufficient and good quality water our land has no value. The primary purposes of this pipeline are: to pave the pockets of MVP stockholders and provide gas for export. For rural Virginians this means at best a one time payment for permanent degradation of their property. For the county it means a loss of property taxes due to reduced land value. For future generations it means no available gas since the Marcellus shale deposit will have gone overseas to make a buck. We are disgusted and horrified at the procedure allowing this travesty to happen.

> Pamela P. Humphrey 167 Placid Lane Newport, VA 24128

IND715-1

Non-environmental FERC staff may review the Synapse report. The Commission Order would discuss markets for natural gas in the region. See the response to comment FA11-12 regarding need. The EIS provides a discussion of steep slopes, seismic activity, and landslides in section 4.1. See the response to comment IND1-3 regarding eminent domain. See the response to comment IND2-3 regarding export. See the response to comment IND12-1 regarding property values. See the response to comment IND3-1 regarding drinking water.

INDIVIDUALS IND716 – Gin Johnson

20161221-5294 FERC PDF (Unofficial) 12/21/2016 2:28:15 PM

Gin Jackson, Milton, WV.

IND West Virginia is my home and I love it dearly. This pipeline would have disastrous consequences for my home state. WV doesn't have great infrastructure and we're already one of the poorest states in America. People also have a very negative view on us due to harsh and inaccurate stereotypes. The Appalachian Trail is one reason they have to come here and experience both West Virginia and Appalachia for themselves. Not only would it have severe environmental consequences, but it would hurt us economically as well. We don't have a great economy as is, and the tourism we get from the Appalachian Trail helps sustain smaller towns and businesses. If you ruin part of the trail, you're also hurting a lot of rural places that really depend on the money.

IND716-1

Socioeconomics are discussed in section 4.9 of the EIS. Tourism is discussed in section 4.9 of the EIS. A revised visual analysis of the ANST can be found in section 4.8 of the final EIS.

INDIVIDUALS IND717 – Pamela P. Humphrey

20161221-5296 FERC PDF (Unofficial) 12/21/2016 2:33:07 PM Pamela P. Humphrey, Newport, VA. Measurements to Clarify Distance Discrepancies in Historic Newport, Giles Co., VA 19 April 2016 David Walker and Susan Edwards IND Materials: Rolatape Professional Series model 300S 717-1 Apple I Phone ME543LL/A (camera & GPS app) Methods: Susan and David walked from the northwest corner of the Newport Recreational Center directly to the MVP roadside marker flag, rolling the Rolatape device to measure footage which was recorded. Pictures were taken of the Rec Center corner and the MVP roadside flag on the north side of State Route 42. The Rolatape device was reset to 0000.0. Susan & David then proceeded southeast along the edge of State Route 42 to Newport Mount Olivet United Methodist Church, rolling the device to measure footage which was recorded. Newport Rec Center--GPS reading: 37degrees, 17.929'N, -80 degrees, 29.530'W (±8M) Distance (in feet) from Rec Center to MVP roadside flag 283' MVP roadside flag--GPS reading: 37degrees, 17.895'N, -80 degrees, 29.573'W (±6M) Distance (in feet) from MVP marker to Newport Mt. Olivet United Methodist Church 1117' NMOUMC - GPS reading: 37 degrees, 17.739'N, -80 degrees, 29.672W (±6M) A mile consists of 5,280 feet. A half mile consists of 2,640 feet. A quarter mile consists of 1,320 feet. The proposed site of the pipeline crosses State Route 42 between two High Consequence Areas a little more than a quarter mile apart (1117' + 283' = 1400'). Actually the distance between the two sites is shorter than that as our measuring team followed the winding road from the MVP flag to the church instead of taking the direct route over an intervening hill. It is impossible to have either High Consequence Area the required 4 mile from the pipeline path. The above document consists of data. It contains the site of the study; the date the study was done; the names of the people involved; the materials and methods used, and the data gleaned by that effort. Please note the difference between this study and those submitted by Mountain Valley Pipeline and its various minions.

The commentor's distances between the proposed MVP pipeline and the Newport Recreation Center and the Newport Mount Olivet United Methodist Church are noted. These distances may not be accurate because they were taken in April 2016, and Mountain Valley modified its route in October 2016. Mountain Valley has stated that its pipeline would be 945 feet away from the Newport Recreation Center (1933 High School), and 430 feet away from the Mount Olivet Methodist Church.

IND717-1

INDIVIDUALS IND718 – Pamela P. Humphrey

20161221-5302 FERC PDF (Unofficial) 12/21/2016 Pamela P. Humphrey, Newport, VA. 20 Dec. 2016 Ms. Kimberly Bose, Secretary Federal Energy Regulator Commission 888 First Street, NE Washington, DC 20426 Ms. Bose and Members of the Commission Subject: MVKKP C16-10-000 Draft Environmental Impact Statement IND 718-1 The following quotation is from DEIS p. ES-9, paragraph 2. 'Fourteen of the 17 counties in the MVP area have poverty rates that are higher than the respective statewide levels." Choosing impoverished counties constitutes disproportionate effect and should not go without a legal challenge. The selection of these 14 counties for the pipeline route almost guarantees landowners will not be financially able to conduct an effective legal battle if a legal battle becomes necessary to ensure compliance with guidelines or remediate wrong doings.

MVP, possibly anticipating such issues, has obscured liability by inserting 3 layers of LLC's between property owners and the company. A lawsuit against The FERC may also be necessary if due diligence is not followed in evaluating the data MVP submits. Private citizens are finding a myriad of unchallenged errors recurring on subsequent documents. This is not reassuring.

Pamela P. Humphrey 167 Placid Lane Newport, VA 24128 IND718-1

As further stated in the Executive Summary of the EIS, the projects would mitigate for impacts on low-income communities through short-term employment, spending on commodities, and generation of tax revenues that would stimulate the local economy. The environmental justice analysis provided in section 4.9 of the EIS is consistent with EO 12898. Section 4.9.2.8 indicates that impacts from the projects would not disproportionately fall on environmental justice populations. Further, impacts on these populations would not appreciably exceed impacts on the general population.

INDIVIDUALS IND719 – Evan Nicely

IND

719-1

20161221-5313 FERC PDF (Unofficial) 12/21/2016 3:08:05 PM

Evan Nicely, Vinton, VA.

Degradation is one of the best words I can think of to describe the proposed pipeline. It's taking advantage of a rural area that lacks wealth in order to drive economic prosperity towards energy companies. I'm one to almost always be a proponent of using natural energy resources we have access to, such as natural gas and oil, but trying to impact areas and people as little as possible and this does is a damaging plan. This pipeline will not create jobs for the region or do anything for us but tarnish Virginia's best natural resource, it's beauty. On top of proposing a path cutting through the Appalachian Trail and people's land, to go ahead and publish a draft that is littered with errors is beyond disheartening. It wouldn't pass a college presentation with any muster and it's supposed to give us a an idea of what to expect? The Appalachian Trail's beauty, especially the views from its peaks and overlooks, is irreplaceable and more attractive and valuable to the region than running a pipeline. We all know the pipeline won't drive down energy costs for those of us who live in the surrounding area. To propose that it would be an economic driver for the region is to ignore actions of energy complains from the preceding decades. It is nothing more than energy companies attempting to use and abuse those in rural areas who rely on farm land and outdoor attractions to help drive the local economy. It is not worth trading those two for a pipeline that does nothing to serve those it causes a disservice to. I expect no one to read this and complaints to fall on deaf ears that are turned to incentives from energy companies but honestly think for a second about what this does to those of us who actually call this area home. If you don't want a pipeline running through your backyard, don't you dare run it in someone else's.

IND719-1

See the response to comment IND281-2 regarding jobs in Virginia. A revised visual analysis of the ANST can be found in section 4.8 of the final EIS. Socioeconomics and tourism are discussed in section 4.9 of the EIS.

INDIVIDUALS IND720 – John Rubel

20161221 Date: Dicember VI, 10 Dicial) 12/20/2016 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Onler -Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 Dear Secretary Bose, 4,3,1.1 I am commenting on Section _ of the Draft Environmental Impact IND Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, 720-1 Drinking Water <u>A supplemental EIS</u> is needed to identify private & domestic drinking water webs on the pipeline route, to determine impact on them. Docket No. CP16-13-000. I request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. 間に20 戸東 5200251 P.C. Sincerely, John Rubel Name: Address: Pob 1087 City & State: Lewisburg WV 2490 Zip Code:

IND720-1

A final EIS was produced to address comments on the draft. Water supply wells are discussed in section 4.3 of the EIS.

INDIVIDUALS IND721 – John Rubel

20161221 2013 HERC EDF (Unofficial) 12/20/2016 Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First St. NE, Room 1A Washington, DC 20426 Re: Draft Environmental Impact Statement, Docket No. CP16-10-000 & CP16-13-000 Dear Secretary Bose, IND || am commenting on Section _ 4.6 Docket No. CP16-13-000.

of the Draft Environmental Impact 721-1 Statement (EIS) for the proposed Mountain Valley Pipeline, Docket No. CP16-10-000 and Equitrans Expansion Project, Aquatic Resources MVP has to submit their info on Sedimentation & tubbidity from the wet crossing method, so you can figure out the impact on fishinies and aquatic life request that the issues listed above be fully addressed in the Final EIS. If these issues are not addressed in the Final EIS, then I request that FERC chose the No Action Alternative. Sincerely. 2世に20 になる Name: John Rutel Address:_POB 1087 aty & state: Lewisburg, WV 2490 Zip Code:

IND721-1

C. A. C. C.

A revised discussion of sedimentation and turbidity can be found in section 4.3 of the final EIS and in the response to comment FA11-15. Since Mountain Valley would cross all waterbodies using dry techniques, there would be a low potential for downstream sedimentation and turbidity.