

# EQM's MVP May be Completed, but Not by Mid-2020

Companies: COG, D, ED, EQM, EQT, ETRN, NEE, RGCO, TSX:ALA

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## Research Question:

**Will EQM's Mountain Valley Pipeline ever get completed? Can it meet its new project deadline of mid-2020?**

## Summary of Findings

- Opinions regarding the on-time completion of [EQM Midstream Partners LP's](#) (EQM) Mountain Valley Pipeline (MVP) project were mixed, trending toward successful completion—but not by its projected mid-2020 in-service date.
- Despite past problems, work stoppages, and what most sources consider poor project management, nine sources expect the MVP project to overcome its current legal, permitting, environmental, and construction challenges and eventually be completed. Six sources were not sure or see a chance that final construction of the MVP will be halted.
- All four sources representing the gas pipeline industry, three government officials, and two trade journalists expect that the MVP will be finished. Sources noted that the project is 80% to 90% complete—which creates strong momentum. There is significant demand for the gas, and EQM and its partners are committed to completing the pipeline.
- The six sources who question whether the MVP will be completed said the numerous legal and permitting challenges are significant roadblocks. They also noted other headwinds that could derail completion of the pipeline, including the escalating cost of the project (originally projected at \$3.5 billion, now estimated at \$5 billion), poor project management, and the expectation that the gas transported through the pipeline will be premium priced and, therefore, uncompetitive. One source said partners and customers may opt out of commitments to the project. This source added that domestic demand is slowing.
- Another issue facing the MVP is its need to cross the Appalachian Trail (AT). EQM has proposed a [land swap deal](#) to resolve this issue and is awaiting a decision. However, the outcome of a pending [Supreme Court appeal](#) by the [Atlantic Coast Pipeline](#) (ACP) regarding its invalidated permit to cross the AT could negatively impact the MVP.
- One source did suggest that EQM and its partners could commence partial service with an incomplete MVP, should it not be able to complete construction.

## Silo Summaries

### 1) MVP Contractors and Suppliers

Two former and one current MVP pipeline inspector said the project will be completed; however, the mid-2020 in-service date will not be met. Poor project management, including nepotism and micromanagement, and inexperienced and aggressive inspectors are key problems that have slowed construction, according to two sources.

### 2) Pipeline Operator

A consultant working for the Atlantic Coast Pipeline said the MVP will get completed but the challenge is to know when. Groups opposed to fossil fuel projects are receiving increased funding and are able to mount more legal challenges than has been seen in the last 10 or 20 years.

### 3) Government & Environmental Officials

Of the six sources, the three who are environmental activists are uncertain that the MVP will be completed. All three of these sources agree that the pipeline, if completed, will not meet the mid-2020 in-service date. The other three sources—that include a representative of a local county government and two state environmental agency representatives—expect the pipeline will be finished. Two said the mid-2020 completion date is unlikely, while the other source thinks the opposite. The sources that think there is a possibility of the MVP not being finished cited the numerous pending court challenges, permitting issues, poor management, steep terrain, and the escalating cost of the project, which will make gas transported in it too costly to be competitive.

### 4) Industry Specialists

One journalist said the MVP will be completed and it will get done on time. He said it is the crown jewel of EQM and there is a lot of demand for the gas it will transport. Another journalist agrees that the MVP is a needed pipeline and the owners are committed to completing the project. The third trade publication source is unsure if the MVP will be completed, but he also sees a strong customer base for the gas. The former utility executive said the completion is less likely today because of the project's escalating costs and slowing demand for gas that is expected to continue to decline.

# EQM Midstream Partners/Mountain Valley Pipeline

	MVP Completed	MVP Completed Mid-2020
MVP Contractors and Suppliers	↑	↓
Pipeline Operators	↑	↓
Government and Environmental Officials	→	↓
Industry Specialists	→	↓

## Background

Blueshift's initial research found EQM Midstream Partners and its partners' Mountain Valley Pipeline project continuing to battle legal and regulatory challenges in its effort to complete construction. Continuous headwinds since the start of the project have come from environmental groups, local and state governments, landowners, and regulators. EQM has aggressively navigated the litigation, but setbacks have caused the company to delay its completion timeline and incur additional production costs, fines, and mitigation cost along the way. Projects like the MVP typically face these kinds of operational challenges, but investors have concern that the project will continue to be interrupted by delays, shutdowns, and escalating costs that could cause its demise.

The MVP project is a key future growth driver for majority holder EQM (45.5%) and an important future gas transportation asset for its partners [NextEra Energy Inc.](#) (NEE), [Consolidated Edison Inc.](#) (ED), [AltaGas Ltd.](#) (TSX:ALA), and [RGC Resources Inc.](#) (RGC0). The MVP is a 300-mile, 42-inch diameter natural gas interstate pipeline with a targeted capacity of 2.0 Bcf per day that will span from EQM's existing transmission and storage system in Wetzel County, West Virginia, to Pittsylvania County, Virginia, providing access to the growing demand markets in the Southeast.

Construction of the MVP began in the spring of 2018 with a completion goal of fourth quarter 2019, after three years of project planning that included civil and environmental surveys, route planning, public hearings, and responses and adjustments to address comments and concerns of landowners, community members, government agencies, and elected officials located along the proposed route.

From the start of construction—and throughout the MVP project—numerous headwinds confronted EQM. Protesters sit in treetops and chain themselves to construction equipment along the proposed route. Work stoppages are imposed by the Virginia Department of Environmental Quality due to environmental issues. A sample of challenges the MVP project faced in August alone that have hampered management and construction include:

- Aug. 30: Two protesters were [arrested](#) for locking themselves to MVP construction equipment.
- Aug. 28: The Federal Energy Regulatory Commission [requested](#) that the U.S. Fish and Wildlife Service start over on its permitting process for the MVP because the project does not have a valid Biological Opinion and Incidental Take Statement. Work on the MVP could be stopped until the proper permits can be obtained.
- Aug. 27: MVP gets Federal Environmental Regulatory Commission (FERC) [approval](#) for water crossing changes.
- Aug. 21: Seven organizations [asked](#) a federal court to stay a 2017 approval for the pipeline by the U.S. Fish and Wildlife Service to protect endangered species.
- Aug. 15: The MVP voluntarily [suspended](#) work three days after a lawsuit raised questions about its impact on endangered species.
- Aug. 2: A federal court [refused](#) Mountain Valley Pipeline's request to remove tree sitters in Virginia.
- Aug. 2: The Virginia Department of Environmental Quality [ordered](#) a halt to construction on part of the MVP because "an imminent and substantial adverse impact to water quality is likely to occur as a result of land-disturbing activities."

# EQM Midstream Partners/Mountain Valley Pipeline

Despite all the lawsuits, challenges, and protests, EQM reported that the MVP project is 85% complete and predicts it will now be completed by mid-2020. However, the project is still [navigating](#) permit problems and a resolution to a land swap deal with the Jefferson National Forest. Diana Charletta, Chief Operating Officer of EQM, said, "... we are working diligently to resolve the project's remaining legal and regulatory issues."

## Current Research

Blueshift Research assessed whether EQM would be successful in completing the MVP at all and, if so, whether it will meet its revised in-service date of mid-2020. We employed our pattern mining approach to establish four independent silos, comprising 15 primary sources and three secondary sources focused on the oil and gas pipeline industry. Interviews were conducted September 9-20.

- 1) MVP contractors and suppliers (3)
- 2) Pipeline operator (1)
- 3) Government and environmental officials (6)
- 4) Industry specialists (5)
- 5) Secondary sources (3)

## Next Steps

Blueshift Research will continue to research the various issues facing EQM and the MVP to determine if any could threaten final completion of the project. We will monitor MVP partners to see if any are considering opting out of the project. Finally, we will research what the MVP in partial service would mean for EQM.

## Silos

### 1) MVP Contractors and Suppliers

Two former and one current MVP pipeline inspector said the project will be completed; however, the mid-2020 in-service date will not be met. Poor project management, including nepotism and micromanagement, and inexperienced and aggressive inspectors are key problems that have slowed construction, according to two sources. One of the two sources rated the management of the MVP project as a 0 to 1 on a scale of 1 to 10, with 1 representing very poor management and 10 excellent management. The current MVP contractor, an inspector, said MVP management is solid and delays are being caused by senseless lawsuits and activist judges. One source said finding labor next year to complete the project will be a challenge.

#### Key Silo Findings

##### Background

- 2 former MVP crew foremen.
- 1 current MVP safety specialist.

##### MVP Completion

- 3 said the MVP will be completed, but not by the mid-2020 in-service date.

##### Project Headwinds and Roadblocks

- Poor management, unqualified and aggressive inspectors, environmental issues, senseless lawsuits, and activist judges.

##### MVP Partners and Customers

- Did not discuss.

##### Miscellaneous

- 1 rated the MVP management at 0 to 1 on a 1 to 10 scale, with 1 representing very poor and 10 representing excellent.

# EQM Midstream Partners/Mountain Valley Pipeline

## 1) Former MVP foreman who ran a crew for Precision Pipeline, LLC

The project is unlikely to be completed until 2021. Management appears disorganized and inefficient. This foreman and his workers spent two weeks this summer getting paid but doing nothing. Micromanagement is so rampant that routine decisions like working an hour of overtime to finish a project require approval. Instead of completing work while the weather is still good, the project is winding down for winter. Workers might be unwilling to return in 2020, instead opting to go to better-managed pipeline projects.

### Background

- A veteran pipeline builder who left the project after growing disgruntled with what he considered mismanagement. He says he was fired after cursing at an inspector.

### MVP Completion

- “I think it will be completed. But it’s going to be another year at least. They’ve got a bunch of permits. They can go ahead and do some things. And they said, no, we’ll just wait until next year to do them. I don’t understand the purpose of it. I think the gas company is way over their head. They’ve done some smaller projects, but they’ve never done anything of this magnitude. They’re well over their head.”
- “They have got permits to do a bunch of stuff right now. There is good weather right now. They should be doing a lot of stuff. [Instead,] they’re winterizing right now. They’re closing it up. They told us they want a start date of April 6 of next year. From what I’ve seen, there’s over a year’s worth of work.”
- “If you needed to work overtime an hour to complete a well, you need to call in and get approval. I’ve never seen that. They’re just stalling and spinning their wheels. It got to the point where if you said you want an Egg McMuffin for breakfast, it would take a three-day meeting.”
- “The way things are going, I’m saying 2021 [regarding the completion date].”
- “Zero. A one, I guess [for management of the MVP on a scale of 1 to 10]. It’s terrible. I think there are some people in the gas company who just have no idea what they’re doing.”
- “It was so screwed up, I just came home. I’ve been doing this for 41 years and I’ve never seen anything like it.”
- “The inspection is controlling the whole thing, and the inspectors don’t have a clue what they’re doing. They’re hiring people who absolutely do not know what they’re doing. These people they’re getting out there are total idiots. There are some very intelligent inspectors I know who are not working, and the people they are getting are idiots.”
- “The first two weeks I was there, all we did was sit in the warehouse and do nothing. They put all these people on the payroll and we have all this expensive equipment, but we’re going to have you sit here because we haven’t decided what we want to do. Management is burning money.”
- “They had to have a two-week committee meeting to decide anything.”

I think it will be completed. But it’s going to be another year at least.

*Former MVP foreman who ran a crew for Precision Pipeline*

### MVP Project Headwinds and Roadblocks

- “From what I’ve seen, they’re going to have a hard time getting personnel to come back next year.”
- “Next year is looking like it’s going to be a busy year for the pipeline industry.”

### MVP Partners and Customers

- Did not discuss.

### Miscellaneous

- “You’ve got environmental concerns. The thing of it is, this is a natural gas pipeline. It’s not a crude oil pipeline. Natural gas is lighter than air. The whole idea of natural gas is to get off of coal-burning power plants. I think the protesters just don’t understand.”
- “I had a top-quality crew. Most of them had been working for me for years.”
- “It’s pretty rugged [terrain], but, to tell you the truth, I’ve been through a lot worse. I’ve worked out in Colorado, Idaho, and Utah.”

# EQM Midstream Partners/Mountain Valley Pipeline

## 2) Longtime pipeline worker who has built projects around the world; served as a foreman on the MVP project

The MVP's construction challenges are not especially difficult; however, poor management of the project is creating obstacles. Inexperienced inspectors are making costly decisions, such as demanding rework for no reason, and slowing the project's progress.

### Background

- A union pipeline worker who ran a crew for Precision Pipeline on the MVP project.

### MVP Completion

- “[The chosen pipeline path] doesn't seem to be any rougher than any of the other stuff I've worked on in the last few years. Precision has the equipment there. As long as they pay us guys who are professionals, it'll get done. As long as the weather is as nice as it is now, it'll get done real smooth.”
- “Ain't no way. No way at all [MVP will meet a mid-2020 in-service date].”
- “They've run in there and put all the easy stuff in, and all the hard stuff is yet to go—and that's all the time-consuming stuff. All the drywash crossings, the steep slopes yet to do.”
- “From what I see down there, somebody needs to clean house. They need to go in there and get 'em all wiped out. All them guys are doing is milking it like a cow with 10 tits. The inspection guys, the contractors, they've got their families in there, fathers and sons working there.”
- “It is one of the worst situations I've seen in the last few years. I've seen a lot of stuff over the last 30 years. The inspection company was calling whatever shots you want to make, and they were just milking things to death. They were making stuff time-consuming and really not doing no work.”

[The chosen pipeline path] doesn't seem to be any rougher than any of the other stuff I've worked on in the last few years. Precision has the equipment there. As long as they pay us guys who are professionals, it'll get done. As long as the weather is as nice as it is now, it'll get done real smooth.

*Longtime pipeline worker who has built projects around the world; served as a foreman on the MVP project*

### MVP Project Headwinds and Roadblocks

- On managers and inspectors: “These guys don't know a bird has feathers. They see a little raincloud at one o'clock in the afternoon and they want to button everything up for the day. They were sticklers on saving money—but on the wrong things.”
- “They cut out a \$40,000 weld I did—for no reason. There was nothing wrong with that weld. I'm a professional. The inspector didn't like it and he ordered another team to cut it out. That's \$40,000 down the drain, for no reason.”
- “Being an inspector is like riding a bucking bronco—if you don't know what you're doing, you better stay out.”

### MVP Partners and Customers

- Did not discuss.

## 3) Senior safety specialist

The MVP will get completed. Current delays are being caused by senseless lawsuits and activist judges. Other options for transporting natural gas put the general public at risk for truck and rail car accidents. [EQT Corporation](#) (EQT) management is very solid.

### Background

- “Safety specialist on the MVP.”

### MVP Completion

- “Yes. The MVP will be completed. The activists that are arguing about private property rights have [double standards].”
- “EQT is an incredible company to work for. The upper management team members I got to meet were solid people.”

### MVP Project Headwinds and Roadblocks

- “Senseless lawsuits and activist judges are causing delays. That is the root cause to all the delays.”

### MVP Partners and Customers

- “Any other options for transporting harmless natural gas put the general public at risk for human error issues, such as truck and passenger car errors causing accidents, rail car issues, etc...”

# EQM Midstream Partners/Mountain Valley Pipeline

## 2) Pipeline Operator

A consultant working for the Atlantic Coast Pipeline said the MVP will get completed but the challenge is to know when. Groups opposed to fossil fuel projects are receiving increased funding and are able to mount more legal challenges than has been seen in the last 10 or 20 years. EQM's management of the MVP is rated a 5 out of 10. The planning was poor, with different portions of the project managed in separate silos. Promises made by land agents and the environmental permitting group were unrealistic and construction crews could not keep them. An issue that EQM still has to face is related to the pipe waiting to be installed. The coating of the pipe has been degraded by UV rays and it will be expensive to fix this. No partners or customers have officially withdrawn, though there have been rumors. An option for EQM, if they find they cannot complete all 303 miles of the pipeline, would be partial in-service. Another option would be to route the natural gas through existing pipelines, based on capacity.

### Key Silo Findings

#### Background

- 1 is a consultant on the Atlantic Coast Pipeline and other pipeline projects.

#### MVP Completion

- 1 said the MVP will get completed, but not by mid-2020. The source added that the operator may put the pipeline that is completed in service ahead of full completion.

#### Project Headwinds and Roadblocks

- 1 said continued funding for fighting the pipeline will lead to additional legal challenges.
- 1 said the coating on the pipe waiting to be installed is degrading due to exposure to the sun and will be costly to fix.

#### MVP Partners and Customers

- 1 said he was not aware of any partners or customers abandoning the project but has heard "noise" about partners having second thoughts.

## 1) Consultant on Atlantic Coast Pipeline and other projects

#### Background

- Project director on various pipelines.

#### MVP Completion

- "I think the MVP will get completed."
- "The caveat is that the legal environment is now very different from what I've seen in my twenty years in the natural gas pipeline industry. This casts doubt on the outcome."
- "There are political influences in the country that are drawing division. Sometimes the facts are less important than the power struggle between political parties. There is much more support and funding to fight fossil fuel projects."
- "Lobbyists from both sides are trying to influence regulatory bodies like the U.S. Fish and Wildlife Service. Fossil fuel operating companies building the pipeline and non-governmental environmental organizations are competing for attention and influence. The regulatory bodies are sometimes even getting challenged for not doing their job properly, such as in the recent Circuit Court ruling."
- "This is something we didn't see 10 years ago, let alone 20 years ago."
- "My professional opinion is that the MVP will be completed. Rarely do projects this big not get finished. There are capital costs on the books that would need to be written off if they can't capitalize on them."
- "I've seen projects stopped and delayed for 10 years and still get built, like the [Millennium Pipeline](#). The scope was reduced, but it eventually got built."
- "I think the pipeline will be completed—but when is going to be the challenge."

I think the MVP will get completed. ... The caveat is that the legal environment is now very different from what I've seen in my twenty years in the natural gas pipeline industry. This casts doubt on the outcome.

*Consultant on Atlantic Coast Pipeline and other projects*

# EQM Midstream Partners/Mountain Valley Pipeline

- “Based on the percentage of pipe already in the ground and how much is still left to do, the full project might not get completed by mid-2020, but they may look at putting the project partially in service. I know from experience that companies can do that.”
- “If they’re struggling to get all 303 miles in service for flowing gas, they can look at opportunities in staging compressor stations and measuring stations on the route to do a partial in-service. They would be missing out on the major goal of the project, but they would still be mitigating their damages.”
- “I worked on the MVP for about six months. Nobody plans a project perfectly and there are always pros and cons involved, but I would give EQM a 5 out of 10. Five may be a little gracious.”
- “The planning has been poor. Some of the land agents were making promises nobody could keep. They were fulfilling weekly objectives and doing whatever they needed to get signatures, regardless of the effect on construction downstream.”
- “EQM managed different major portions of the project in silos. The land agent group was getting right of ways under their own management and oversight. The natural resources and environmental permitting group was also separately making promises that construction could not meet later.”
- “They had a 72-hour requirement on stream crossings in West Virginia that was ridiculous, particularly because it was an open cut. Construction, of course, wasn’t able to do it. That turned into a major issue and they had to get revised permits that resulted in delays. It was poor planning up front. They should have had centralized oversight of the entire project to manage the environmental aspects, the landowner aspects, and the construction and engineering aspects.”
- “The Atlantic Coast Pipeline had some of the same issues, but not to the same level of severity.”

## MVP Project Headwinds and Roadblocks

- “An issue that will be coming up is [the coating of the pipe, which has been sitting outside](#). Groups have complained to FERC and the U.S. Pipeline and Hazardous Materials Safety Administration, part of the [U.S. Department of Transportation]. A lot of the pipe was ordered up to 6 years ago. The UV rays degrade the coating over time. They could protect the coating by white washing it and with other methods. They have taken some measures, but not to the level I think they should have. It’s going to be a concern in the future in terms of the integrity of the pipe. It can be addressed but it’s going to cost money to fix it. You can’t have an unsafe pipeline. It’s not something that you can compromise on.”

## MVP Partners and Customers

- “As far as I know, their partners are still committed to the project but there’s always some noise about second thoughts. I’m sure there are discussions, but I’m not privy to them. As far as I know, there haven’t been any official actions taken.”
- “One option is partial in-service of the pipeline. Another option is taking some of the volume and capacity that they sold and route it through existing lines. That may make it difficult for certain customers, but I believe most of the customers on the MVP are production companies that want to get the gas out to [shippers] to go to market. Their gas could be routed through another pipeline, assuming there is capacity.”

## 3) Government & Environmental Officials

Of the six sources, the three who are environmental activists are uncertain that the MVP will be completed. All three of these sources agree that the pipeline, if completed, will not meet the mid-2020 in-service date. The other three sources—that include a representative of a local county government and two state environmental agency representatives—expect the pipeline will be finished. Two said the mid-2020 completion date is unlikely, while the other source thinks the opposite. The sources that think there is a possibility of the MVP not being finished cited the numerous pending court challenges, permitting issues, poor management, steep terrain, and the escalating cost of the project, which will make gas transported in it too costly to be competitive. One of the sources that thinks the MVP will be completed said there are only 60 miles left to build, the compressors are completed, and the money spent to date will likely motivate the partners to complete the project. The other said the MVP had met its state obligations for inspections and remediation of problems. Other than possible fines, there is nothing on the state level that will delay the project. That source did say that the federal endangered species issues still needs to be resolved.

# EQM Midstream Partners/Mountain Valley Pipeline

## Key Silo Findings

### Background

- 3 environmentalists.
- 3 government officials.

### MVP Completion

- 3 environmentalists are unsure that the MVP will be completed. If completed, all 3 think it will not be completed in time to meet the mid-2020 in-service date.
- 3 government officials expect the MVP to be completed. 2 expect the in-service date to be missed and 1 thinks it will be completed on time.

### Project Headwinds and Roadblocks

- Court challenges, permitting issues, poor MVP management, steep terrain, and the escalating cost of the project.
- 1 source said the escalating cost of the pipeline could render the gas transported through it too costly to be competitive.

### MVP Partners and Customers

- 1 said this project is not being motivated by domestic demand, but the partners' desire to export it.
- 1 said the need for additional gas transmission capacity in the Roanoke Gas Company service area is debatable. They added, however, that it is too late for Roanoke to have second thoughts.
- 1 said most of the MVP partners have plans for using the gas outside of the area the pipeline traverses. Roanoke Gas, the local partner, was determined by state utility regulators to have sufficient supply from its existing sources and denied the gas company's request for a rate increase.

## 1) David Sligh, conservation director at Wild Virginia and former senior environmental engineer for the Virginia Department of Environmental Quality

There is a possibility that the serious nature of the MVP construction issues—including permitting problems, pollution issues, and the endangered species concern—could curtail the project. However, this source acknowledges that with a project this far along, that is unlikely. The mid-2020 in-service date is optimistic, as the operator has to complete analysis and secure a Corps of Engineers permit to cross hundreds of bodies of water. This 40-year water management professional said the MVP project management is one of the worst he has ever seen.

### Background

- Sligh is an environmentalist whose organization is suing the MVP.

### MVP Completion

- "I think there is a possibility that it won't be completed, but once a project has gotten as far along as this one has, there's a lot of leverage and a lot of momentum. I think it is fair to say that completion of the MVP by mid-2020 seems very optimistic."
- "They have some pretty serious problems. The court challenges, the federal permits that have been invalidated already—especially the Forest Service one—are going to be a big problem."
- "The court found they had totally underestimated the amount of pollution they were likely to cause from the construction. It's even more extreme than what many of us had predicted."
- "They're going to have to provide some analysis that shows this thing can be built without causing major damage to the environment—and, frankly, I don't think they can do that. The terrain they want to cross is incredibly tough."
- "It's going to take them some time to do the analysis right, if that's what they choose to do. We have the world's experts on some of these species, like the [Roanoke logperch](#), saying you've already caused permanent damage. They've got a real headwind against them."

I think there is a possibility that it won't be completed, but once a project has gotten as far along as this one has, there's a lot of leverage and a lot of momentum. I think it is fair to say that completion of the MVP by mid-2020 seems very optimistic.

*David Sligh, conservation director at Wild Virginia and former senior environmental engineer for the Virginia Department of Environmental Quality*

# EQM Midstream Partners/Mountain Valley Pipeline

- In terms of a 1 to 10 management rating: “I don’t know if I can go low enough. I’ve been doing water management projects for nearly 40 years. I don’t know if I’ve seen a project done as badly, as negligently. They just haven’t tried. They’ve had the same issues pop up over and over—not just dozens of times but hundreds of times.”

## **MVP Project Headwinds and Roadblocks**

- “They still don’t have a Corps of Engineers permit that would allow them to go through hundreds of water bodies.”

## **MVP Partners & Customers**

- “We’ve had experts on both of these pipelines—both the Mountain Valley Project and the Atlantic Coast project—that want to go through Virginia. There’s plenty of capacity for them to get natural gas from the fracking fields. They’re pushing these projects not because there’s a need but for their own profit.”
- “The story that all this gas is going to be used in eastern markets, we’ve always been skeptical of that. We’ve always believed they’re going to ship it overseas. If there’s a slowdown in those markets, or if there’s a trade problem, that could affect demand.”

## 2) Former government official, now an environmentalist

EQM has to respond to several lawsuits before it can complete the MVP. The suits revolve around violations of the Endangered Species Act, the pipeline traversing national parks, and the cost of cleaning drinking water affected by the construction. He thinks the management of the project by the construction company has been very slipshod. The MVP is likely to be delayed past its new targeted completion date and there is a minimal chance that the cost of taking the appropriate court-ordered steps may be so high that EQM will have to decide whether it is worth continuing. Other pipelines exist in the area that could be used to transport natural gas. Alternative sources of energy, such as solar and wind power, have yet to be tapped.

### **Background**

- Former Assistant Secretary of Agriculture for Conservation, Research, and Education and currently serving on citizen advisory committees.

### **MVP Completion**

- “I can’t say if the project will be completed. They have to respond sufficiently to the lawsuits. One of the issues is putting a pipeline across a national park. The Blue Ridge Mountains, the Blue Ridge Parkway, and the Appalachian Trail are units of the national park system. The Natural Gas Act includes language that to traverse a national park requires an act of Congress. That is going to be hard to get. The question is whether the court will insist upon the pipeline company obtaining permission from Congress. It’s a serious issue and it may delay the pipeline quite a while. It’s hard to tell what the cost of the delay will be and what it will result in for the owners of the pipeline company, whether they will think it’s worth continuing.”
- “I don’t have any way of knowing what the courts are going to decide, but I don’t think it’s going to be completed on time. The cost in time and money is a real issue. It’s already been delayed by several months and even years. The litigation by the Southern Environmental Law Center, the Sierra Club, and others will delay the completion of the pipeline, I’m sure.”
- “It might be very costly to the pipeline owners to take the steps to minimize the erosion and siltation. They might be required to take steps they had not planned to take, to minimize the problems. That will increase the cost.”
- “I think the management of the pipeline has been very slipshod, specifically around the construction project. The work has been done in a very insufficient manner, resulting in landslides. There are extremely steep slopes and they’ve lost equipment. They’ve created dangerous situations for employees because of equipment falling over. They’ve left open soil exposed to wind, rain, and storms and let it get washed away.”

### **MVP Project Headwinds and Roadblocks**

- “There is still litigation around the MVP to stop it from going through the

I can’t say if the project will be completed. They have to respond sufficiently to the lawsuits. One of the issues is putting a pipeline across a national park. ... The question is whether the court will insist upon the pipeline company obtaining permission from Congress. It’s a serious issue and it may delay the pipeline quite a while. It’s hard to tell what the cost of the delay will be and what it will result in for the owners of the pipeline company, whether they will think it’s worth continuing.

*Former government official, now an environmentalist*

# EQM Midstream Partners/Mountain Valley Pipeline

Jefferson National Forest. The courts found that the Forest Service's decision to permit the pipeline was flawed. The initial recommendation of the national forest was to oppose it, but the Forest Service at a higher level approved it. There's a lawsuit pending now on the failure of the Forest Service to follow its own procedures, to represent the findings of its own biologists."

- "The Sierra Club, along with the Southern Environmental Law Center in Charlottesville, is pursuing a case around the Endangered Species Act. The Roanoke logperch is an endangered fish that lives in the Roanoke River. The construction of the pipeline through the Jefferson National Forest, and potentially as proposed under the Appalachian Trail and the Blue Ridge Parkway, is on a steep terrain. Heavy rains have led to the soil washing out from the open cut where the pipeline is being laid into the streams that lead to the Roanoke River. It has covered the habitat of several fish species, including the Roanoke logperch and another endangered fish, the candy darter in the New River Valley. That has led to a violation of the Endangered Species Act."
- "The Roanoke River is used for drinking water supply. The Western Virginia Water Authority has to clean up the water before it can be used as drinking water. There is also a Clean Water Act requirement about the silt and the level of turbidity in the river. Every property owner in Roanoke pays a storm water management fee that goes into a fund to control the runoff and reduce the pollutants and contaminants that reach the river. The fact that the pipeline is being built above the city and the watershed is obviating the millions of dollars that were spent by the citizens of Roanoke to clean up the river. It is making it dirty again by the siltation."
- "The pipeline has been partially completed but still has to face these issues—of the Forest Service decision through the old grove forest and the potential wilderness areas, the steep topography, the soil erosion, and the effect on the views of the Blue Ridge Parkway and the Appalachian Trail. It is quite ugly. It affects the tourism business of the community. Visit Virginia's Blue Ridge is based on attracting people to our beautiful scenery and recreation and the pipeline degrades some of that value and the attraction. That's also of concern."

## MVP Partners and Customers

- "The local gas company, the Roanoke Gas Company, is a small partner. They bought into the MVP to increase their supply of gas. I think the MVP wanted to have a local gas partner. We think most of the gas will go to the coast and much of it will become liquified gas to send abroad. We're not convinced here it's in the public interest and we're not sure this pipeline is really needed."
- "We're afraid the fracking process may only last about another 20 years and then the pipeline will just become a piece of junk in the ground."
- "Environmentalists are concerned about fossil fuel use leading to leakage of methane from the fracking process and the burning of gas that just creates more greenhouse gasses and more climate change issues. We're not happy about the whole process."
- "It's too late for the Roanoke Gas Company to have second thoughts. There's the issue of them having to increase the price of gas to their customers."
- "Roanoke Gas says they want to expand natural gas service to Franklin County, a suburb of Roanoke, because they don't have natural gas service now. They just built an industrial park."
- "There are already existing pipelines that serve the area and, as far as I know, they have not been completely utilized."
- "The research by the environmental community shows that the existing network of pipelines could provide an adequate supply of gas. The gas company says there are peaks in the winter and the summer when gas is in strong demand and they don't have sufficient supply. It's a debatable point."
- "The other alternative is to expand solar power and wind power that has not yet been tapped as an alternative source of energy."

## 3) Community activist involved in conservation groups

It is unlikely that EQM will meet their mid-2020 deadline and there is also uncertainty about whether the MVP will get completed at all. There are numerous pending cases without any clear timing to their resolution. The MVP is a very poorly planned project, with the route going through steep terrain and poor soil, leading to landslides—and in the middle of a seismic zone. Though the work has stopped, there have been documented violations that MVP continues to dig trenches. The rising cost of the MVP will increase the price of the natural gas sold by its owners, making it less competitive than natural gas from existing pipelines. Partners could pull out of the project if they get better offers. Contracts with customers signed five years ago might be coming up for renewal in the spring and contracts with landowners might also

# EQM Midstream Partners/Mountain Valley Pipeline

have to be re-examined over time. A challenge has stopped Roanoke Gas, the local gas company and a small customer of the MVP, from increasing utility rates to pay for connections to the MVP, finding that there was adequate supply to meet demand.

## Background

- Community activist involved in numerous conservation groups.

## MVP Completion

- “I’m pretty sure it’s going to be delayed because of pending cases.”
- “It’s extremely unlikely they’ll meet their mid-2020 deadline. There’s a lot of uncertainty about whether this project will get completed or not.”
- “It’s been a very poorly planned project.”
- “The MVP route is stupid. [Dominion Energy](#) [Inc./D], which owns the ACP, told us in meetings that they had looked at the MVP first and rejected it because it was too hard to build. This was because of the steep terrain and poor soil, leading to landslides, and because [it’s in the epicenter of a seismic zone](#). In the low ground, there are underground caves and rivers. This is the worst place to build the pipeline. It’s a very risky project. As an Appalachian Trail volunteer, I’ve worked with the Forest Service, the Parks Service, and engineers on many projects.”
- “It’s destroyed a lot of lives around the route.”
- “Even the process with FERC was chaotic because they didn’t even manage to turn in their environmental impact statement in one go. That didn’t stop FERC from approving it. The only time FERC does not approve projects is when there are no customers.”
- “They are working as fast as they can and don’t care. The project is going to have a lot of failures if it gets built—and even explosions, because the route is badly chosen and badly built. Precision Pipeline have a terrible worker safety record. They are being sued by Dominion, the ACP owner, because they built a 55-mile pipeline in Virginia that had 50 landslides on it.”
- “MVP has been violating their work stoppage. They are still digging trenches. It’s being documented. They will probably stop working fairly soon for the winter.”

I’m pretty sure it’s going to be delayed because of pending cases. ... It’s extremely unlikely they’ll meet their mid-2020 deadline. There’s a lot of uncertainty about whether this project will get completed or not.

*Community activist involved in conservation groups*

## MVP Project Headwinds and Roadblocks

- “The Supreme Court will be deciding whether to take up the case on the Atlantic Coast Pipeline—the [Lorax case](#). It’s based on the 4<sup>th</sup> Circuit Court decision that the Forest Service does not have the authority to give a permit to cross the Appalachian Trail. It is up to the Park Service and would require an act of Congress. The Forest Service and the Trump administration are appealing the 4<sup>th</sup> Circuit Court decision and asking the Supreme Court to take up the case. They will decide in the fall and, if it happens, the case wouldn’t be heard until next year. It is about the ACP but everyone believes the case would also apply to the MVP because it’s the same situation. The same Forest Service granted permits to both pipelines.”
- “There is also the case brought by the Sierra Club, along with other groups, in front of the 4<sup>th</sup> Circuit Court regarding the Endangered Species Act. MVP is on a voluntary stop work. The consultation on the Endangered Species is starting over again and we don’t know how long that will take.”

## MVP Partners and Customers

- “The primary customers of the pipeline are mostly the primary owners, EQM and EQT. [They’ve just had a huge layoff](#). I would wonder how long people will keep loaning them money, why people will invest in this project instead of something more promising, and where they can even sell this gas.”
- “EQT and USG Properties Marcellus Holdings, which together have contracted for 77% of the capacity of the pipeline, are natural gas supply companies. This means they will be selling where they can. Given the increasingly expensive project, the price of the gas could be quite high.”
- “Consolidated Edison is a 12.5% owner and they’re in New York State, 400 miles out of the way of the MVP pipeline. Once the gas goes through the MVP, it will go into another pipeline that’s already completed to take it up north. Con Edison is interested because fracing is against the law in New York. They stand to get a 15% profit from being part owners of the pipeline, plus get the gas. If they pull out, it’s only because they have a better offer from somewhere else.”
- “Some customers signed contracts five years ago. I don’t know how it will work, but some of the contracts are coming up next spring.”

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- “There were also deals made with landowners. I don’t know if there are fines involved if things don’t happen as promised or if the contracts can end.”
- “WGL Midstream [which is a wholly-owned subsidiary of AltaGas] has [a contract to sell the natural gas in India](#), I believe. It’s interesting that all the pipe being used was made in India. If WGL pulled out, India could presumably buy natural gas from Russia.”
- “NextEra is also a partner and customer, I believe in Florida.”
- “Another customer and owner is our own gas company, the Roanoke Gas Company. They came on at the end as a local company, to gain local support. They raised our rates on January 1 to recover costs, including building connections to the MVP, and extending pipe to Franklin County. The Sierra Club and citizens objected and now the decision on the rate increase has been delayed. State regulators [rejected Roanoke Gas’s claim](#) that they need the MVP because they cannot get sufficient gas from the two sources they already have. In addition to this rate increase, new gas from new pipelines usually results in a tripling or more of natural gas prices so they can recover the cost of building the pipelines. In the meantime, they are borrowing money. Their stock is over-valued and they have to worry about their publicity.”
- “The MVP would have no impact here. Our utility company has their own sources and natural gas plants.”

## 4) Roanoke county official

Based on the amount of money that has been spent on the pipeline, it is likely that the developers will see it through to completion. However, the mid-2020 completion date is very unlikely. In Roanoke County alone, very little work has been done. With winter coming and permits needing to be revised, it would be surprising if even the basic construction would be completed in time, much less the additional work required to put the pipeline into service.

### Background

- Roanoke County official, where pipeline construction is being delayed.

### MVP Completion

- “Only a few miles of the MVP are meant to be in Roanoke County, but there are only a couple of hundred yards of pipe in the ground now. There hasn’t been a lot of work done. They felled the trees and got the right of way cleared for a few sections in the county but, for the most part, they haven’t gotten here yet. The bulk of the work on the project has been on either side of us in Montgomery County and Franklin County.”
- “There have been issues with the Endangered Species Act concerning the work in the county.”
- “We thought it was going to come through the county in the last two construction seasons, but it looks like that will not be likely to happen until next year.”
- “About two weeks ago, I saw they were putting in erosion and sediment control. It looked like they were putting it to bed for the winter.”
- “From a dollar perspective, the MVP is far along. I would be surprised if it didn’t end up getting finished because so much of the overall pipeline is already done. The compressors are finished and they only have about 60 miles left to build.”
- “I would also be surprised if it gets finished by the mid-2020 deadline. A lot of things would have to fall into place. They can lay the pipe quickly, but, in our county, there’s not much evidence of the work. For example, there’s no pipe waiting to be laid out and welded. They’ll have to clean it all, also, to get it into service—and that is a lot to do if they can’t start the work in earnest until the spring, when they get their permits worked out. I would be surprised even if the basic construction is finished by then, much less all that they have to do to put it into service.”
- “If I were placing a bet, I would say it’s more likely to be completed later rather than sooner.”

I would also be surprised if it gets finished by the mid-2020 deadline. A lot of things would have to fall into place. They can lay the pipe quickly, but ... there’s no pipe waiting to be laid out and welded. They’ll have to clean it all, also, to get it into service—and that is a lot to do if they can’t start the work in earnest until the spring, when they get their permits worked out. I would be surprised even if the basic construction is finished by then, much less all that they have to do to put it into service.

*Roanoke county official*

# EQM Midstream Partners/Mountain Valley Pipeline

## MVP Project Headwinds and Roadblocks

- Did not discuss.

## MVP Partners and Customers

- Did not discuss.

## 5) Dr. Paul Angermeier, Department of Fish and Wildlife Conservation, Virginia Tech

The MVP is very likely to be completed, but further delays would not be surprising, as completion dates of construction projects are often underestimated. The pipeline is more than three-quarters completed and the significant delays have already taken place in the past. New assessments of the impacts of the pipeline on endangered stream species are not likely to cause delays but could add cost to the project for monitoring. There were shortcomings in the assessments that were made but it is unclear if any of the assessments will be redone. Ideally, there should have been measures before the work started so there could be pre- and post-construction comparisons. Now, the impacts will be assessed under current conditions, with an additional look at future steps toward recovery. Opponents have succeeded in creating stoppages because they've documented instances of erosion in violation of permits. The methodology and cost of preventing such erosion and restoring vegetation is not yet clear but could also add significant cost.

### Background

- "My involvement is in the scientific assessment of the impact of the pipeline's construction on stream species. There are endangered fish in the pathway. My insights are from having worked on those topics for years."

### MVP Completion

- "MVP is 80% completed and, without any special qualifications in the matter, my guess is it will be completed. I'm skeptical about their deadline, though. Proponents of construction projects always underestimate the completion date—accidentally or on purpose. In this case, it's probably not going to be mid-2020, because of how it's been going the last few years."

### MVP Project Headwinds and Roadblocks

- "I am interested in what we know about the impacts of the pipeline before it started—if we're doing an adequate job of documenting it, so that, at the end of the day, we can see if pipeline construction and maintenance has had an adverse impact on the species."
- "We identified shortcomings in how the impacts were assessed early on. It's not clear yet if any of the assessments will be re-done to shore up the weaknesses in the initial plans. If there was a large investment by either MVP or the agencies that regulate the impacts, there could be additional delays. I don't have any idea how likely that could be."
- "Ideally, there would have been measures before the work started so there could be a pre- and then post- comparison. Now, we are limited to assessing the impact under current conditions, with construction already far along. We will be also looking at what will happen in the future, with some sort of recovery of forests and streams, but we know very little about that still."
- "This is not likely to delay construction, but it would add cost. Although it's unlikely, if the cost has to come out of another budget, that could delay construction. I don't expect this to happen."
- "There really hasn't been any single action or protest that has changed the schedule significantly, even if there have been stops and starts and the schedule has been protracted. It's hard to know how long any delays would be. I don't think it's going to be delayed indefinitely. I would be shocked if the MVP were not completed. More than three-quarters of the MVP is laid. They are just tying up loose ends now. The significant delays already took place before."
- "I do hear about the litigation, but I don't know how much traction they will get. We are all waiting to see the next steps unfolding in the drama."
- "In terms of the cost of assessing the impact, we don't even know the costs so far of the environmental damage. There has been little rigorous analysis of those costs in terms of dollar values. In comparison, there was a project on the Roanoke River about 20 years ago that included major construction work for flood control. The very intense

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*Dr. Paul Angermeier, Department of Fish and Wildlife Conservation, Virginia Tech*

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monitoring program for one of the same endangered fish species went on for about 15 years and, though it was a more spatially confined area compared to the MVP, it was around \$100,000 a year. MVP is a larger project and the cost of monitoring would be determined by the frequency of measurements and the spatial extent.”

- “I don’t think the path of the pipeline is going to change [in response to any study]. For example, in small streams, they simply lay the pipe across the stream. For the larger streams, they dig tunnels under the streams and rivers to put the pipe in. That’s far more expensive. If they decided that more of that tunneling had to be done, that could increase costs. I don’t think it would change the path, it would just be about how to cross that stream. The pipeline is close to 80% complete, so any alterations would be just bits and pieces.”
- “Part of the environmental concern is that they are laying the pipeline across very steep topography. This questions the capacity to prevent severe erosion. Opponents have had some success in creating stoppages for the pipeline because they’ve documented severe erosion events in violation of permits.”
- “After the construction is done, there is likely going to be some revegetating of the rights of ways and to minimize long-term erosion in the next few decades. The question then becomes, “Can the disturbed rights of way be restored so they don’t continue to erode severely over the next 25 years?” No one knows the answers. A significant cost that could emerge would be if the plans to restore vegetation were not successful. How do we keep all that mud from falling into the rivers? Those are questions that no one can answer at this point.”

## MVP Partners and Customers

- “[The options for transporting the gas] remain, as they are now, by truck or train, as far as I know. Those options are not risk free and I don’t know the dollar costs, nor the environmental costs.”

## 6) Ann Regn, Communications, Virginia Department of Environmental Quality

EQM should be able to meet their mid-2020 deadline from the perspective of the Commonwealth of Virginia because they have met all of the state’s requirements and even taken care of violations. They will probably have fines to pay for violations to be determined with the state attorney general’s office. She is aware of federal issues that EQM still has to face, but there are no roadblocks from the perspective of Virginia.

### Background

- Virginia Department of Environmental Quality

### MVP Completion

- “From the perspective of the state of Virginia [not taking into account FERC and federal proceedings], they have met all the requirements and taken care of all violations on sediment control handled by our attorney general’s office. They have satisfied Virginia laws.”
- “From the state perspective there is nothing stopping them from meeting their mid-2020 deadline.”
- “We’ve investigated them when we had complaints from the public and, in addition, they are paying for additional independent inspectors. Those inspectors work with our compliance staff. There are always two inspectors on each of the big three spreads doing regular routine inspections. Most of the issues that we saw are maintenance issues and they corrected them as best they can. There will probably be some fine that will be agreed on with our attorney general’s office.”

### MVP Project Headwinds and Roadblocks

- “As far as Virginia law, there are no other issues.”
- “They haven’t started the river and creek crossings. I believe federal regulators will be looking at concerns regarding the Endangered Species Act.”

### MVP Partners and Customers

- Did not discuss.

**From the state perspective there is nothing stopping them from meeting their mid-2020 deadline.**

*Ann Regn, Communications, Virginia Department of Environmental Quality*

## 4) Industry Specialists

Three gas industry trade journalists, a former utility executive, and an executive for a gas pipeline consulting company had mixed views regarding the likelihood of MVP completion. One journalist said the MVP will be completed and it will get done on

# EQM Midstream Partners/Mountain Valley Pipeline

time. He said it is the crown jewel of EQM and there is a lot of demand for the gas it will transport. Another journalist agrees that the MVP is a needed pipeline and the owners are committed to completing the project. The third trade publication source is unsure if the MVP will be completed, but he also sees a strong customer base for the gas. The former utility executive said the completion is less likely today because of the project's escalating costs and slowing demand for gas that is expected to continue to decline. Headwinds that could derail and or slow the MVP include the anticipated Supreme Court ruling on the Atlantic Coast Pipeline project crossing the Appalachian Trail, which could negatively impact the MVP, as well as other pending and future litigation issues, permitting issues, protesters, and partners having second thoughts. Two of the journalists said EQM's management was solid. One rated management at 8 or 9 on a 1 to 10 scale.

## Key Silo Findings

### Background

- 3 oil and gas trade journalists.
- 1 former utility executive.
- 1 executive with a gas industry consulting firm.

### MVP Completion

- 1 said the project will be completed on time, as there is lots of demand for gas in the southeast.
- 1 said the partners are committed to completing the MVP and that it is a much-needed project.
- 1 said he is unsure about the MVP being completed, but there is a customer base in the region.
- 1 said it is less likely to be completed because of the project's cost escalation and slowing domestic demand for gas.
- 1 did not comment on final completion, but said, if completed, it will not be on time.

### MVP Project Headwinds and Roadblocks

- The pending Supreme Court review of the ACP Appalachian Trail crossing issue, other pending and future litigation, permitting issues, protesters, and second thoughts by partners and customers.

### MVP Partners and Customers

- 3 said there is plenty of demand from customers operating gas-fired power plants that have been underserved.
- 1 said partners are having second thoughts and demand for gas is slowing and expected to continue to slow.
- 1 did not comment.

## 1) Journalist covering MVP and other projects for Marcellus Drilling News

The MVP project is nearly complete and has significant momentum that will drive the project to an on-time completion. Opponents' arguments are drawn from a familiar playbook, so MVP is unlikely to be surprised in court. There is strong demand for the gas the pipeline will carry.

### Background

- This journalist covers the shale industry and has followed the MVP and other pipeline projects.

### MVP Completion

- "This project is probably already somewhere between 85% and 90% in the ground and completed, so that bodes quite well for the future of the project. This is a very important project for [Equitrans \[Midstream Corp./ETRN\]](#). This is probably the crown jewel for the company. They are extremely dedicated to making sure it happens."
- "I think they'll complete the project in 2020. I'm very confident of that. You could say the reason for my optimism is that, in some senses, we've seen this movie before. Equitrans knows what to expect. They know what the legal arguments will be. Everyone is a little bit wise to what the challenges will be. I'm confident that Equitrans knows what to expect, and they'll be able to navigate that."
- "The thing that's standing in the way is litigation that has been brought on by the environmental lobby. FERC stopped some permits that had been granted by the U.S. Fish and Wildlife Service, but that only affects part of the project. Construction can continue on other sections of the pipeline."

This project is probably already somewhere between 85% and 90% in the ground and completed, so that bodes quite well for the future of the project. This is a very important project for Equitrans. This is probably the crown jewel for the company. They are extremely dedicated to making sure it happens.

*Journalist covering MVP and other projects for Marcellus Drilling News*

# EQM Midstream Partners/Mountain Valley Pipeline

- “They also want to extend the pipeline into North Carolina. The completion of that project is a little less certain.”
- In terms of a 1 to 10 management rating: “I’d put it at an 8 or a 9. They have smart people. They’ve done a good job. They’re still, in my mind, newly separated from the mothership. The only reason I wouldn’t give them top-top of the line is they’re still finding their sea legs.”

## **MVP Project Headwinds and Roadblocks**

- “There seems to be a very small but very dedicated cadre of people who will chain themselves to equipment, and there goes another three or four hours while they wait for the police to come and get them unchained. There are still people who are sitting in trees, believe it or not. I would call it a cloud. It’s a minor cloud, but it appears from time to time to block the sun.”
- “Every month, every quarter, every year the project gets delayed, the price goes up.”

## **MVP Partners and Customers**

- “I think there’s a tremendous amount of demand, and it’s developing all the time. One of the primary drivers is our gas-fired power plants. That part of the Southeast is not well-served currently by very many pipelines. A lot of the gas that’s going to flow to it will probably go to things like that. And new demand centers are appearing all the time. I have no worries there is going to be plenty of demand for the gas that’s carried on this pipeline.”

## 2) Journalist covering MVP and other projects for Natural Gas Intelligence

While the project faces strong opposition and uncertainty, ownership seems committed to completing the project. If the MVP is built, it should see strong demand from utilities and others. Management has been responsive and cordial with analysts and the media through the delays in the project’s timeline.

### **Background**

- This reporter covers natural gas and has followed the MVP and other pipeline projects.

### **MVP Completion**

- “From a reporter’s point of view, this has been an extraordinarily complicated and convoluted project. The project has been delayed repeatedly. There has been speculation from analysts wondering if this thing is ever going to be built. I’m not in the business of speculating about that. Keep in mind that this project is 85% complete. Environmentalists are hellbent on stopping these projects. That’s their number 1 goal right now.”
- “They’ve pushed the price tag of this thing from \$3.5 billion all the way up to \$5 billion. At this point, the companies are committed to finishing this.”
- Declined to rate management on a scale of 1 to 10, but offered this assessment: “I would say it’s in pretty good hands. When these guys get poked and prodded on their earnings call, they’ve seemed pretty consistent. There have been no erratic comments. From my point of view as a reporter, they’ve been very responsive, which tells me they want to stay ahead of this thing as well as they can. They do seem to have their heads screwed on straight. They seem to be a fairly solid team of executives. There’s nothing abnormal about the way they’ve handled things.”
- “EQT is a company with a lot of experience. There’s obviously been some issues with EQT and the whole proxy fight that went down there.”
- “There’s been a lot of turnover there. Equitrans was spun off from EQT in the last year. We’re not that far away from that, so I just wonder how much that had to do with some of the inefficiencies. Now that Equitrans is separate from EQT, EQT is still their biggest customer. EQT has had three CEOs in the last year or something.”

### **MVP Project Headwinds and Roadblocks**

- “[Analysts and observers] think the bigger issue is this whole Appalachian Trail crossing. MVP has worked out a land exchange with the feds.”
- About the Supreme Court’s expected decision about Atlantic Coast Pipeline: “All eyes are going to be on the Supreme Court next month.”

From a reporter’s point of view, this has been an extraordinarily complicated and convoluted project. The project has been delayed repeatedly. There has been speculation from analysts wondering if this thing is ever going to be built. I’m not in the business of speculating about that. Keep in mind that this project is 85% complete. Environmentalists are hellbent on stopping these projects. That’s their Number 1 goal right now.

*Journalist covering MVP and other projects for Natural Gas Intelligence*

# EQM Midstream Partners/Mountain Valley Pipeline

## MVP Partners and Customers

- “This is one of the last greenfield pipeline projects up here. It’s a project that’s very much needed. The growth is not as robust as it once was, but there’s still growth. It’s not double-digit production growth any more, it’s single-digit growth. MVP claims that they’ve got the customers. The Southeastern U.S. has been one of the stronger growth markets for natural gas, from what we’ve seen. They’ve talked about building laterals along the line to serve utilities along the way, and they’ve got this Southgate project to reach into North Carolina. They just have to get it built.”

## 3) Journalist covering natural gas for Kallanish Commodities

The MVP faces uncertainty in the regulatory process. If the project is built, it should enjoy robust demand.

### Background

- Journalist who has covered shale projects for years, for the *Akron Beacon Journal* and Kallanish.

### MVP Completion

- “You’re getting into federal courts, you’re getting into Supreme Court decisions. Permits are being revoked. The White House is getting involved. If you take a look at ACP and MVP, I don’t think both of them will be built. I can’t tell you which one.”

### MVP Project Headwinds and Roadblocks

- “This current delay is going to drag on for a number of months. It’s a crapshoot right now when you talk about these big pipelines.”

### MVP Partners and Customers

- “I think there’s a base there. You’re going past Washington, D.C., Northern Virginia, Southern Virginia, Richmond, Norfolk.”

You’re getting into federal courts, you’re getting into Supreme Court decisions. Permits are being revoked. The White House is getting involved. If you take a look at ACP and MVP, I don’t think both of them will be built. I can’t tell you which one.

*Journalist covering natural gas for Kallanish Commodities*

## 4) Former senior executive whose responsibilities included regulatory approval and compliance issues for major utilities

There are many reasons that EQM would halt completion of the Mountain Valley Pipeline. The cost of the MVP will put gas transported in that pipeline at a premium, up to 50% costlier, compared to gas using existing pipelines that have already been paid for. Besides their share of the cost of the construction, which is now at around \$5 billion, EQM and EQT would also be responsible for paying for two-thirds of the capacity at a time when there is already sufficient capacity and no rising demand. With its new management and board, EQT may decide to swallow its losses rather than continue to lose money. Partners will have a 30-day window to exit the contract around the June 2020 delivery date. There are indications that Consolidated Edison and Roanoke Gas might do so, and others could follow. It will not be possible for EQM to meet the June 2020 in-service date because even the process to test the pipeline takes one to two months, after completion.

### Background

- Extensive career as executive in energy industry.

### MVP Completion

- “Completion of the MVP looks less likely now than one or two years ago.”
- “If they cannot do it the way they planned [because of a possible Supreme Court decision on permitting for the ACP], they would have to do a reroute and that would involve re-opening some of the FERC proceedings. Time is not their friend in this case.”

### MVP Project Headwinds and Roadblocks

- “EQM might decide it is costing a lot more than they thought and, even with the extra time they’ve taken, they still don’t have more buyers. You have to be competitive in the marketplace. The new pipeline will force them to have premium prices. Their gas will be very expensive. The capacity is already available and there is no advantage that the MVP will provide.”
- “I don’t see how it’s possible for the MVP to be completed by the mid-2020 in-service date. The schedule for the Dominion/ACP decision by the Supreme Court [which is likely to apply to MVP also] is spring of next year. To prove that the pipeline is ready for commercial operation, they will have to go through a process that takes one to two

# EQM Midstream Partners/Mountain Valley Pipeline

months, after the pipeline is completed. That already would put them into the summer, but the pipeline still has to be finished. I think they overestimated how much of it is actually completed.”

## MVP Partners and Customers

- “Consolidated Edison is both owner and shipper on the project. They’re responsible for 12.5% of ownership and also 12.5% of capacity. Shortly after FERC approved the pipeline, ConEd told its state regulator that the project had [no value to its customers](#).”
- “When FERC Commissioner Cheryl LaFleur dissented [from the approval], she said that only 13% of the project capacity looked like it was going to be assigned to actual end users. ConEd made it clear they were not part of that 13%.”
- “As far as I know, no end users have been identified by any of the shippers on the project that will actually use the gas and be paying for the capacity of the pipeline. Pipeline developers get their wholly owned subsidiaries to sign up as shippers. FERC only looks for contracts. There are no market studies on the need for the pipeline. The owners get contracts from their own subsidiaries to get FERC approval. The intention is to shift the risk and the cost of the projects onto the customers of their captive utilities. This is what ConEd intended. Recent development has been by utility holding companies, because FERC offers them about 50% higher rate of return on those projects.”
- “RGC, Roanoke Gas’ parent company, owns 1% of the pipeline, while Roanoke Gas has a reservation for .5%. They wanted to increase rates to pay for connecting to the MVP. The utility regulator said no to the increase because Roanoke Gas had no need for additional capacity. It is already supplied by two pipelines and, if it were supplied by the MVP, it would be inordinately expensive for the customers.”
- “To protect the utility from further exposure, there was a recommendation that they use the 30-day exit window around the June 2020 deadline. This would require them to write a letter saying they want to leave their ownership and capacity obligations. If they don’t do it in the 30-day window, the agreement says they have waived their right to leave.”
- “I would think ConEdison would choose to use the 30-day exit window. They already chose not to participate as an owner in the additional MVP Southgate project.”
- “NextEra is another big owner with 12.5%. They own a utility, Florida Power and Light, which is already served by other pipelines that are making their customers pay very high rates. I don’t think Florida Power and Light has informed their customers about the extra costs of the MVP. However, they must be asking themselves some questions.”
- “WGL [Washington Gas Light, a wholly-owned subsidiary of AltaGas] is another owner, with about 10% of the pipeline and 10% of the capacity. They’re basically a gas marketing company. It’s possibly that WGL may use some of the gas but they have also made big commitments in other projects, making it possible they will reconsider their investments.”
- “EQM and EQT will be on the hook for paying the pipeline for two-thirds of its capacity. That’s billions of dollars. They are already experiencing financial distress. There is new management and a new board at EQT and they are trying to stop the bleeding. They are certainly concerned about whether this is a good project for them.”
- “I think all the partners are having second thoughts because they have to confront their obligation to pay for it, and the only way to get money to do that is to sell the capacity to someone who will pay for the delivery of gas. They must be looking at the same situation I see. Are they going to be able to sell a premium-priced product [as gas delivered through the MVP is going to cost more than gas going through the existing Transco pipeline]? Customers—other than the owners’ subsidiaries—will be free to pay a lower price for that gas. It’s important to note that the pipeline only sells transportation service and not gas. The gas is contracted for separately.”
- “There are more considerations why the developers may choose not to continue the MVP project. Pipelines take about 40-50 years to pay off. The long-term prospects for gas use are not as optimistic as the industry would like us to believe. The U.S. Energy Information Administration expects residential and commercial uses of gas to taper off over the next 20-30 years. Industrial use could rise, but it is price sensitive.”
- “The greatest increase in gas usage has been for generating electricity. The rapid build-out of new gas-fired power plants has significantly slowed. A few new plants will be added over the next several years, but nothing like the numbers added over the past five years. The public is getting the news that the total greenhouse gases associated with producing electricity with gas are about the same as with a coal plant. This is mostly due to methane leaking at

Completion of the MVP looks less likely now than one or two years ago.

*Former senior executive whose responsibilities included regulatory approval and compliance issues for major utilities*

# EQM Midstream Partners/Mountain Valley Pipeline

drilling and storage sites, and from the pipeline network. Carbon emission limits are already in place in nine states and Virginia has a new law to add it to the list. Carbon "taxes" are being considered by PJM [Interconnection LLC], a manager of the electricity network in 13 states, of which Virginia is a member. Over the next decade, these limits will be lowered, causing the early retirement of older gas plants and added costs for newer ones."

- "Electricity use in the U.S. has been stable or declining for the past ten years, even as our economy grew and our population increased. The growth potential for gas usage does not look good. Financial calculations always favor money now versus money later, but you will still need customers later to pay the loans on the pipeline. Long-term prospects for growth in gas usage are not that great. The cost of renewables is undercutting electricity generated using gas."
- "It doesn't make sense to keep building new pipeline projects when we [don't have a greater demand](#) for the capacity."
- "With so many pipelines built in the last five to 10 years, all the different production facilities are equally priced. Access to many different markets now equalizes the delivered prices. The real difference is in the cost of transporting it to markets, in the cost of the pipelines. This gives a huge advantage to existing pipelines because they have been paid for by existing customers. For example, Transco has expanded its capacity in Virginia and the Carolinas more than what the MVP and ACP together will provide. There is no shortage of pipeline capacity. In the last 20 years, we built more than twice our national maximum use."
- "EQM's original published pricing, based on the original \$3 billion cost, adds about 30% to the current price of gas. That will make it 30% higher than the gas Transco transports. The \$5 billion cost makes it about 50% higher. Who in the United States is going to want to pay that much more for gas that you can easily get by other means? It is going to be hard for them to sell that."
- "Only export customers are paying more than the domestic price of gas. Exports now go to Mexico and South America. In the last year or so, we built a number of natural gas facilities to liquify and transport gas to Europe and Asia. The problem is that, even as cheap as our gas is, the cost to liquefy and transport it still makes the delivered price of gas in Europe and Asia higher than their current price of gas. Our export markets are not going to be as lucrative as we thought they might be, unless market conditions change."
- "The [exploration and production] sector continues to be volatile, with years of oversupply lowering prices and destroying profits. It looks like that will continue to be the case for a while. Investors are asking CEOs to only invest in new drilling that free cash flow will support. Although several billion have already been invested in the MVP, there is a very probable prospect of billions more to finish the project, plus billions in operating losses. Making the tough decision to swallow what has been spent but halt additional losses would provide funds for other projects that might actually make money. Continuing with the MVP means making a multi-billion-dollar bet that growth will occur in the gas market over the next 40 years, when many forces are being arrayed against the use of fossil fuels. EQT/EQM should review what [Cabot](#) (Oil and Gas Corp./COG) is doing and mimic that. They seem to be the only one making money in this sector."
- "These are difficult decisions for corporate executives. When they see that conditions have changed, they have to decide if they are going to pour more money into it and hope that it will turn out well, or swallow what they spent so far and decide to at least not lose anymore. I would think those are the kinds of discussions they are having at EQM, especially with the new management and board at EQT."
- "From an ownership perspective, EQM is spending almost half of the \$5 billion. That's a lot of money. Even if they do get it built, as a shipper they will still be on the hook for two-thirds of the payments for capacity in a 20-year contract. They would have to have a high degree of confidence that they are actually going to have people to pay them for all that capacity. Since the domestic market is not growing, there must be serious discussions going on in the boardroom."

## Miscellaneous

- "Wall Street wants to increase the price of gas because of investments in oil and gas exploration that were made when money came out of the mortgage security markets in 2008. At the time, we had an all-time price for oil and gas. Everyone thought the shale gas wells would be like the conventional ones, which took 20 to 40 years to decline, but shale gas wells peak and decline in about three to five years. They [had to keep drilling new ones](#) just to keep production levels the same—and even just to pay the interest on their loans—and the cost of production keeps going up. The producers cannot afford to cut back their production to bring it back in alignment with demand and this is keeping prices low."

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## 5) Executive of a firm that does gas and liquid pipeline investigation, auditing, risk management, siting, construction, and design

Many pipeline plans underestimate construction times by relying on optimistic routes and schedules. It's possible that MVP's straight-line map, while simple in theory, has created challenges of topography and ecology that will slow the project. Developers of multi-billion-dollar projects do not take delays lightly, so MVP's scheduling setbacks bespeak problems with the overall viability of the project. He guesses that some details of the project design have gotten away from the developer.

### Background

- This technical expert is an industry consultant who has not worked on the MVP project but is familiar with pipeline construction.

### MVP Completion

- Did not discuss.

### MVP Project Headwinds and Roadblocks

- "The schedule becomes more important than the process. It looks like somebody drew a straight line saying, "We're going to build it from Point A to Point B"—and that can get you in all kinds of trouble. You can get a FERC pre-approval process going, but that doesn't mean it's the right process. It's routing in terrain that's very treacherous; a lot of steep slopes. You don't want to put a 48-inch in an unstable slope area. There's no way you can build a large-diameter gas transmission pipeline in an area susceptible to landslides. It's steel pipe, folks. It's not invincible."
- "It looks like you're taking the shortest path between two points. But if you haven't done your homework, the people who are contesting these things are smart enough to figure out where you haven't done your homework. When it's multiple billions, it's easy to start losing control. The project management gets complex."
- "A lot of times they'll draw a straight line because, in their minds, they can get it done cheaper and faster. Actually, it may delay this by a decade. I'm not picking on them. I see this on a lot of pipelines."
- "The fact that they're delaying a multi-billion-dollar project, they don't take that lightly. It means they know they have a problem, or problems."

### MVP Partners and Customers

- Did not discuss.

## Secondary Sources

These three secondary sources focused on continued protest against the MVP, the federal approval for the MVP to cross several waterways, and a study indicating that gas pipelines are being over built.

### Sept. 10 Popular Resistance.org [article](#)

Protesters continue to challenge and slow construction of the MVP.

- "Early this morning, 3 water protectors locked themselves to 3 separate excavators at a Mountain Valley Pipeline site outside of Rainelle, WV. These 3 individuals prevented work at the site for over 3 hours, before being extracted and arrested just after 9 am. 1 additional supporter was arrested near the site while walking on a public road. Banners at the site read, "VIOLENCE AGAINST MOTHER EARTH IS VIOLENCE AGAINST OUR SISTERS" and "AIN'T SCARED. STILL FIGHTIN." The 4 arrested individuals were charged with misdemeanors; bail was set between \$500 - \$2,500 for each person. All 4 have been released."
- "Resistance to the Mountain Valley Pipeline has only grown since the pipeline's proposal in 2014. Grassroots-led pipeline monitoring and a nonviolent direct action campaign are ongoing. Cherri, Mama Julz, and Jim are the 14th, 15th, and 16th people to lock their bodies in the path of the Mountain Valley Pipeline in 2019."
- "Meanwhile, the ongoing tree sit blockade near Elliston, VA — the Yellow Finch blockade — is currently in its 371st day of blocking MVP's path."
- "In June 2019, builders admitted that the project's budget has ballooned to \$5 billion and that the completion date has been delayed by at least 1.5 years (and counting)."

# EQM Midstream Partners/Mountain Valley Pipeline

## Aug. 30 *Charleston Gazette-Mail* [article](#)

A review of orders impacting MVP's ability to build across wetlands, in light of the recent decision by the Fourth U.S. Circuit Court of Appeal's Federal allowing such construction.

- "The same day federal regulators decided construction could continue on the Mountain Valley Pipeline, a panel of federal judges also decided to allow construction on streams and rivers."
- "The 4th U.S. Circuit Court of Appeals lifted its stay on a river crossing permit for the pipeline on Wednesday, allowing construction across streams and rivers. Earlier that day, the Federal Energy Regulatory Commission also gave the project momentum forward when it decided construction could continue along the route. FERC had halted construction in early August, following a 4th Circuit ruling that said the Bureau of Land Management and U.S. Forest Service had sidestepped environmental rules when they granted their approvals for the project."
- "And in June, construction on rivers and streams along the project's route was temporarily halted when [three federal judges on the 4th Circuit](#) stayed the project's river crossing permit. The permit, approved by the U.S. Army Corps of Engineers' Huntington District, included a condition that said construction would have to be completed in 72 hours, but developers said it would take between [four and six weeks](#)."
- "The Corps of Engineers also voluntarily chose to block construction on the Elk, Gauley, Greenbrier and Meadow rivers. After that victory, environmental groups also challenged the corps' approval of the project in the Norfolk District, which would apply to streams and wetlands in Virginia. The project is designed to run from Wetzel County, West Virginia to Pittsylvania County, Virginia."
- "'The Norfolk District verification is invalid because the Huntington District verification is invalid,' environmental lawyers wrote in a motion for stay on July 2. 'When it comes to NWP 12, one bad apple spoils the bunch.'"
- "In July, the corps rewrote its approval to waive the 72-hour limit, and the West Virginia Department of Environmental Protection released a proposal earlier this month to modify the permit, essentially waiving its own time limit. On Wednesday, the 4th Circuit denied that request for a stay of the [Norfolk District's Nationwide 12 Permit](#). The judges also lifted the stay of the [Huntington District's Nationwide 12 Permit](#)."
- "Both [orders](#) were entered by Chief Judge Roger Gregory, with the concurrence of Judge James Wynn. Judge Stephanie Thacker voted to side with the environmental and citizen groups."
- "The environmental groups filed motions to reconsider both orders Thursday."
- "There are no 'regulatory or judicial impediments' that are preventing MVP from 'blasting and trenching through the Elk, Gauley and Greenbrier Rivers before this Court can resolve the merits of these consolidated petitions,' lawyers [wrote in their motion](#), asking the court to reconsider its decision to lift the stay on the permit in the Huntington District."
- "Earlier this year, the 4th Circuit also declined to suspend the pipeline approval that was challenged by the citizen groups, which said the project wasn't eligible for the streamlined permit because the DEP waived a certificate needed for that permit."
- "Oral arguments on a broad challenge to the corps' approval are scheduled for Sept. 28 in Richmond."
- "On Thursday, a panel of judges on the U.S. Court of Appeals for the D.C. Circuit also [denied a motion](#) for an expedited stay. In the emergency motion, filed earlier this month, a coalition of environmental groups challenged FERC's broad approval of the project."
- "The Fourth Circuit's ruling vacating the Forest Service and BLM decisions highlighted the arbitrary and capricious nature of FERC's sedimentation analysis, which has implications not just for the Jefferson National Forest but for the entire project," they wrote Aug. 14."

## July 29 Institute for Energy Economics and Financial Analysis (IEEFA) [article](#)

A study by the IEEFA indicated that there is widespread overbuilding of pipelines because ratepayers take on the financial burden of payment and because the gas industry's drillers are underperforming in their core business and building pipelines to boost revenue.

- "A recently published study by the Institute for Energy Economics and Financial Analysis (IEEFA) concludes that natural gas pipelines proposed for construction from West Virginia into Virginia and North Carolina are indicative of a rush toward industry overbuilding. Titled "Risks Associated With Natural Gas Pipeline Expansion Across Appalachia," the study examines the proposed Mountain Valley Pipeline and the proposed Atlantic Coast Pipeline, which together would cost roughly \$9 billion."

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- “ ‘There is a widespread assumption that a pipeline would only be proposed if it is necessary, but this assumption is not supported by the facts,’ said Cathy Kunkel, an IEEFA energy analyst and lead author of the report. ‘Developers are being rewarded for overbuilding and are guaranteed a return on their investment by the Federal Energy Regulatory Commission (FERC).’”
- “ ‘Demand for natural gas will not keep pace with the level of capital investment currently going into pipeline infrastructure,’ said Tom Sanzillo, IEEFA’s director of finance and a co-author of the study. ‘Those affected, at bottom, are the communities through which the pipelines run and the consumers who pay the rate increases needed to underwrite pipeline development.’”
- “ ‘We found that the dynamics of the pipeline business tend toward building excess pipeline capacity,’ said Kunkel. ‘Major pipeline companies are competing with each other to build out the best, most well-connected pipeline networks. And utility companies are entering the pipeline space because much of the risk of overbuilding can be pushed off onto captive ratepayers. Natural gas production companies are [also] entering the pipeline business because their core business of drilling is under-performing and they are looking for ways to boost revenue and investment value.’”
- “ ‘These kinds of financial considerations on the part of individual companies do not add up to the kind of socially rational, long term planning of natural gas infrastructure that we need,’ said Kunkel.”

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Additional research by Eva Cahen and Jeff Ostrowski.

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