

APPENDIX I
Route Variations

APPENDIX I-1

Status of Route Deviations Reported by Stakeholders

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Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
This deviation was identified by the landowner to allow room for a future drill site.	Rerouted	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved.
This deviation was identified to avoid cutting of trees on properties.	Rover denied a reroute, stating that the Project route is alongside an existing pipeline.	No	Acceptable. We reviewed the current and proposed routes. The pipeline route in this area is constrained by topography, State Highway 18, the existing Hope Gas Pipeline, and several residences. Based on our analysis, we could not identify a viable route crossing for this area that was preferable to the proposed route.
Landowner request for routing considerations relative to beef cattle raised on property.	Parcel is neither crossed nor adjacent to the Project work areas	Yes	Acceptable. Based on available information, we conclude that a route modification is not necessary.
Landowner raised concerns for future use of land and current farming operations.	Rover was unable to identify a landowner by name provided.	No	Acceptable. Specific reroute request was not determined and landowner could not be identified with the name provided.
Deviation identified to avoid an intersection with a recently coal strip-mined area and waterbodies on property.	Parcel is neither crossed nor adjacent to the Project work areas	Yes	Acceptable. Based on available information, we conclude that a route modification is not necessary.
Landowner raised concerns about cutting of old growth trees, and about the potential for landslides should trees be removed on a steep slope. Landowner requested that the original route be followed, with a slight modification to avoid the steep slope. The current route was identified to minimize cutting of old growth trees, but cannot return to the original route due to environmental and constructability concerns.	Rover was unable to identify a reroute, due to an ephemeral stream and steep slope that poses environmental and constructability concerns.	No	Acceptable. We reviewed the current and proposed routes. The current route avoids sensitive area that would be crossed by the proposed route and steep slopes in the area limit the constructability of alternate routes.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner raised concerns about impacts to the New Life Fellowship Church properties.	Rover is consulting with landowner regarding mitigation measures, as a deviation would impact 6 additional residences and at least 4 additional ephemeral streams.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
Landowner suggested that the Project route be deviated to the north to minimize impacts to their parcel.	Rover identified deviation to minimize impacts to property.	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.
Deviation was identified to collocate with existing right-of-way.	Rerouted	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.
Landowner raised concerns about the Project route impeding access to several acres of the tract, as well as disrupting plans to develop that portion of the parcel. A deviation to the outer (southern) edge of the property was requested by the landowner.	No route deviation has been made.	No	Acceptable. We have reviewed the current route and parcel. Moving the route to the south edge of the property would increase the pipeline length, and impacts more forested land.
Deviation was identified to avoid forested areas on properties.	No route deviation has been made.	No	Acceptable. The route deviation would impact sensitive resources and new landowners.
Landowner raised concerns for mature tree removal on the property, impacts to spring-water system, and impacts to drain tiles.	No route deviation has been made.	No	Acceptable. Landowner did not suggest a preferred route over the tract, and movement north or south on the property would have greater impacts to forested lands, or other homes.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner raised concerns about impacts to deer hunting abilities on the property, and the pipeline route crossing of a stream.	No route deviation has been made.	No	Acceptable. No specific re-route was suggested by the landowner. Current route avoids an emergent wetland to the south.
Landowner raised concerns for the pipeline impacting plans for construction of a pond, and suggested moving the route to a field on the property that would avoid the pond location.	A reroute on the property is pending per survey and construction.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
Landowner raised concerns for the route blocking access to hay fields and horses, as well as increased risk for sediment/soil erosion in historical problem areas (such as crossing Poker Rd.)	No route deviation has been made.	No	Acceptable. We have reviewed the current and proposed routes and found that the current route minimizes environmental impacts on the parcel and other homes. The proposed routes would affect new landowners and more acres of forested land.
Landowner raised concerns for the Project route impacts to plans to build a pond, and suggested a deviation of 20 to 30 feet.	No route deviation has been made.	No	Acceptable. We have reviewed the identified parcel and were unable to identify the features from the comment. The route appears to minimize impacts on the identified parcel.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowners raised concerns about the proximity of the pipeline to their home, approximately 200 feet, and damage to their hay field. A route deviation was requested to move the route to the southern edge of their property.	No route deviation has been made.	Pending	Not Acceptable. Moving the route to the south of the tract may affect more acres of forested land, but would be farther from the house. Therefore, as stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners.
Murray Corporation seeking to discuss relocation of the proposed pipeline and compressor station to a location that will not be impacted by future mining operations.	Rover is consulting with Murray Corporation on relocation options.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
Landowner raised concerns for the route crossing a forested wetland on the property.	Route minimizes impacts to the tract, the forested wetland, and forested land.	No	Acceptable. No specific reroute was identified in the comment. We have reviewed the crossing of the parcel and determined that the route minimizes impacts to the tract, the forested wetland, and forested land. The current route runs parallel to an existing right-of-way in this location.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
<p>Landowner raised concerns for proximity of the route near their home and barn, as well as impacts to the burial site of their family dog and Dawn Redwood trees. Further concerns were raised regarding the presence of a former mine under their property, and a reroute to avoid this mine was requested.</p>	<p>Rover is proposing to reduce temporary workspace, per description from landowner, and to avoid the pet cemetery. Landowner concerns have not been reduced per additional comment letters received by the FERC.</p>	<p>Pending</p>	<p>Not Acceptable. Rover's reroute does not appear to address landowner concerns; therefore, as stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.</p>
<p>Deviation was identified to avoid future building site and property access (driveway).</p>	<p>Rover did not adopt a route deviation due to route infeasibility and impact to new landowners.</p>	<p>Pending</p>	<p>Not Acceptable. Based on our evaluation, a reroute that addresses the landowners concerns appears viable. Therefore, we are recommending that Rover file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.</p>

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
<p>The landowner raised concerns for the routes proximity to their house, septic system and drain line, a geothermal system, nearby power lines, and fencing.</p>	<p>Rover has adopted a new route variation to avoid the features identified by the landowner; however, the route appears to be closer to the house.</p>	<p>Pending</p>	<p>Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.</p>
<p>The landowners believe the route would cross a potential historic Indian village or burial mound.</p>	<p>No route deviation has been made.</p>	<p>No</p>	<p>Acceptable. The route deviation was not adopted because Phase I survey results for this site found it was not eligible for the NRHP.</p>
<p>The stakeholder raised concerns for the route proximity to an oilfield waste injection well and impacts to the pipeline's integrity from associated earthquakes.</p>	<p>No route deviation has been made.</p>	<p>No</p>	<p>Acceptable. The suggested route is not on the commenter's property and would affect several new landowners. Route deviation within the commenter's property is not feasible due to the congested area with a subdivision to the north and Killbuck Marsh Wildlife Area to the South.</p>

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
<p>The landowner raised concerns about impacts from the Project route to bald eagle nesting on their property and suggested relocating the route within their property to avoid the nests.</p>	<p>A re-route on the property is suggested to avoid impacts to the bald eagle nesting habitat.</p>	<p>Pending</p>	<p>As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners for parcels with a status of pending in appendix I. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.</p>
<p>The landowner raised concerns about proximity to the water well, septic system, house and barn. Requested a re-route to follow powerlines, which would move the route off this tract.</p>	<p>Deviation as requested would impact other landowners.</p>	<p>No</p>	<p>Acceptable. Rerouting the line along the landowners property lines would result in transferring similar impacts from one landowner to another. Therefore, based on available information, we were unable to identify a viable route alternative preferable to the proposed route.</p>
<p>The landowner raised concerns about the pipeline route intersecting the center of their tract.</p>	<p>A route deviation would impact other landowners with similar concerns.</p>	<p>No</p>	<p>Acceptable. Rerouting the line along the landowners property lines would result in transferring similar impacts from one landowner to another. Therefore, based on available information, we were unable to identify a viable route alternative preferable to the proposed route.</p>
<p>Offline</p>	<p>Parcel is neither crossed nor adjacent to the Project work areas</p>	<p>Yes</p>	<p>Acceptable. Based on available information, we conclude that a route modification is not necessary.</p>
<p>The landowner raised concerns about the pipeline interfering with expansion plans of the college.</p>	<p>Rover has adjusted the route on this parcel to avoid the area identified for future expansion.</p>	<p>Yes</p>	<p>Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.</p>

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner requested that Rover route pipeline along property lines.	Rover did not adopt a route deviation stating that a route along the property line would result in greater environmental impacts as compared to the proposed route.	No	Acceptable. Rerouting the line along the landowners property lines would result in transferring similar impacts from one landowner to another. Therefore, based on available information, we were unable to identify a viable route alternative preferable to the proposed route.
Landowner raised concerns for multiple crossings of the Wisner Drain Field.	A route deviation was not adopted because the current route minimizes impacts to several houses.	No	Acceptable. We were unable to identify a viable route preferable to the proposed route.
Stakeholder raised concerns for the route near Consumer Freedom Compressor Station and suggested moving the route further west to avoid the population center, a lake, and fields that are farmed.	The current route minimizes impacts to residential housing as well as Pleasant Lake. The proposed Consumers Meter Station site was relocated in June 2015 about 7 miles north.	No	Acceptable. We were unable to identify a viable route preferable to the proposed route. Moving the route to the west would impact forested land.
Landowner raised concerns about tree-clearing; no deviation has been proposed by either the landowner or Rover.	Current route follows existing METC powerline right-of-way.	No	Acceptable. The proposed route follows an existing right-of-way. Additionally, the landowner was concerned about all trees being cleared between residence and M52. However, based on the current configuration, tree vegetation screens will continue to exist between the residence and the road. We were unable to identify a viable route preferable to the proposed route.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner raised concerns for diagonal pipeline route through their property.	Rover will alter right-of-way on landowners' property per their request.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
The landowner Trust raised concerns about decimation to wildlife habitat and prime hunting locations due to pipeline route through property. Further concerns were raised regarding crossing of a forested wetland on the property, and a re-reroute to avoid this wetland was suggested.	Original route was deviated into MI-WA-043.000 to avoid a major county drain. The reroute moved more of the pipeline onto this landowner's property. Rover will consider re-routing again if survey permission is granted in the adjoining property, MI-WA-044.000.	No	Acceptable. The reroute adopted by Rover avoids impacts to several waterbodies and a wetland. If the route was to be moved south of the original line, it would impact several streams and be located closer to a residence. Based on our review and analysis, we were unable to identify a variation that resulted in fewer environmental impacts.
Landowner raised concerns for the pipeline impacting a drain tile and identified an alternative route west of the original proposed route. Rover's proposed deviation follows existing pipeline easements.	Rover is proposing a reroute that follows existing easements.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner suggested that the Project route follow an existing pipeline on their property.	Rover is proposing a reroute that follows the Panhandle Pipeline easement.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
Landowner raised concerns that the pipeline route would eliminate a grove of trees on the property.	Rover has rerouted and this parcel is no longer crossed by the Project.	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.
Landowner suggested moving the pipeline route to be adjacent to the Panhandle Pipeline easement.	Rover is evaluating a reroute that would follow the Panhandle Eastern easement, reroute is pending survey results.	Pending	Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.
Landowner raised concerns for the right-of-way needed in addition to the parallel existing easement.	Rover did not adopt a reroute, as the current route follows current easements on these tracts as much as is possible.	No	Not Acceptable. As stated in our recommendation in section 3.4.3, Rover should adopt a variation for all residences within 10 feet where they are unable to get landowner concurrence.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
Landowner raised concerns about the pipeline route traversing the middle of the property. No suggested alternatives were provided.	Any re-route would not be possible due to surrounding high-congestion areas.	No	Acceptable. Rerouting the line along the landowners property lines would result in transferring similar impacts from one landowner to another. Therefore, based on available information, we were unable to identify a viable route alternative preferable to the proposed route.
Landowner raised concerns for the crossing of a river and wetland on the property and has suggested a route that would involve boring under a contaminated pond.	The deviation requested was not adopted because of interference with expansion of a public water facility, and inability to bore near contaminated soils.	No	Acceptable. The proposed route is following an existing right-of-way through most of the property and the requested deviation would result in greater environmental impacts. We were unable to identify a viable route preferable to the proposed route.
Landowner raised concerns that the pipeline route could impact potential expansion of the municipal sewage treatment plant.	Rover has rerouted and this parcel is no longer crossed by the Project.	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.
Landowner raised concerns that the pipeline route will remove mature trees on their property, and would incur costs associated with building their home in a different location within the property.	Rover has rerouted and this parcel is no longer crossed by the Project.	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.
Landowner raised concerns for impacts on farming operations, 1-3 acre zoned parcels zoned, future development of the parcels, and questioned use of nearby powerline right-of-way on southern edge of property as a route alternative.	Rover has rerouted the line to avoid the 1-3 acre zoned parcels.	Yes	Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.

APPENDIX I-1 (continued)

Status of Route Deviations Reported by Stakeholders

Reason for Landowner Minor Deviation Request	Status	Resolved per Landowner Request (Yes/No)	FERC Conclusions
<p>Landowner raised concerns the route on their parcel and associated impacts on forest lands, wildlife habitat, and property values while an existing nearby utility corridor offered an alternative route across lands already cleared of trees.</p>	<p>Rover has rerouted and this parcel is no longer crossed by the Project.</p>	<p>Yes</p>	<p>Acceptable. Based on available information, we conclude landowner concerns have been resolved with adoption of the variation.</p>
<p>Landowner raised concerns for cumulative impacts on farming operations due to multiple existing right-of-ways already located on the parcel, and asked for consideration of use of the existing lines that have additional capacity that could serve the project.</p>	<p>This landowner is near Rover's interconnect to the Vector System. A reroute for the Vector interconnect is currently being evaluated by Rover and pending survey permission.</p>	<p>Pending</p>	<p>Not Acceptable. As stated in our recommendation in section 3.4.3, prior to the end of the draft EIS comment period, Rover should file with the Secretary any route adjustments, workspace modifications or mitigation measures as developed through Rover's ongoing consultations with landowners. Rover should also include updated alignment sheets incorporating any route adjustments and associated modifications of construction methods and mitigation.</p>
<p>Landowner raised concerns for impacts to property access, loss of land due to the pipeline route, and safety concerns presented due to the 200 foot proximity to their house.</p>	<p>The proposed route follows existing easements through the entirety of the tract.</p>	<p>No</p>	<p>Acceptable. The proposed route is following an existing right-of-way through most of the property. We were unable to identify a viable route preferable to the proposed route.</p>
<p>Landowner raised concerns for the path of the pipeline through the center of the property, and requested that Rover follow existing easements on the tract.</p>	<p>Rover did not adopt the suggested reroute due to the presence of a rock formation that forced the route into its current position.</p>	<p>No</p>	<p>Acceptable. The proposed route is following an existing right-of-way through most of the property. There is an alternate existing right-of-way through the property which the landowner would prefer for Rover to follow; however, based on available information, and the information provided by Rover, we were unable to identify a viable route preferable to the proposed route.</p>