**Note To:** FERC Docket Nos. CP14-554, CP15-16, CP15-17

**Note From:** John Peconom, Environmental Project Manager

**Date:** April 1, 2015

**Subject:** Southeast Market Pipelines Project – Interagency Meetings

The FERC staff has recently communicated with various federal and state regulatory agencies regarding the planned Southeast Market Pipelines Project, comprised of the Hillabee Expansion Project (Docket No. CP15-16); the Sabal Trail Project (Docket No. CP15-17); and the Florida Southeast Connection (FSC) Project (Docket No. CP14-554).

**JANUARY 22, 2015 – FLORIDA KARST MEETING**

The FERC staff met with representatives from the Florida Department of Environmental Protection (FDEP), Florida Geological Survey (FGS), Florida Park Service (FPS), Suwannee River State Park, Suwannee River Water Management District (SRWMD), and Southwest Florida Water Management District (SWFWMD). The meeting was held at FGS offices in Tallahassee, Florida. Some agency personnel attended via conference call. The primary purpose of the meeting was to discuss Florida geologic and hydrogeologic information presented by Sabal Trail Transmission (Sabal Trail) in its FERC application and other supplemental filings. Topics discussed included:

* Pipeline construction and restoration methods and operating procedures, including standard overland trench excavation and the horizontal directional drill (HDD) method.
* Existing pipeline systems in Florida - approximately 5,400 miles of interstate transmission pipeline and over 40,000 miles of natural gas distribution pipeline in Florida.
* Review of pipeline damage incidents due to karst geologic setting - no significant incidents on record in Florida.
* Sabal Trail karst characterization methods – existing databases and mapping; aerial photographic interpretation; geotechnical studies; geophysical studies.
  + Sabal Trail underestimated karst features - additional, more recent data available from agencies including LiDAR, potentiometric surface maps, and cave maps.
  + Highest agency concern is associated with likely loss of drilling fluid associated with HDDs in limestone bedrock including at the Suwannee, Santa Fe, and Withlacoochee rivers. Less concern with impacts of overland construction or HDDs in non-limestone bedrock. No significant karst-related concerns with the FSC Project.
  + Drilling fluid loss would have an environmental impact; risk and magnitude of impact on groundwater, wells and springs should be based on updated, site-specific information.
* Sabal Trail karst mitigation measures - procedures to limit HDD drilling fluid loss; surface water, water well, and spring monitoring and mitigation plans; and sinkhole mitigation procedures.
  + Monitoring and mitigation plans should be based on updated, site-specific information and flow regimes at time of construction.
  + Consider using construction materials (sand, gravel, cobble) to mitigate sinkholes and other karst features encountered during construction.
  + High volumes of grout can locally affect aquifer quality and recharge.
  + Polymers not historically successful in preventing drilling fluid loss.
  + Pipeline right-of-way should be inspected for signs of sinkhole activity after major rain events.
* Private landowner adjacent to Suwannee River State Park opposes construction on his property, which is within a conservation easement. Minimize operating right-of-way if overland route occurs within the park.
* Consider route alternatives, drilling method alternatives (e.g., direct push), open cut method, or aerial/bridge crossings to avoid/reduce impacts at karst-sensitive river crossings.
* FGS provided FERC staff with written geologic/hydrogeologic comments issued to Sabal Trail in the FDEP’s January 16, 2015 Request for Additional Information (RAI).

**FEBRUARY 4, 2015 – GEORGIA KARST MEETING**

The FERC staff met with Mr. Jim Kennedy, Georgia State Geologist, via conference call. The primary purpose of the meeting was to discuss Georgia geologic and hydrogeologic information presented by Sabal Trail in its FERC application and other supplemental filings. Topics discussed included:

* Summarized the recent FGS karst meeting (above).
* Pipeline construction and restoration methods and operating procedures, including standard overland trench excavation and the HDD method.
* Existing pipeline systems in Georgia - approximately 4,500 miles of interstate transmission pipeline and over 83,000 miles of natural gas distribution pipeline in Georgia.
* Review of pipeline damage incidents due to karst geologic setting - no significant incidents on record in Georgia.
* Sabal Trail karst characterization methods – existing databases and mapping; aerial photographic interpretation; geotechnical studies; geophysical studies.
  + Geologic information acceptable; Sabal Trail accessed the most current geologic information available for Georgia.
  + One HDD would encounter limestone bedrock (Withlacoochee River).
  + Discussed sinkhole development near Albany municipal well field.
* Sabal Trail karst mitigation measures - procedures to limit HDD drilling fluid loss; surface water, water well, and spring monitoring and mitigation plans; and sinkhole mitigation procedures.
  + Sabal Trail’s proposed mitigation appears adequate.
  + Loss of drilling fluids not expected to have long term environmental impact.
  + Overland construction should not initiate karst features in areas where trench is above the water table.
  + Recreational caves in Georgia lie south of the proposed Sabal Trail route and not at proposed waterbody HDD crossings.
* Discussed USEPA concern of natural gas leaking from the pipeline into underground caves, resulting in increased risk of explosion. Concluded extremely low risk due to pipeline construction and integrity monitoring, natural gas dissipation, and lack of ignition source.

**FEBRUARY 10, 2015 – U.S. ARMY CORPS OF ENGINEERS MEETING**

The FERC staff met via conference call with Mark Evans of the U.S. Army Corps of Engineers (COE) Jacksonville District Office. Mr. Evans is coordinating the Jacksonville, Mobile, and Savannah Districts in the review and permitting of the SMP Project.

The COE and FERC staff discussed comments provided by the COE in a letter dated January 8, 2015 including:

* Project design and location alternatives;
* Direct and indirect effects on waters of the U.S.;
* Pre- and post-project wetland functional assessments; and
* The 404(b)(1) analysis recommendation.

The COE and FERC staff agreed in principal how each of the above topics will be addressed in the environmental review of SMP Project. As a formal cooperating agency, the COE will assist the FERC in addressing these topics in the draft Environmental Impact Statement.

**FEBRUARY 10, 2015 – FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) MEETING**

The FERC staff met via conference call with Lisa Prather of the FDEP. Ms. Prather is coordinating the environmental review of the Sabal Trail Project and FSC Project by various FDEP programs.

The FDEP and FERC staff discussed comments that the FDEP provided to Sabal Trail in its January 16, 2015 Request for Additional Information (RAI), including:

* Davenport Creek Swamp (Happy Trails) alternatives site review;
* Conservation easements crossed by the Hunters Creek Lateral and managed by South Florida Water Management District;
* Green Swamp route reviews;
* Mitigation bank suitability; and
* Karst-related comments.

The FDEP indicated it expects Sabal Trail to respond to its RAI within the next four weeks, and agreed to communicate again with the FERC, as necessary, to coordinate review efforts.

**FEBRUARY 24, 2015 – U.S. FISH AND WILDLIFE SERVICE, VERO BEACH FIELD OFFICE MEETING**

The FERC staff met via conference call with Ted Martin of the U.S. Fish and Wildlife Service (FWS). Mr. Martin is coordinating the federal sensitive species review for the FSC Project. The primary purpose of the meeting was to provide an update of each agencies’ environmental review process and discuss the status of sensitive species surveys. Topics discussed included:

* Status of FERC’s review of FSC’s application;
* Status of FSC’s consultation with FWS;
* Timeframes for determining Florida sand skink and blue-tailed mole skink survey protocols; and
* Timeframe and process for continuing consultation with the FWS.

**FEBRUARY 25, 2015 – U.S. FISH AND WILDLIFE SERVICE, JACKSONVILLE FIELD OFFICE MEETING**

The FERC staff met via conference call with Annie Dziergowski of the FWS. Ms. Dziergowski is coordinating the federal sensitive species review of the Sabal Trail Project. The primary purpose of the meeting was to provide an update of each agencies’ environmental review process and discuss the status of sensitive species surveys. Topics discussed included:

* Status of FERC’s review of Sabal Trail’s application;
* Status of Sabal Trail’s consultation with FWS;
* Timeframes for determining Florida sand skink and blue-tailed mole skink survey protocols; and
* Timeframe and process for continuing consultation with the FWS.

**MARCH 11, 2015 – U.S. ENVIRONMENTAL PROTECTION AGENCY MEETING**

The FERC staff met via conference call with Beth Walls and Ntale Kjumba of the EPA. Ms. Walls is coordinating review of the SMP Project for the EPA, and Ms. Kjumba evaluates impacts on environmental justice communities. The primary purpose of the meeting was to obtain EPA feedback on the FERC’s approach to identifying EJ communities in the SMP Project area.  The FERC provided a draft write-up describing its planned approach, and the EPA generally agreed with the definitions that FERC identified for minority and low income populations.  Other topics of discussion included:

* Determining “meaningfully greater” populations, and
* Identifying comparison groups for the evaluation of disproportionate effects.