Guest Speakers
Pipeline Advisory Committee Meeting
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Ms. Paula Gant
Deputy Assistant Secretary
Office of Oil and Natural Gas
1000 Independence Avenue, SW
Washington, DC 20585

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Dr. Paula Gant is the Deputy Assistant Secretary for Oil and Natural Gas in the Department of Energy's Office of Fossil Energy. As Deputy Assistant Secretary, Dr. Gant administers domestic and international oil and gas programs, including policy analysis and liquefied natural gas import and export authorization. Dr. Gant's work at DOE is focused on realizing the promise presented by America's abundant natural gas and oil resources which hinges on prudent production, environmental stewardship and efficient use. The Department of Energy's research efforts seek to deploy the best available science, analysis and technologies to ensure a more secure energy future by leveraging our domestic natural gas and oil resources and protecting our air, land, and communities.

Dr. Gant previously worked for the American Gas Association and Duke Energy. She has also served on the faculties of Louisiana State University and the University of Louisville. Dr. Gant is a native of Louisiana. She received a Bachelor of Arts degree in Economics from McNeese State University and a Ph.D. in Economics from Auburn University. She lives in Washington, D.C. with her family.

Dr. James White
Director
Institute of Arctic & Alpine Research (INSTAAR)
Professor of Geological Sciences (CU-Boulder); Director of Environmental Studies Program (CU-Boulder)
University of Colorado Boulder
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Specialty: Global change, paleoclimate dynamics, biogeochemistry.

Research Interests: Global scale climate and environmental dynamics; carbon dioxide concentrations and climate from stable hydrogen isotopes, peats and other organics; climate from deuterium excess and hydrogen isotopes in ice cores; isotopes in general circulation models; modern carbon cycle dynamics via isotopes of carbon dioxide and methane.

Biography: My research interests are broad, but all revolve around the use of environmental stable isotope ratios. I operate and maintain a laboratory for the analysis of stable isotope ratios of carbon, hydrogen, nitrogen, oxygen and sulfur. My specific areas of research include modeling the global carbon cycle using isotope ratios in atmospheric carbon dioxide and methane, development of techniques for measuring isotope ratios in atmospheric gases, reconstructions of paleo-environmental conditions using isotopes in ice cores, reconstructions of past environments from isotopes in organic materials, and tracing of ground water flow and recharge. I have been a member of several deep ice coring projects in Greenland (GISP2, NorthGRIP, and NEEM) and Antarctica (Siple Dome and Inland WAIS). I am also an affiliate of NOAA and work closely with the Carbon Cycle Group there.

Starting in the late 1980's, my ice core research has helped to show that large climate changes tend to occur in the natural system as abrupt and rapid shifts in mode probably driven by internal adjustments in the Earth climate system, rather than slow and gradual adjustments to changing external conditions, such as the amount of energy received from the sun. Shifts of more than 10˚C in mean temperature in less than a human lifetime are common in the paleoclimate record, and serve as a warning that adaptation to future climate changes may not be easy. My research in isotopes in the carbon cycle has also helped to show that land plants are capable of removing large amounts of carbon dioxide from the atmosphere, amounts that equal our input of CO_2 from fossil fuel burning on short time scales. Such large changes in the uptake of CO_2 by plants is a key piece in the puzzle we must solve to formulate workable policy on CO_2 levels and climate change.