



BIOSKETCH

Mr. Frederic Snider received his Bachelors Degree in Physics from Amherst College, Amherst, Massachusetts in 1972, and his Masters Degree in Geology/Geophysics from Wesleyan University, Middletown Connecticut, in 1975. He then spent 19 years working for Ebasco Services Inc., a large engineering firm, supporting major engineering, environmental and construction projects in the U.S. and overseas, including nuclear and large hydroelectric power generation facilities. In 1994, he left Ebasco to form Applied Geosciences Incorporated to provide high-level geological, geophysical, geotechnical and hydrological consulting services to both public and private clients. Among other recent projects, Mr. Snider has been a member of the Design Review Team supporting the Comprehensive Everglades Restoration Project for the South Florida Water Management District addressing hydrogeologic issues. He was also a member of the Independent Technical Review Board to oversee site investigations and remedial work plans by the US Army Corps of Engineers for the Ten Mile Creek Reservoir near Jupiter, Florida. Mr. Snider is currently involved in a number of FERC Part 12D safety inspections of hydroelectric projects in Michigan, and is a member of the Engineering Team for demolition and replacement of the primary water supply dam in Greensboro, N.C.

Over the course of his career, Mr. Snider has developed expertise in the following:

- Neotectonics, including Air Photo and Imagery analysis
- Seismic and Volcanic Risk Assessments
- Design and Implementation of Field Investigation Programs
- Geology, Geotechnical Engineering, Geophysics
- Groundwater Hydrology and Mathematical Modeling of Groundwater Flow
- Project Management of Projects Ranging from \$50,000 to \$100 million
- Business Development, including Proposal Creation and Presentation
- Negotiating Contracts, Terms and Conditions, and Fees
- Addressing the Challenges of Working Overseas and in Third World Countries
- Operating under Nuclear QA/QC programs, and EPA Health & Safety Standards

SUMMARY OF EXPERIENCE

Mr. Snider is a Registered Professional Geologist with more than 25 years experience in geology, geophysics, hydrogeology, geotechnical interpretations, site safety assessments, forensic investigations, tectonics, the design and implementation of field exploration programs, support of regulatory processes and Project Management. His experience includes work on environmental projects (both hazardous and nuclear waste) and large engineering projects such as nuclear, fossil-fuel and hydropower facilities. Since 2005, among other projects, he has provided consulting services to the South Florida Water Management District in support of the Comprehensive Everglades Restoration Project, the largest environmental restoration project ever undertaken.

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Other work during this time includes special projects for the Water Management District including serving on the Independent Technical Review Board for forensic investigations and rehabilitation studies for the Ten Mile Creek Reservoir project, evaluation of the District's hydrologic computer modeling center, and advising on several District initiatives including development of a policy and protocol for implementation of baseline hydrologic monitoring for water resource projects.

Since 1994, Mr. Snider has been a Principal of Applied Geosciences Incorporated providing specialty consulting services to public and private clients. During this time he supported the licensing process for a proposed nuclear waste disposal facility in North Carolina, and provided technical expertise to the State of New Jersey for development of a nuclear waste repository in the Northeast U.S. He was also a key team member on an extensive program of field geologic, hydrologic and geotechnical investigations to address potential foundation leakage and rim stability issues at a 2.2-billion dollar water supply reservoir in Southern California. He has provided expert witness support to several private clients addressing foundation failures related to flooding, and unstable soils.

Mr. Snider's prior experience includes 19 years with Ebasco Services Incorporated where he worked as Principal Investigator and/or Project Manager on a large number of engineering and environmental projects. He spent 18 months as a Resident Geologist in the Philippines working on geologic, tectonic, and seismic and volcanic hazards assessments associated with site selection and licensing for a nuclear power plant in that country (PNPP Unit 1). Once back in the U.S., Mr. Snider was involved with preparation of final licensing documents for the project and expert testimony before the International Atomic Energy Agency in Vienna, Austria. Following the recent eruption of Mt. Pinatubo, approximately 90 kilometers from the plant site, Mr. Snider participated in site safety reviews, presentations and workshops during evaluation of power generation alternatives by the Philippine National Power Authority in Manila.

Mr. Snider has also worked on a number of other engineering projects in the U.S. and overseas. He led route selection and foundation investigation programs for 21 miles of undersea electrical cables under Long Island Sound for the New York Power Authority. This project involved several years of overwater geophysical surveys and sub-sea soil and rock sampling programs. Mr. Snider also actively supported the New York State Article VII licensing process for the project, including providing expert testimony during the adjudicatory hearings. He also supported the Article VIII licensing process in New York for a cogeneration facility near Albany. Other engineering projects included site selection and site characterization studies for a proposed nuclear power station in Greece, site investigations for hydroelectric power facilities in central California, Utah and Alaska, and a multi-year investigation of foundation leakage and stability problems at the Ludington Pumped Storage facility in Michigan.

Environmental projects completed by Mr. Snider include several hazardous waste site investigations in New York and New Jersey, including geophysical investigations and subsurface sampling and testing under the Superfund program. Other environmental work includes investigation of ground and surface water contamination from a coal storage pile in Minnesota, investigations at existing and proposed radioactive waste disposal sites at Oak Ridge National Laboratory, TN, Maxey Flats, KY, Paducah, KY, West Valley, NY, and at the Savannah River Site,

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SC. Mr. Snider also has 10 years experience in state low-level radioactive waste management programs including criteria development, mandatory and volunteer siting programs, public process, regulatory interface, and licensing activities in New Jersey, New York, Vermont, and North Carolina.

Mr. Snider also has experience in neotectonics, seismology, the study of active faults, and the interpretation of satellite imagery and air photos. This expertise has been applied to a number of projects in the U.S. and abroad, including: site safety assessments for nuclear power facilities in Washington State, review of dam safety issues associated with existing reservoirs affected by the eruption of Mount St. Helens, reservoir-triggered seismicity associated with two large reservoirs in western Thailand, seismic and ground-rupture safety assessments for a proposed high dam in the Himalayan Mountains of western Nepal, seismic design and foundation liquefaction assessments for power generating facilities in Egypt, and studies of ground rupture and micro-seismicity following several large earthquakes in central Greece.

In addition to his technical expertise, Mr. Snider has gained experience with a wide range of regulatory processes at the state, federal, and international level. This experience includes work with the USNRC, the IAEA, the USEPA, FERC, and the DOE. At the state level, he has worked with a number of state agencies dealing with geologic and seismic hazards, groundwater contamination, dam safety, radiation protection and power generation and transmission facilities.

Mr. Snider is a Registered Professional Geologist in the state of Virginia. He is also widely published in peer-review and other journals.

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REPRESENTATIVE LEGAL AND PUBLIC PROCESS EXPERIENCE

In support of the technical projects throughout his career, Mr. Snider has had the opportunity to become involved in the legal and public process aspects of much of his work. This experience includes:

- Expert testimony before the International Atomic Energy Agency (IAEA) in Vienna, Austria during the licensing process for Philippine Nuclear Power Plant #1.
- Expert testimony in support of the New York Power Authority's Sound Cable Project under the New York Article VIII adjudicatory hearing process.
- Preparation of testimony in support of pending lawsuits regarding the site selection process for the low-level waste facility in North Carolina.
- Presentations and dialogue at over 50 public meetings and hearings on low-level radioactive waste siting and safety issues in North Carolina and New Jersey, including dealing with often hostile audiences.
- Technical support of Ebasco's legal counsel during a bid protest process arising from awarding of the New Jersey Site Characterization Contract to Ebasco over the low bidder.
- Expert Testimony for several cases involving in personal injury and property damage litigation. Support included forensic geologic work at several sites, report preparation, depositions and presentations.

EDUCATION

M.A., Geology, Wesleyan University, Middletown, CT, 1975
B.A., Physics, Amherst College, Amherst, MA, 1972

PROFESSIONAL REGISTRATIONS

Registered Professional Geologist, State of Virginia since 1984

PROFESSIONAL AFFILIATIONS

Association of Engineering Geologists

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PROFESSIONAL RECOGNITION

Invited Speaker, "Lessons Learned: Activities of the Illinois Low-Level Radioactive Waste Disposal Facility Siting Commission", Idaho National Laboratories, National Waste Management Program, at the following conferences and meetings:

- 15th Annual US Department of Energy LLRW Management Conference, December 1-3, 1993, Phoenix, AZ
- Host State Technical Coordination Committee Meeting, April 14-15, 1994, St. Louis, MO
- Nuclear Waste Technical Review Board (NWTRB) Quarterly Meeting, April 11-12, 1994, Reno, NV
- The Low-Level Radioactive Waste Forum Quarterly Meeting, April 25-27, 1994, New Orleans, LA
- NRC Advisory Committee on Nuclear Waste (ACNW) Quarterly Meeting, June 28-29, 1994, Bethesda MD

Invited Speaker, "Management of Low-Level Radioactive Waste in North Carolina", 24th Midyear Topical Meeting, Health Physics Society, Jan 21-25, 1991, Raleigh, NC.

Invited Participant, "Re-creation of a Public Forum on LLRW disposal and site selection", 23rd Midyear Topical Meeting, Health Physics Society, Feb 5-8, 1990, Atlantic City, NJ.

Invited Presenter, "Catastrophic Earthquake: The Federal Response", Enserch E&C Washington Policy Forum, National Press Club, October, 1988, Washington DC.

Invited Presenter, "The Rediscovery of Planet Earth", Segment #1: Geology, for Public Television WQED, June, 1986, Pittsburgh PA.

Invited Speaker, "Hazardous Waste Disposal", Association of Engineering Geologists Special Seminar, September 17, 1982, Atlanta, GA.

REPRESENTATIVE PROJECT EXPERIENCE

The following sections describe Mr. Snider's representative project experience. Projects have been grouped into the following categories: **Nuclear Power, Neotectonics, Water Resources, Low-Level Radioactive Waste Disposal, Other Geological/Geotechnical Projects, and Environmental Projects.**

NUCLEAR POWER

Philippine National Power Corporation, Nuclear Power Plant Study. For two years, Mr. Snider was a member of the field-based team supporting site selection, feasibility studies, and full site characterization for the Philippines' first nuclear power facility. Extensive experience was gained in site field investigations, including mapping, drilling and geophysical surveys, data interpretation and presentation, and neotectonic, volcanic, and geologic hazards studies and evaluations. Mr. Snider participated in generation of Preliminary and Final Safety Analyses Reports (PSAR and FSAR), and supported the hearing process, including expert testimony before the International Atomic Energy Agency, in Vienna, Austria.

Mr. Snider was also responsible for the QA/QC aspects of the records management for the licensing process.

Philippine National Power Corporation, Nuclear Power Plant Safety Review. After approximately 12 years since the nuclear facility was completed but not started, the National Power Corporation recently investigated issues related to upgrade and startup of the facility. As part of this process, Mr. Snider was involved in a safety review of the seismic and volcanic hazards assessments completed in the late 1970's, in light of additional data and more recent risk assessment methodologies. His involvement in this project included field investigations and evaluation of potential hazards related to the recent eruption of Mount Pinatubo, approximately 90 km from the plant site, and presentations and workshops with Philippine and worldwide experts convened in a special forum in Manila.

Public Power of Greece, Nuclear Plant Siting Study. As a member of the project team based in Athens, Greece, Mr. Snider participated in the development of site selection criteria, data acquisition, country-wide site screening, identification of candidate sites, design and implementation of site mapping and drilling programs, data synthesis and interpretation, project reports, and coordination with client representative and subcontractors.

NEOTECTONICS

Neo-Tectonic Studies at the DOE Site in Paducah, Kentucky. Mr. Snider was hired as a specialty consultant to the DOE in the investigation of potential Holocene faulting exposed in creek beds just north of the DOE site at Paducah. Work included stratigraphic analyses and determination of the

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relation of marker horizons to observed faulting, sense of motion, and possible offsets. Charcoal fragments at key stratigraphic points were collected for age dating and development of the tectonic history. Work included leading a field trip to the site for a large group of DOE staff and members of public watchdog and intervenor groups.

El Kureimat Seismic and Liquefaction Study, Egyptian Electric Authority. Mr. Snider was Task Leader for a probabilistic seismic hazard assessment and liquefaction susceptibility analysis for a major power generating facility at the El Kureimat site, Egypt, following the magnitude 5.9 earthquake on October 12, 1992 near Cairo. He was responsible for compilation and review of historical and instrumental seismicity, definition of seismic source zones and seismicity parameters, and directing the probabilistic hazard assessment. Mr. Snider also designed and directed liquefaction susceptibility studies using data from site borings and a range of input accelerations, as well as in-country coordination with client and project subcontractors.

Public Power of Greece, Gulf of Corinth Earthquake Study. Mr. Snider was a member of a field investigations team studying effects of major earthquake sequence in 1981, including rapid deployment of seismic monitoring equipment following the main shock, installation of tiltmeters and other recording instruments, mapping of over 40 kilometers of surface rupture, examination of failure modes of extensive damage to homes and other structures, and development of locally applicable earthquake prediction methodology based on instrumentation.

His Majesty's Government of Nepal, Chisapani Hydroelectric Development. As a member of the project team, Mr. Snider was involved in feasibility, site characterization, and preliminary design studies for a proposed major high dam in western Nepal. He took primary responsibility for the neotectonic analyses, including field investigation of known and suspected active faults, interpretation of satellite and aerial imagery, determination of seismic design parameters, and evaluation of geologic and seismic hazards. He also directed the installation of precise leveling benchmarks and tiltmeter plates as part of a long-term geologic deformation study.

WATER RESOURCES

Lake Townsend Dam Replacement Project, Water Resources Division, City of Greensboro, North Carolina. As a member of the Design Team working with Schnabel Engineering, Mr. Snider has been involved in all phases of site exploration, design and contractor pre-qualification and selection for a new labyrinth spillway dam to be built less than 100 feet downstream of the existing Lake Townsend Dam, the primary water supply for the City of Greensboro. Particular challenges include the construction of a new dam while maintaining full pond in the existing reservoir, diversion of flood flows during construction, and underwater demolition of the old concrete, gated spillway section and pumphouse.

Comprehensive Everglades Restoration Project (CERP), South Florida Water Management District, West Palm Beach, Florida. As a member of the Design Review Team under the Program Management contract, Mr. Snider provided review, comment, synthesis, and interpretation of

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geologic, geotechnical, groundwater and surface water field data, modeling results, and designs for embankments, canals, flow-ways, stormwater treatment areas, pump stations, and other water conveyance, storage and control features. His work also included the review of seepage analyses, design review for pilot programs, test cells, and groundwater monitoring systems. During this project, Mr. Snider was involved in all of the planned CERP Acceler8 projects and was the Districts primary reviewer for all seepage, modeling, and other groundwater related issues.

Ten Mile Creek Forensic Analysis, South Florida Management District, West Palm Beach, Florida. Mr Snider was asked by the District to help lead their efforts in evaluating serious seepage and embankment stability issues at the newly commissioned Ten Mile Creek Reservoir Project near Fort Pierce, Florida. The project was constructed by the Corps of Engineers and was turned over to the District for operation and maintenance. During first filling, significant seepage, sand boils in the adjacent Ten Mile Creek, failure of the soil cement armor and anomalous groundwater readings in site piezometers were noted. Mr. Snider was asked to participate in the initial evaluations, develop a geotechnical and hydrogeologic investigation program as part of the forensic analysis, and ultimately requested to serve on the Independent Technical Review Board to oversee analyses initiated by the Corps of Engineers and their contractors.

Baseline Hydrogeologic Monitoring Policy, Protocol and Procedures Report, South Florida Water Management District, West Palm Beach, Florida. Mr. Snider was asked by the District to develop a district-wide policy and protocol document for establishment of baseline hydrogeologic monitoring for their planned reservoirs and storm water treatment areas. The monitoring programs include monitoring wells and groundwater level readings, installation of well clusters for evaluation of multiple, isolated water bearing zones and documentation of vertical gradients, and evaluation of ground- and surface water geochemistry for identification of possible tracers in support of modeling efforts.

Federal Energy Regulatory Commission (FERC), Dam Re-Licensing Studies (various districts). Mr Snider regularly participates in the data analysis and development of documents supporting various clients with dam projects regulated by FERC. This work includes preparation of the required Supporting Technical Information Documents as well as input to the Part 12D Independent Consultant Inspection reports. The projects are in various states and districts, including Michigan and Virginia.

Eastside Reservoir Project, Metropolitan Water District of Southern California, Los Angeles, California. Mr. Snider provided geological consulting services to the Metropolitan Water District in support of a \$2.2 billion dollar water supply reservoir near Hemet, California. Mr. Snider's responsibilities included support of studies dating the age of last movement on faults discovered in the dam foundation, and addressing potential reservoir rim seepage and stability issues in a potentially inadequate portion of the natural site.

Ludington Pumped Storage Facility, Consumers Power Company, Ludington, Michigan. For this project, Mr. Snider was the initial geophysical program lead on a major site investigation program at the Ludington Pumped Storage Facility in Ludington, Michigan. His work entailed overall

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responsibility for design and implementation of a large scale overwater geophysics program to investigate potential leakage paths at the upper reservoir, including high-resolution side scan sonar, overwater self-potential and electromagnetic surveys, and sub-bottom profiling using narrow-beam fathometer, pinger and boomer technology. This project required close coordination with the lead technical personnel in the overwater drilling and geotechnical testing programs, in order to develop unified interpretations, and ensure that all studies are completed in the most cost effective way.

In addition to the technical planning and implementation aspects of this program, Mr. Snider was also responsible for developing technical specifications and bid packages, identification of qualified firms for subcontract, review of proposals and recommendation of preferred contractor, subcontract negotiation, contract administration, and coordination with client representatives.

South Fork American River (SOFAR) Hydroelectric and Water Supply Development Project, California. On this project, Mr. Snider acted in a review capacity and was responsible for synthesis of field and laboratory data into unified interpretations for reports and presentation to the expert board of review. Field activities included checking of field mapping, support of geophysical surveys at key project features, writing report sections, developing project graphics for presentations, and supporting field trips for expert board members.

Pacific Power and Light, Lewis River Projects Relicensing. Mr. Snider was responsible for re-assessment of volcanic and seismic risk following major eruption of Mt. St. Helens. Activities included analysis of earthquake history using Ebasco proprietary CAD-based earthquake analysis tools, analyses of satellite and aerial imagery, and field investigations at and around Mount St. Helens. Participated in preparation of reports and documentation to support FERC relicensing effort for these two major hydroelectric projects on the flanks of the volcano.

Utah Power and Light, Bear Lake Pumped Storage Project. Mr. Snider was site manager responsible for all aspects of geotechnical site feasibility studies, including mapping, drilling and trenching, soil sampling and laboratory analysis, neotectonic and geologic hazards evaluations, fault studies, preparation of project reports, and coordination with subcontractors and client staff.

Alaska Power Authority, Grant Lake Hydroelectric Project. As field operations leader, Mr. Snider directed field investigations for proposed 6 MW hydroelectric station in Seward, AK. He was responsible for feasibility and design support studies, including mapping, drilling, geophysical surveys, overwater bathymetry, and seismic design analysis, as well as subcontractor contract management and client interface.

Alaska Power Authority, Susitna Hydroelectric Project. During the latter stages of the feasibility and design studies, Mr. Snider was responsible for overall analysis and synthesis of extensive data from field mapping, on-land and over-ice borings, morphological analyses and geophysical surveys and generation of major sections of the geotechnical sections of feasibility and design reports for a proposed 1600 MW hydroelectric development on the Susitna River.

LOW-LEVEL RADIOACTIVE WASTE DISPOSAL

Consulting Services for Site Pre-Characterization and Characterization for the Location of a Low-Level Radioactive Waste Disposal Facility, New Jersey LLRW Disposal Facility Siting Board. As Technical Advisor for this multi-million dollar project, Mr. Snider was responsible for addressing the technical, regulatory and public policy issues related to New Jersey's recent shift from a statewide screening, mandatory siting process to a voluntary siting process. A number of important issues related to the published siting criteria and statewide screening methodologies arose as a result of this shift which must be addressed by the Siting Board. Mr. Snider is also actively involved in preparation of project schedules, public information materials, site pre-characterization and characterization plans, QA/QC, and working closely with the Board's technical subcommittee on a number of technical and policy issues.

Statewide Screening, North Carolina LLRW Management Authority. Mr. Snider was technically responsible for the statewide screening aspects of the North Carolina LLRW siting process for the Southeast Compact. In this capacity, he had responsibility for the development of the screening methodology, overall data management, implementation of GIS techniques on a statewide scale, quality control and data tracking, production of final reports, and oversight and coordination of two major subcontractors.

Part of this responsibility included periodic meetings and presentations to the NC LLRW Management Authority members and staff, presentations and hearings before the Joint Select Committee of the North Carolina Legislature (some televised), and update meetings with the Southeast Compact Commissioners. He also actively participated in an extensive program of public information, which included 32 forums and meetings around the state of NC during the various phases of the statewide screening process, as well as presentations to specific industrial, legal, or other special interest groups.

Environmental Impact Statement, North Carolina LLRW Management Authority. Mr. Snider was part of the project team responsible for the preparation of the Environmental Impact Statement (EIS) for the preferred site for the LLRW disposal facility in North Carolina. In this capacity, he is responsible for the overall technical organization and content of the EIS, as well as participating in coordination with technical and legal staff of the Authority and other specific regulatory agencies.

Generic Site Characteristics Study, New York State LLRW Siting Commission. Mr. Snider was Principal Investigator on this task order to develop a set of generic site characteristics as input to performance assessment for a range of disposal methodologies. As part of this project, he provided design and coordination of the Geographic Information System activities, as well as participation in overall project design, implementation, and report preparation.

Generic Site Characterization Plan, New York State LLRW Siting Commission. As Principal Investigator on this project, Mr. Snider led the technical aspects of the revision of the Commission's draft Generic Site Characterization Plan in response to comments from outside reviewers, and based on a global technical and consistency review of the document. Two major deliverables were produced, including a revised Generic Site Characterization Plan, and documentation of the responses

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to over 400 comments generated by the Commission's draft.

Draft Generic Environmental Impact Statement on Method Selection, New York State LLRW Siting Commission. Mr. Snider was lead geoscientist on the development of the DGEIS for the Siting Commission's selection of a preferred disposal method. In this capacity, he was responsible for the geoscience's affected environment sections, and documentation of alternatives and impact assessments related to geology and geohydrology. He was also actively involved in the scoping process, and supported the required public involvement program.

Lessons Learned Report: Activities of the Illinois LLRW Disposal Facility Siting Commission, EG&G Idaho, National Waste Management Program. As lead geoscientist on this project, Mr. Snider was responsible for the identification of geoscience issues and lessons learned during the lengthy Illinois Siting Commission hearing process. As part of this project, the extensive report prepared by the Commission was reviewed, as well as hearing transcripts and other supporting documentation. Mr. Snider has also had the responsibility of presenting the overall results of this study at conferences and technical meetings, at the request of the client.

LLRW Consulting Services, Vermont Agency of Natural Resources, Radioactive Waste Management Division. Mr. Snider was Project Manager for development of LLRW site selection criteria, screening methodology, site certification procedures, and public process procedures for the regulatory agency in the State of Vermont. The project deliverables developed were used during public review process and submitted for legislative rulemaking.

West Valley LLRW Disposal Site Studies, New York State Energy Research Development Authority (NYSERDA). Mr. Snider was a member of the project team evaluating existing geological, geotechnical, and geohydrological conditions at the closed West Valley LLRW disposal site. These analyses were used in support of the evaluation of remediation and closure strategies.

Maxey Flats Steering Committee, Maxey Flats LLRW Disposal Site, Kentucky. Mr. Snider acted in technical review capacity for major site characterization program designed to establish extent of offsite contamination and support feasibility studies for remediation and closure. His duties included review of site workplans prior to investigations, and support of data management, display, and interpretations.

Oak Ridge National Laboratory, Closure of WAG 6 Tumulus 1 and 2. Mr. Snider was responsible for analysis of present geologic and geohydrologic conditions at an LLRW disposal facility at ORNL in Oak Ridge, TN. He compiled and synthesized existing boring and monitoring data to provide input to closure design, including cap design, evaluation of wick potential, depth to groundwater, and potential groundwater travel paths. As an extension to this work, Mr. Snider was also asked to review and participate in the groundwater modeling activities for the entire Waste Area Grouping #6 (WAG 6), in support of a large-scale closure and stabilization program for the site.

Low-Level Radioactive Waste Studies - Savannah River DOE Site, US Department of Energy. As part of the project team, Mr. Snider was involved in a re-evaluation of LLRW disposal options at

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the Savannah River Site, including an options analysis comparing existing and proposed above ground and below ground technologies. Technical, cost, exposure risk, and logistical characteristics of each disposal technology were included in the analyses. Mr. Snider was also involved in design and implementation of demonstration cells for evaluating closure options for existing below ground disposal area, including the use of combined geotextile and earthen cover designs. Performance was evaluated by extracting sand from beneath the demonstration caps and documenting the effects of subsidence on natural and man-made materials. Other studies at the site included instrumentation and analysis of dynamic compaction tests and evaluating existing DOE regulations with respect to disposal and closure options.

Technical Services in Support of the License Application Process, North Carolina LLRW Management Authority. Mr. Snider completed work with the NC LLRW Management Authority and its subcontractors and regulators to help expedite the license application review process for the proposed LLRW disposal facility in Wake County, NC. Services under this contract include review and recommendations with respect to field and analysis, plans and strategy to address interrogatories, review of the existing conceptual and numerical groundwater flow models, and working with Authority members and staff to develop a comprehensive licensing strategy.

Consulting Services for Assistance in the Development and Implementation of a Low-Level Radioactive Waste Disposal Facility Siting and Disposal Plan, New Jersey LLRW Disposal Facility Siting Board. As Group Manager for major technical portions of this project, Mr. Snider was technical lead for all tasks related to development of the site selection criteria and statewide screening methodology, screening data acquisition and control, establishment of the project Geographic Information System (GIS), and implementation of the initial statewide screening and site selection process, all in coordination with the Siting Board. He also actively participated in the Siting Board's public information program during the development of the criteria and methodology, including support of public hearings on the siting criteria and site selection methodology.

Consulting Services for Identification of Candidate Sites, New Jersey LLRW Disposal Facility Siting Board. As Project Manager on the extension of the previous project, Mr. Snider had overall responsibility for all technical and administrative aspects of the project. He was responsible for coordination of all technical personnel assigned to the project, as well as maintaining budget and schedule, and interfacing with the Siting Board on technical and contractual issues. He also maintained overall responsibility for the technical content and quality of work products.

OTHER GEOLOGICAL AND GEOTECHNICAL PROJECTS

New York Power Authority, Sound Cable Project. Mr. Snider had overall geotechnical responsibility for three years of route selection and route characterization activities for the overwater portions of a major transmission line project for the New York Power Authority (NYPA). In this capacity, he was responsible for the design and implementation of three field seasons of overwater geophysical, rock and soil drilling, and geotechnical testing programs to identify, optimize, and characterize a total of 28 miles of subsea cable routes.

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Mr. Snider worked closely and extensively with lead and technical personnel from other disciplines, in order to coordinate the multiple data acquisition needs with the minimum of redundant activities. He was also responsible for developing the technical specifications and bid packages for subcontracts for the overwater geophysics, surveying and navigation, soil and rock drilling, in-situ soil testing, and laboratory testing services. Mr. Snider also was responsible for review of bids, selection of preferred contractors, contract negotiation and contract administration.

Mr. Snider also had overall responsibility for the interpretation and synthesis of the extensive data collected during these investigations, including selection and justification of the preferred cable routes, report generation, and support of the New York Public Services Commission Article VIII license application process, including response to interrogatories and expert testimony during the adjudicatory hearing process.

Inter-Power of New York, Half Moon Cogeneration Project. Mr. Snider was geotechnical lead in the early stages of site characterization, licensing, and preliminary engineering design of the Half-Moon Cogeneration Project near Albany, New York. He was responsible for design and implementation of site drilling, testing, and geophysical programs to support the New York State Article VIII license application and preliminary design studies. He has overall responsibility for the initial drilling and geophysical programs, including design, implementation, and data interpretation.

New York State HUD Authority, Super Conducting Super Collider. Mr. Snider provided support of geotechnical investigations at three potential site regions, including drilling, testing, and geophysical surveys. He was responsible for ring configuration optimization studies, data management, and was co-author of major portions of the geotechnical proposal sections in support of New York States proposals to the U.S. Department of Energy.

Houston Power and Light, Mexia, Texas Lignite Plant Ash Pond Study. Mr. Snider acted as field geologist supervising and logging borings, trenches and test pits, and piezometer installation, and geohydrologic testing for a proposed ash pond site, including several large scale infiltration tests.

Minnesota Power and Light, Coal Pile Seepage and Foundation Stability Study. Mr. Snider managed a field program of exploratory borings, piezometer installation, trenching, and testing to determine the source of contamination from an operating coal storage facility adjacent to a major coal-fired power generating facility. As part of this project, Mr. Snider was also the field geologist responsible for boring and testing at a proposed site for ash-pond extension.

ENVIRONMENTAL PROJECTS

Niagara Mohawk Power Co, Gloversville Coal Gasification Site Investigations. At this hazardous waste site, Mr. Snider was responsible for developing a geophysical investigation program to determine the extent of groundwater contamination using electro-magnetic methods, and a subsequent mapping and boring program to detail the occurrence of coal tar and contamination in the subsurface.

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New Jersey Department of Environmental Protection and Energy. Mr. Snider was part of the project team for design, implementation, and interpretation of geoscience investigations at several existing hazardous waste sites, including Burnt Fly Bog and Combe North Landfill.

Jersey Central Power and Light, Boonton Coal Gasification Site. Mr. Snider was part of the project team implementing geophysical surveys, site mapping, and boring and trenching programs to determine the extent of groundwater contamination and coal tar disposal on this old gasification site. Mr. Snider was also responsible for data management and integration of the site geophysical, geologic, and geochemical information to develop a unified interpretation and presentation of site characteristics.

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