

Information Needs Victoria County Station ESP Site Audit

Info needs #	Information Needs
G - General Information Needs - ALL	
G-1	Please make available originals of all ER figures in .jpeg, .png or .tif format at a resolution of at least 300 dpi, and sized correctly. Please make available the electronic version of all ER figures in black and white.
G-2	<p>Have available large wall map(s) at the site audit that show key features related to the proposed project, including:</p> <ul style="list-style-type: none"> • Potential temporary and permanent facilities to be constructed at the site • Potential construction laydown areas • Proposed intake pipeline • Proposed transmission corridor(s) • Property boundaries • Points of interest (e.g., nearby residences, gas pipelines, nearby industries, including quarries/mines) • Proposed haul roads • Wetlands to be impacted by proposed activity (permanent & temporary) by acreage & type • Nearby and regional transportation corridors and infrastructure (roads, interstates, rail, airports, and water ports) • Points of interest relevant to past, present, and reasonably foreseeable future projects (federal and non-federal)
G-3	Please have all ER references available for review.
G-4	<p>Provide access to all Geographic Information System (GIS) and/or CAD data/databases used to support the Environmental Report analysis and results including existing and proposed conditions as appropriate. The data should generally include, but is not limited to:</p> <ol style="list-style-type: none"> a) All existing and proposed site infrastructure (roads, buildings, pipelines, transmission lines, utility right-of-ways/transmission corridors, power blocks, switchyards, pipeline corridors, cooling and retention ponds, dams, canals, monitoring/instrument stations, etc.) b) Location data (official property boundary, official unit point location, exclusion area boundary, and other relevant boundaries on-site or regionally) c) study boundaries, aquifers, potentiometric contours, well locations, surface water monitoring sites, etc.) d) All terrestrial and aquatic ecological data (wetlands, ponds, terrestrial and aquatic sampling sites,

	<p>wildlife/habitat areas, land use/land cover, threatened and endangered species locations,</p> <p>e) Terrain and bathymetric data (LIDAR, contours, river cross-sections, bathymetric point samples, etc.)</p> <p>f) Socioeconomic data (sector data at various radii, census blocks w/ attribute data including low income and minority data, state./county park recreational area boundaries, trails, water trails, wildlife management units, traffic count data, commuter routes, etc.)</p> <p>g) Geology and soils data (site and vicinity data, faults, folds, seismic activity, etc.)</p> <p>h) Alternative (candidate) site data (point locations, proposed site boundary, proposed infrastructure, etc.)</p> <p>Have available for review metadata supporting this (GIS) data, such as purpose, access and use constraints, source, scale, capture date, contact information, processing steps, spatial reference, and data attribute definitions.</p>
A - Alternative Sites - Ron Kolpa	
A-1	Have available a knowledgeable expert responsible for the ER site screening methodology and use of the screening criteria as discussed in section 9.3, as well as the application of exclusionary criteria. Have available the documentation supporting the siting study. (ESRP 9.3)
A-2	<p>Have a knowledgeable expert familiar with the ROI, including:</p> <ul style="list-style-type: none"> • Electric power generation, transmission, and distribution throughout the ROI, including major generating sources and their locations, areas identified as deficient in power availability, areas of transmission congestion, announced transmission system expansions • Water bodies available for cooling • Land use classifications • Transportation infrastructures • Demographics within the ROI, including population centers and distribution throughout the ROI • Topographic features • Seismic activity, flood-prone areas, unusual geographic features that could impact reactor safety
A-3	Have available a subject matter expert (or experts) familiar with the data and the sources of data used in alternative site evaluations (e.g. the American Electric Power (AEP) Interconnection Study referenced in Section 9.4.3.2 of the ER.)
A-4	<p>Have a subject matter expert available to provide additional details regarding transmission at alternative sites, including:</p> <ul style="list-style-type: none"> • Maps or aerial photographs showing pathways from the proposed location to the nearest or most likely AEP substation or interconnection point • Maps showing existing or announced generation sources and transmission expansions

	<ul style="list-style-type: none"> Additional details regarding potential transmission corridors (length, width, terrestrial or aquatic resources potentially impacted in each pathway, other unique factors (e.g. wetlands, wildlife refuges, federal land ownerships and status, other protected land classifications, proximity to airports, roads, railroads, urban or residential areas, geologic hazards, flood potential) impacting construction or operation of each alternative site.
TE - Terrestrial Ecology - Bob Van Lonkhuyzen	
TE-1	Have available the subject matter expert responsible for the ER analysis of vegetation types, (including mapping, aerial cover of types, species associated with types, vegetation surveys/reports, acres of each type permanently and temporarily impacted/restored), on or adjacent to the VCS site or in transmission corridors, CB blowdown line, haul road (entire), or RWMS intake line route. (ESRP 2.4.1, 4.3.1, 5.6.1)
TE-2	Have available the subject matter expert responsible for the ER analysis of wetland types, distribution, and impacts (including mapping, delineation/reports, areal cover of types, acres of each type permanently and temporarily impacted/restored, and conceptual wetland mitigation plans.). (ESRP 2.4.1, 4.3.1)
TE-3	Have available the subject matter expert responsible for the ER analysis of Federal or State-listed threatened, endangered species, or other special status species that might occur on or near the VCS site or in transmission corridors, CB blowdown line, haul road, or RWMS intake line route, or in coastal marshes of the Guadalupe/San Antonio/Aransas Bays. (ESRP 2.4.1, 4.3.1)
TE-4	Have available copies of ecological survey reports for: birds, small mammals (trapping), other wildlife (remote cameras, spotlight survey, mist netting, and herpetological surveys), and wetland delineation. (ESRP 2.4.1)
TE-5	Have available for review copies of written correspondence with state and Federal agencies regarding threatened and endangered species. (ESRP 2.4.1, 4.3.1, 5.3.3.2)
AQ - Aquatic Ecology - Bill Vinikour	
AQ-1	Have available the subject matter expert responsible for, or familiar with, the pre-application aquatic resources monitoring studies. (ESRP 2.4.2)
AQ-2	Have available the subject matter expert responsible for the ER analysis of construction- and operation-related activities relevant to impacts on aquatic resources. (ESRP 4.3.2 and 5.3.1.2)
AQ-3	Have available for review large wall maps (e.g., 7.5 minute topographic maps) that show key project facilities. These should include on-site facilities, cooling basin makeup and blowdown facilities, rail spur, haul road, and transmission lines. (ESRP 2.4, 4.3.2, 5.3, and 5.6) [See also G-2]
AQ-4	Have available for review a copy of AEP's established construction and best management procedures for transmission lines and a copy of their rights-of-way maintenance procedures. (ESRP 5.6)
AQ-5	Have available a subject matter expert to discuss the potential fish return system to be used at the pumping station (ESRP 5.3.1.2)

AQ-6	Have available a subject matter expert to discuss the molluscicide that would most likely be used if Asiatic clams or some other mollusk becomes a concern at VCS (ESRP 5.5.1)
AQ-7	Provide a description of the ichthyoplankton sampling methodology used during the 2008 pre-application monitoring program as described in Section 6.5.2.1.1 of the ER. Have a subject matter expert available to discuss quantitative results for the three locations sampled (Guadalupe River Station GR-05, GBRA main canal, and Goff Bayou).
AQ-8	Provide a tour and detailed description of the intake canal to be located between the Guadalupe River and the intake pumping station (ESRP 5.3.1)
AQ-9	Have available for review a copy of the response letter from the U.S. Fish and Wildlife Service (FWS) in regard to the April 30, 2008, letter from Exelon Generation to the FWS that requested information on threatened and endangered species. (Note: response letters were contained in Appendix A from NOAA Fisheries and from TPWD, but not from FWS.) (ESRP 2.4)
SE - Socioeconomics & Environmental Justice - Karen Lyncoln	
SE-1	Have available the subject matter expert responsible for the ER analysis of current and projected population as presented in the ER (Section 2.5.1) who can discuss population and demographic issues (ESRP 2.5.1)
SE-2	Have available the subject matter expert responsible for the ER analysis of Section 2.5.2, who can discuss the potential economic (including industry and employment), housing, land use, and taxation issues. (ESRP 2.5.2)
SE-3	Have available the subject matter expert responsible for the ER analysis of Section 2.5.3, who has knowledge of the specific health and environmental concerns for EJ populations and information on Scoping and Outreach activities related to specific EJ populations. (ESRP 2.5.4)
SE-4	Have available large wall map(s) at the site audit that show key features related to the proposed project, including: <ul style="list-style-type: none"> • Property boundaries and political boundaries • Topographical features, including rivers and other water bodies, forests, parks, . . . • Points of interest (e.g., nearest residences, nearest EJ populations of interest (including tribes), gas pipelines, nearby industries, including quarries/mines) • All roads, including those expected to be most used for construction and operations worker commuting, all proposed haul roads, trails, . . . [See also G-2]
SE-5	Provide access to Geographic Information System (GIS) and/or CAD data/databases used to support the Environmental Report analysis and results including existing and proposed conditions as appropriate, including: <ul style="list-style-type: none"> • Socioeconomic data (sector data at various radii, census blocks w/ attribute data including low income and minority data, state/county park recreational area boundaries, trails, water trails, wildlife management units, traffic count data, commuter routes, etc.)

	<ul style="list-style-type: none"> Alternative (candidate) site data (point locations, proposed site boundary, proposed infrastructure, socioeconomic data, etc.) [See also G-4 f and h]
SE-6	Have available the subject matter expert responsible for the ER analysis of the construction transportation plan.
SE- 7	<p>Have a subject matter expert available to discuss the demographic make-up of the people of Paradise Ranch, including:</p> <ul style="list-style-type: none"> Construction and operational impacts to the people who live on/near Paradise Ranch (ESRP 4.4.1, 4.4.2, 5.8.1, and 5.8.2) Recreation/Aesthetic Impacts (hunting, ranching, Lynn Lake, etc.) Heavy Haul Road Impacts Physical Impacts
SE-8	Have available the subject matter expert responsible for the ER Section 2.5.2.5.2 who can provide information about recreation/aesthetic impacts from construction and operation on the Coastal Birding Trail and the Water Management Areas. Topics for discussion will include potential impacts from operating the proposed new units at the Victoria site on the whooping crane population and financial impacts to local recreation and tourism industries based around the whooping crane industry (ESRP 4.4.2 and 5.8.2).
SE-9	Have available a subject matter expert responsible for the ER Section 5.8.2.2.6 to provide input on the potential housing patterns of the operations workers and the impacts on the housing market (ESRP 5.8.2).
SE -10	Have available a subject matter expert to discuss potential impacts of construction and operations to the Victoria independent school district.
CR - Historic and Cultural Resources - Dan O'Rourke	
CR-1	Have available the subject matter expert responsible for consultation efforts with the SHPO, Tribes, and interested parties. (ESRP 2.5.3)
CR-2	<p>Have available for review copies of all survey reports and technical studies for both onsite and offsite project areas referenced in the ER, Sections 2.5.3.3 and 5.1.3, including any documentation with respect to SHPO concurrence with report findings. (ESRP 2.5.3) As summarized in the ER, these reports should include:</p> <ul style="list-style-type: none"> Cultural history of the project area Environmental setting Land use history Consultation efforts with SHPO and the Tribes Records search methodology and results Field survey methodology and results Archaeological testing methodology and results

	<ul style="list-style-type: none"> • Resource sensitivity in the APE • Site records containing details and locations of cultural and historic resources in the APE (including both National Register eligible and other resources). • Potential project-related impacts to historic properties • Mitigation measures.
CR-3	Have available the subject matter expert to describe ongoing and future efforts to identify and evaluate historic properties within the area of potential effect for the project. (ESRP 2.5.3)
Met - Meteorology and Air Quality - Elizabeth Hendrick	
Met-1	Have available the subject matter expert responsible for the ER analysis of meteorology as described in Section 2.7, including the regional climatology, local meteorology and severe weather events. (ESRP 2.7)
Met-2	Have available the subject matter expert responsible for the ER analysis of air quality as described in Section 2.7.2, including the discussion of regional air quality and Sections 2.7.5 and 2.7.6 to discuss the modeling methods for estimating atmospheric transport and dispersion of gaseous effluents for accidental and routine releases. (ESRP 2.7)
Met-3	Have available the subject matter expert responsible for the ER discussion of air quality (fugitive and vehicular emissions) during construction activities as described in Sections 3.9.5.2 and 4.4.1.3 who could discuss air emissions from construction as it relates to applicable State and Federal air quality requirements. (ESRP 2.7, ESRP 4.4)
Met-4	Have available the subject matter expert responsible for the ER discussion of heat dissipation to the atmosphere as described in Sections 5.3.3.1 and 9.4.1 who can discuss the tower location and SACTI modeling of the mechanical draft cooling towers and the natural draft cooling towers described in Section 9.4.1.2. (ESRP 5.3.3.1)
Met-5	Have available the subject matter expert responsible for the ER discussion of air quality impacts associated with sources of non-radiological emissions as described in Section 5.8.1.2 (emissions are presented in Section 3.6.3.1) who could discuss air emissions from operations as it relates to applicable State and Federal air quality requirements (e.g., compliance with the National Ambient Air Quality Standards). (ESRP 2.7, ESRP 5.8.1)
Met-6	Please have available the subject matter expert responsible for the ER analysis of meteorology monitoring as described in the ER Section 6.4, as well as the staff that operate and maintain the meteorological equipment including data averaging and quality assurance methods. Provide a tour of the current meteorological tower site. Have available for review any instrument maintenance records. (ESRP 6.4)
NR - Non-Rad Health - Sunita Kamboj	
NR-1	Have available the subject matter expert responsible for the analysis in ER Section 4.4.1, Section 4.6, and Section 4.7 with respect to the impact of construction on workers and public. (10 CFR 51.45(c))

NR-2	Have available the subject matter expert responsible for the analysis in ER Section 5.3.4.2 with respect to the impact of the noise generated from a mechanical draft cooling tower to the public. (ESRP 5.3.4)
NR-3	Have available the subject matter expert responsible for the analysis in ER Section 5.3.4.1 with respect to the effects to workers and members of the public from etiologic agents in the Guadalupe River. (ESRP 5.3.4)
NR-4	Have available the subject matter expert responsible for the analysis in ER Section 5.6.3 with respect to the effects (such as noise, visual, electric shock, electromagnetic field effects) to workers and members of the public. (ESRP 5.6.3)
NR-5	Have available the subject matter expert to discuss cumulative impacts of other past, present, and reasonably foreseeable future actions on human health in the region. (ER Section 5.11) [see also C-1]
NRW - Non-Rad Waste - Sunita Kamboj	
NRW-1	Have available the subject matter expert responsible for the source term; liquid, gaseous, and solid radioactive waste management systems analysis in the ER, Section 3.5. (ESRP 3.5)
NRW-2	Have available the subject matter expert responsible for the analysis in ER Section 3.6 on nonradioactive waste systems. (ESRP 3.6)
HP - Health Physics and Radiation Protection - Sunita Kamboj	
HP-1	Have available the subject matter expert responsible for the analysis in ER Section 4.5 with respect to the radiation impact to the construction worker. (ESRP 4.5)
HP-2	Please make available the input data, output data, calculational packages, and a subject matter expert responsible for analysis of the following computer codes in MEI and population dose estimation: <ul style="list-style-type: none"> • LADTAP • GASPAR • XOQDOQ (ESRP 5.4.2)
HP-3	Provide a windshield tour and have available aerial photographs and maps that show nearby residents and sensitive receptors (residences, schools, hospitals, nursing homes, daycare centers, etc. (ESRP 5.4.1)
HP-4	Have available a subject matter expert to discuss the estimated gaseous and liquid effluent release source terms used in the dose analysis. (ESRP 3.5 and 5.4.2)
HP-5	Have available the subject matter expert to discuss the distances from the proposed reactor to the nearest site boundary for each radial sector, and the location of the nearest residence, milk cow, milk goat, meat animal, and vegetable garden. (ESRP 5.4.2)
HP-6	Have available the subject matter expert to discuss the occupational dose analysis in ER Section 5.4.5. (ESRP 5.4.2)

HP-7	Have available the subject matter expert to discuss exposure pathways considered for calculation of doses to the public and populations in ER Section 5.4.1. (ESRP 5.4.1)
HP-8	Have available the subject matter expert to discuss the present commercial fish and invertebrate catch from waters within 50 miles downstream of the facility radwaste discharge. (ESRP 5.4.1)
HP-9	Have available the subject matter expert to discuss the irrigation rate, crop yield, annual production, and growing period for irrigated land using water withdrawn within 50 miles of the facility radwaste discharge. (ESRP 5.4.1)
HP-10	Have available the subject matter expert to discuss the unusual animals, plants, agricultural practices, game harvests, or food processing operations having the potential to contribute 10% or more to either individual or population doses in areas affected by liquid effluents, and food-processing operations involving large quantities of water. (ESRP 5.4.1)
HP-11	Have available the subject matter expert to discuss the present and known future drinking water intake locations within 50 miles of the facility radwaste discharge. (ESRP 5.4.1)
HP-12	Have available the subject matter expert to discuss radiation dose, including <ol style="list-style-type: none"> 1. maximum individual doses from liquid effluents 2. maximum individual doses from gaseous effluents 3. maximum individual doses from direct radiation sources 4. collective doses to the population within 80 km (50 mi) of the facility and occupational collective doses. (ESRP 5.4.3)
HP-13	Have available the subject matter expert to discuss the impact to biota in ER Section 5.4.4. (ESRP 5.4.4)
HP-14	Have available the subject matter expert to discuss cumulative impacts of other past, present, and reasonably foreseeable future actions on human health in the region. (ER Section 5.11)
HP-15	Have available the subject matter expert to discuss the VCS radiological environmental monitoring program as discussed in ER Sec 6.2. (ESRP 6.2)
ACC - Accidents - Andrew R. Marchese	
ACC-1	Have available the subject matter expert(s) responsible for the ER analysis of DBAs and Severe Accidents described in Chapter 7, Sections 7.1 through 7.3, including all tables in those sections. (ESRP 7.1, 7.2, and 7.3).
ACC-2	Have available the subject matter expert that is responsible for evaluating severe accidents for the potential AP1000 and APWR units. Topics for discussion will include how the severe accident risks are bounded for the ESBWR, ABWR, AP1000, and APWR. (ESRP 7.2)
ACC-3	Have available the subject matter expert that is responsible for analyzing DBAs and severe accidents for the mPower Small Modular Reactor (SMR). (ESRP 7.1 and 7.2)
ACC-4	Have available a subject matter expert responsible for the ER analysis of DBA doses in Table 7.1-5. (ESRP 7.1)

ACC-5	Have available the subject matter expert responsible for the ER analysis on the activity releases in Tables 7.1-6 through 7.1-70. (ESRP 7.1)
ACC-6	Have available a subject matter expert who can discuss the conclusion that the severe accident risks for external initiated events are much less than the risks for internally initiated events for all ALWR design types being considered, including the mPower SMR. (ESRP 7.2)
ACC-7	Have available a subject matter expert who can discuss the input/output assumptions used for the MACCS2 code runs. (ESRP 7.2)
ACC-8	Have available for review electronic copies of input and output files for the MACCS2 code runs used for determining severe accident risks. (ESRP 7.1, 7.2, 7.3)
ACC-9	Have available a subject matter expert to describe how the applicant performed radiological dose consequence calculations for DBAs and severe accidents, including having available specific source terms for the five reactor types being considered at VCS. (ESRP 7.1, 7.2, 7.3)
HY - Hydrology - Richard Codell	
HY-1	Have available a subject matter expert who can address Texas water law, applicable discharge standards for the Guadalupe River, and the status of Exelon with regard to water rights and contracts presently held, proposed further acquisitions, and seniority. (ESRP 2.3.1, 2.3.2, 2.3.3, 3.3.1, 3.3.2, 3.3.6, 5.2.2)
HY-2	Have available a subject matter expert who can address issues of groundwater at the preferred and alternative sites, including communication among aquifers, effects of onsite groundwater use, effects of infiltration from on-site sources, effects of dewatering, and groundwater monitoring. (ESRP 2.3.1, 2.3.2, 2.3.3, 2.4.2, 3.3.6, 4.2.2, 5.2.2, 5.3, 6.3, 6.6, 9.3)
HY-3	Have available a subject matter expert who can address issues related to surface water, including alternative designs for intakes and discharge structures; non-consumptive uses; protocols for operation of the cooling basin; other surface water users; alternative water treatment options; the effect of surface water use on salinity of and sediment transport to downstream bays and estuaries; and monitoring. (ESRP 2.3.1, 2.3.2, 4.2.2, 5.2.1, 5.2.2, 5.3.1, 5.3.2, 5.3.3, 6.1, 6.3, 6.6, 9.4)
HY-4	Have available a subject matter expert who can discuss the hydrologic effects of construction and operation of facilities for transport of heavy equipment by water; e.g., the barge slip, dredging of channels, removal of snags. (ESRP 2.4.2, 4.2.1)
HY-5	Have available a subject matter expert who can discuss and provide all surface and groundwater hydrologic data (watershed/sub-basin boundaries, stream/river channels, springs, sinkholes, flood boundaries, reservoir boundaries, site stormwater drainage, levees, hydrogeologic study boundaries, aquifers, potentiometric contours, well locations, and surface water monitoring sites, etc.) [See also G-4c]

LU - Land Use - Martin Marchaterre	
LU-1	Have available the subject matter expert responsible for the ER analysis of land use impacts who can discuss the changes in land use from construction and preconstruction. (ESRP 2.2.1)
LU-2	Have available a subject matter expert who can discuss land use planning and the transmission lines. (ESRP 2.2.1 and 2.2.2)
LU-3	Have available a subject matter expert who can discuss proposed transmission lines including construction, widths of ROW, land use restrictions, and visual impacts. (ESRP 2.2.2, 4.1.2, and 5.1.2)
LU-4	Have available a subject matter expert who can discuss how heavy equipment and reactor components will be transported to the site. (ESRP 2.2.2 and 4.1.1)
LU-5	Have available a subject matter expert who can discuss the borrow pits and volumes of borrow material. (ESRP 4.1.1)
LU-6	Have available a subject matter expert who can discuss transmission line ROW maintenance. [see also AQ-4]
T - Transportation - Bruce Biber	
T-1	Have available a subject matter expert who can discuss assumptions used on TRAGIS and RADTRAN computer codes and include input and output files in the transportation analysis for unirradiated fuel, irradiated fuel, and radioactive waste. (ESRP 3.8, ESRP 5.7.2, ESRP 7.4)
T-2	Have available a subject matter expert familiar with the heat loads expected in a spent fuel shipping cask for comparison with that in 10 CFR 51.52 Table S-4 (ESRP 3.8).
T-3	Have available a subject matter expert who can discuss the comparison of the ER transportation analysis with the nonradiological effects covered in Table S-4 in 10 CFR 51.52.
T-4	Have available a subject matter expert familiar with the expected average distances of travel for commuting construction and operations workers as well as the average shipping distance for raw materials for plant construction.