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**CONCLUSIONS AND RECOMMENDATIONS**

**9-ENVIRONMENTAL IMPACT STATEMENT**

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Appendix E25 - Transportation Assessment
Appendix E26 - Emergency Response
Appendix E27 - Site Access Control
Appendix E28 - Eskom Grid Planning Report: Comparison between Thyspunt, Bantamsklip and Koeberg Sites (October 2008)

Appendix F: Draft Environmental Management Plan and Annexures A – C
Appendix G: EIA Legislative Requirements Checklist
**LIST OF ABBREVIATIONS / ACRONYMS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>Percentage</td>
</tr>
<tr>
<td>°C</td>
<td>Degrees Celsius</td>
</tr>
<tr>
<td>µSv</td>
<td>Micro Sieverts</td>
</tr>
<tr>
<td>AADQ</td>
<td>Annual Authorized Discharged Quantities</td>
</tr>
<tr>
<td>ABI</td>
<td>Agulhas Biodiversity Initiative</td>
</tr>
<tr>
<td>ACER</td>
<td>ACER (Arica) Environmental Consultants (Pty) Ltd</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immuno Deficiency Syndrome</td>
</tr>
<tr>
<td>AP1000</td>
<td>Advanced Passive, form of an advanced pressurised water reactor</td>
</tr>
<tr>
<td>APPA</td>
<td>Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965)</td>
</tr>
<tr>
<td>ARC</td>
<td>Agricultural Resource Centre</td>
</tr>
<tr>
<td>Arcus GIBB</td>
<td>Arcus GIBB (Pty) Ltd</td>
</tr>
<tr>
<td>AsgiSA</td>
<td>Accelerated and shared Growth Initiative for South Africa</td>
</tr>
<tr>
<td>ALARA</td>
<td>As Low As Reasonably Achievable</td>
</tr>
<tr>
<td>B&amp;B</td>
<td>Bed and Breakfast</td>
</tr>
<tr>
<td>BID</td>
<td>Background Information Document</td>
</tr>
<tr>
<td>BMP</td>
<td>Best Management Practise</td>
</tr>
<tr>
<td>BWR</td>
<td>Boiling Water Reactor</td>
</tr>
<tr>
<td>CAPE</td>
<td>Cape Action Plan for People and the Environment</td>
</tr>
<tr>
<td>CCGT</td>
<td>Combined Cycle Gas Turbine</td>
</tr>
<tr>
<td>CDC</td>
<td>Coega Development Corporation</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean Development Mechanism</td>
</tr>
<tr>
<td>ECO</td>
<td>Environmental Control Officer</td>
</tr>
<tr>
<td>CFR</td>
<td>Cape Floristic Region</td>
</tr>
<tr>
<td>CGS</td>
<td>Council for Geoscience</td>
</tr>
<tr>
<td>CIGS</td>
<td>Copper-Indium-Gallium-diSelenide</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
</tr>
<tr>
<td>CSIR</td>
<td>Council for Science and Industrial Research</td>
</tr>
<tr>
<td>CSP</td>
<td>Concentrating Solar Power</td>
</tr>
<tr>
<td>CV</td>
<td>Coefficient of variation / <em>Curriculum vitae</em></td>
</tr>
<tr>
<td>dB(A)</td>
<td>decibel</td>
</tr>
<tr>
<td>DBA</td>
<td>Design Basis Accidents</td>
</tr>
<tr>
<td>De Beers</td>
<td>De Beers Consolidated Mines</td>
</tr>
<tr>
<td>DEA&amp;DP</td>
<td>Department of Environmental Affairs and Development Planning (Provincial Government Western Cape)</td>
</tr>
<tr>
<td>DEA</td>
<td>Department of Environmental Affairs (National Government)</td>
</tr>
<tr>
<td>DEAT</td>
<td>Department of Environmental Affairs and Tourism (Now DEA)</td>
</tr>
<tr>
<td>DEDEA</td>
<td>Department of Economic Development and Environmental Affairs (Provincial Government Eastern Cape)</td>
</tr>
<tr>
<td>DMA</td>
<td>Disaster Management Act</td>
</tr>
<tr>
<td>DME</td>
<td>Department of Minerals and Energy (National Government)</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Energy (National Government)</td>
</tr>
<tr>
<td>DOL</td>
<td>Department of Labour (National Government)</td>
</tr>
<tr>
<td>DPW</td>
<td>Department of Public Works (National Government)</td>
</tr>
<tr>
<td>DSR</td>
<td>Draft Scoping Report</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>DTEC</td>
<td>Department of Tourism, Environment and Conservation (Provincial Government Northern Cape)</td>
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<tr>
<td>DWA</td>
<td>Department of Water Affairs (National Government)</td>
</tr>
<tr>
<td>DWAF</td>
<td>Department of Water Affairs and Forestry (Now DWA)</td>
</tr>
<tr>
<td>EAP</td>
<td>Environmental Assessment Practitioner</td>
</tr>
<tr>
<td>ECO</td>
<td>Environmental Control Officer</td>
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<tr>
<td>ECT B</td>
<td>Eastern Cape Tourism Board</td>
</tr>
<tr>
<td>EDG</td>
<td>Emergency Diesel Generator</td>
</tr>
<tr>
<td>EEU</td>
<td>Environmental Evaluation Unit</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>EIR</td>
<td>Environmental Impact Report</td>
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<tr>
<td>ELA</td>
<td>Earthlife Africa</td>
</tr>
<tr>
<td>ELC</td>
<td>Environmental Liaison Committee</td>
</tr>
<tr>
<td>EMF</td>
<td>Electromagnetic Frequencies</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>EN</td>
<td>Endangered</td>
</tr>
<tr>
<td>EPR</td>
<td>European Pressurised Reactor also known as Evolutionary Power Reactor</td>
</tr>
<tr>
<td>EPSOC</td>
<td>Emergency Planning Steering and Oversight Committees</td>
</tr>
<tr>
<td>EPZ</td>
<td>Emergency Planning Zone</td>
</tr>
<tr>
<td>Eskom</td>
<td>Eskom Holdings Limited</td>
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<tr>
<td>EUR</td>
<td>European Utility Requirements</td>
</tr>
<tr>
<td>FBC</td>
<td>Fluidised Bed Combustion</td>
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<tr>
<td>FGM</td>
<td>Focus Group Meeting</td>
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<tr>
<td>FOB</td>
<td>Fish on Board</td>
</tr>
<tr>
<td>FSR</td>
<td>Final Scoping Report</td>
</tr>
<tr>
<td>GCR</td>
<td>Gas Cooled Reactor</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHG</td>
<td>Green House Gas</td>
</tr>
<tr>
<td>GW</td>
<td>Gigawatt</td>
</tr>
<tr>
<td>GWh</td>
<td>Gigawatt hours</td>
</tr>
<tr>
<td>H2O</td>
<td>Dihydrogen oxide (water)</td>
</tr>
<tr>
<td>Ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>HBD</td>
<td>Headland Bypass Dune</td>
</tr>
<tr>
<td>HEU</td>
<td>High-Enriched Uranium</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immuno-deficiency Virus</td>
</tr>
<tr>
<td>HLW</td>
<td>High Level Waste</td>
</tr>
<tr>
<td>HPa</td>
<td>Hectopascal</td>
</tr>
<tr>
<td>HRSG</td>
<td>Heat Recovery Steam Generator</td>
</tr>
<tr>
<td>HSE</td>
<td>Health, Safety and Environment</td>
</tr>
<tr>
<td>HV</td>
<td>High Voltage</td>
</tr>
<tr>
<td>I&amp;APs</td>
<td>Interested and affected parties</td>
</tr>
<tr>
<td>IAEA</td>
<td>International Atomic Energy Agency</td>
</tr>
<tr>
<td>ICM</td>
<td>Integrated Coastal Management</td>
</tr>
<tr>
<td>IDP</td>
<td>Integrated Development Plan</td>
</tr>
<tr>
<td>IDZ</td>
<td>Industrial Development Zone</td>
</tr>
<tr>
<td>IEP</td>
<td>Integrated Energy Plan</td>
</tr>
<tr>
<td>IGCC</td>
<td>Integrated Gasification Combined Cycle</td>
</tr>
<tr>
<td>IIS</td>
<td>Integrated Investment Strategy</td>
</tr>
<tr>
<td>ILW</td>
<td>Intermediate Level Waste</td>
</tr>
</tbody>
</table>
# GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Advection</td>
<td>The horizontal transport of air or atmospheric properties. Commonly used with temperatures, i.e., &quot;warm air advection&quot;.</td>
</tr>
<tr>
<td>Advection fog</td>
<td>A type of fog caused by the horizontal movement of moist air over a cold surface and the consequent cooling of that air to below its dew point.</td>
</tr>
<tr>
<td>Aeolian</td>
<td>Transported and deposited by wind. A rock formed by the solidification of Aeolian sediment is known as an aeolianite.</td>
</tr>
<tr>
<td>Alternatives</td>
<td>Different means of meeting the general purpose and requirements of the activity, which may include alternatives to – location, type, design, technology of operational aspects of the activity.</td>
</tr>
<tr>
<td>Annulus</td>
<td>The distance between two objects.</td>
</tr>
<tr>
<td>Anomaly</td>
<td>Any departure from the norm, which may indicate the presence of mineralization in the underlying bedrock in geological terms.</td>
</tr>
<tr>
<td>Aquifer</td>
<td>A geological formation capable of yielding economic quantities of water.</td>
</tr>
<tr>
<td>Barchanoid</td>
<td>As of dunes. Immature mobile transverse dunes, unvegetated.</td>
</tr>
<tr>
<td>Bioregion</td>
<td>An area constituting a natural ecological community with characteristic flora, fauna, and environmental conditions and bounded by natural rather than artificial borders.</td>
</tr>
<tr>
<td>Borehole</td>
<td>A borehole is a deep and narrow shaft in the ground used for extraction of fluid or gas reserves below the earth's surface.</td>
</tr>
<tr>
<td>Brittle-ductile</td>
<td>Transitional conditions between brittle and ductile or plastic flow.</td>
</tr>
<tr>
<td>Cenozoic</td>
<td>Last 65 million years; an era of geologic time from the beginning of the Tertiary period (65 million years ago) to the present. Its name is from Greek and means &quot;new life.&quot;</td>
</tr>
<tr>
<td>Chlorophyll a</td>
<td>The pigment that makes plants and algae green. Measurement of chlorophyll a is used to determine the quantity of algae in the water.</td>
</tr>
<tr>
<td>Coastal current</td>
<td>Any more or less permanent or continuous directed movement of ocean water that flows in one of the Earth's oceans.</td>
</tr>
<tr>
<td>Cretaceous</td>
<td>The final period of the Mesozoic era, spanning the time between 145 and 65 million years ago.</td>
</tr>
<tr>
<td>Critically Endangered</td>
<td>The status of a species that has satisfied the International Union for the Conservation of Nature and Natural Resources (IUCN), also known as the World Conservation Union, criteria that indicate that it faces an extremely high risk of extinction in the wild.</td>
</tr>
<tr>
<td>Crustaceans</td>
<td>A class of articulated animals, having the skin of the body generally more or less hardened by the deposition of calcareous matter, breathing by means of gills. (Examples, Crab, Lobster, Shrimp, etc.).</td>
</tr>
<tr>
<td>Cultivated (of land or fields)</td>
<td>No longer in the natural state; developed by human care and for human use.</td>
</tr>
<tr>
<td>dBA</td>
<td>Environmental noise measurements are measured in terms of dBA. The A weighting aims to correspond to the frequency sensitivity of the human ear.</td>
</tr>
<tr>
<td>Desalination</td>
<td>A process that converts seawater or brackish water to fresh water.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Diffuse attenuation coefficient</td>
<td>Measure of how far the sun's radiance penetrates the ocean at a wavelength of 490 nano metres (nm).</td>
</tr>
<tr>
<td>Dispatchable Resource</td>
<td>A resource whose electrical output is available at short notice and can be controlled or regulated to match the electrical energy requirements of the electric system, and is not affected by phenomena such as the time of day or weather conditions. Nuclear power and coal power are both dispatchable.</td>
</tr>
<tr>
<td>Dorbank</td>
<td>A hard subsurface soil horizon forms in arid/semi-arid climates, through cementation by silica, often in association with calcium carbonate or iron oxides. It is often reddish-brown in colour, as has been found at Brazil and Schulpfontein.</td>
</tr>
<tr>
<td>Dune field</td>
<td>Descriptive of an area with numerous low hills or banks of drifted (wind-borne) sand.</td>
</tr>
<tr>
<td>Dyke</td>
<td>A discordant intrusive body that is substantially longer than it is wide. Dikes are often steeply inclined or nearly vertical. A dyke is a tabular (sheet-like) igneous intrusion that cuts the surrounding strata at an angle.</td>
</tr>
<tr>
<td>Ecotone</td>
<td>A geographic boundary or transition zone between two different groups of plant or animal distributions containing characteristic species of each.</td>
</tr>
<tr>
<td>Embayment</td>
<td>An indentation of a shoreline, larger than a cove (small inlet) but smaller than a gulf (arm of a sea or ocean partly enclosed by land).</td>
</tr>
<tr>
<td>Endangered</td>
<td>The status of a species that has satisfied the IUCN criteria that indicate that it faces as a very high risk of extinction in the wild.</td>
</tr>
<tr>
<td>Endemic</td>
<td>In biology and ecology, endemic means exclusively native to the biota of a specific place.</td>
</tr>
<tr>
<td>Environment</td>
<td>The surroundings within which humans exist and include biophysical, social and economic aspects.</td>
</tr>
<tr>
<td>Environmental Impact Assessment</td>
<td>An Environmental Assessment is required when an activity(ies) triggers a regulation(s) listed in Government Notices R 386 and R 387 in Government Gazette 28753 dated 21 April 2006. Depending on the activity(ies) either a Basic Assessment (for activities listed in R 386) or a Scoping and Environment Impact Assessment (for activities listed in R 387) is undertaken. The construction of the proposed nuclear power station triggers regulations requiring a Scoping and Environmental Impact Assessment.</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>A positive or negative change to the environment that results from the effect of a construction activity. The impact may be a direct or indirect consequence of a construction activity.</td>
</tr>
<tr>
<td>Ephemeral</td>
<td>Short lived. Living or lasting only for a day, as certain plants or insects do.</td>
</tr>
<tr>
<td>Fault</td>
<td>A fault is a fracture or fracture zone, along which movement has taken place. Sudden movement along a fault produces earthquakes. Slow movement produces a seismic creep. A fault is a tectonic structure along which differential slippage of the adjacent earth materials has occurred parallel to the fracture plane. It is distinct from other types of ground disruptions such as landslides, fissures and craters. A fault may have gouge or breccia between its two walls and includes any associated monoclinic flexure or other similar geologic structural...</td>
</tr>
<tr>
<td><strong>Nuclear-1 EIA Version 1.0 / February 2010</strong></td>
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<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
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<tr>
<td><strong>Draft Environmental Impact Report</strong></td>
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</tr>
<tr>
<td><strong>Fission</strong></td>
<td>The splitting of an atom into at least two other atoms and the release of a relatively large amount of energy.</td>
</tr>
<tr>
<td><strong>Geomorphology</strong></td>
<td>Geomorphology is the study of landforms, including their origin and evolution, and the processes that shape them.</td>
</tr>
<tr>
<td><strong>Gneiss</strong></td>
<td>Rock formed by regional metamorphism in which bands or lenticles of granular minerals alternate with bands or lenticles characterised by minerals having flaky or elongate prismatic shapes.</td>
</tr>
<tr>
<td><strong>Grabens</strong></td>
<td>A depressed block of land bordered by parallel faults.</td>
</tr>
<tr>
<td><strong>Greenhouse gases</strong></td>
<td>Gases that increase the temperature of the earth’s surface as defined by the United Nations Framework Convention on Climate Change, which include <em>inter alia</em> chlorofluorocarbons, carbon dioxide, methane and nitrous oxide.</td>
</tr>
<tr>
<td><strong>Groundwater flow</strong></td>
<td>The movement of water through openings and pore spaces in rocks below the water table i.e. in the saturated zone. Groundwater naturally drains from higher lying areas to low lying areas such as rivers, lakes and the oceans. The rate of flow depends on the slope of the water table and the transmissivity of the geological formations.</td>
</tr>
<tr>
<td><strong>Hazardous substance</strong></td>
<td>Any substance that is of risk to health and safety, property or the environment. Hazardous substances have been classified under the SABS Code 0288: 'The Identification and Classification of Dangerous Goods and Substances'.</td>
</tr>
<tr>
<td><strong>Hazardous waste</strong></td>
<td>Any inorganic or organic element or compound that because of its toxicological, physical, chemical or persisting properties, may exercise detrimental acute or chronic impacts on human health or development. Hazardous wastes are classified in accordance with the ‘Minimum Requirement for the Handling, Classification and Disposal of Hazardous Waste’ published by the Department of Water Affairs and Forestry (1998).</td>
</tr>
<tr>
<td><strong>Heavy water</strong></td>
<td>Water containing a significantly greater proportion of heavy hydrogen (deuterium) atoms to ordinary hydrogen atoms than is found in ordinary (light) water. Heavy water is used to lower the energy of neutrons in a reactor.</td>
</tr>
<tr>
<td><strong>Hectopascal</strong></td>
<td>Unit of pressure used in meteorology. One hectopascal equals 100 Pascals (1 hPa = 100 Pa).</td>
</tr>
<tr>
<td><strong>Heritage site</strong></td>
<td>A site that contains either archaeological artefacts, graves, buildings older than 60 years, meteorological or geological fossils etc.</td>
</tr>
<tr>
<td><strong>High level waste</strong></td>
<td>Radioactive waste that will either be the spent fuel itself (if declared as a waste and intended to be disposed of as such), or the principal waste emanating from the reprocessing of spent fuel. While only 3-4 % of the volume of spent fuel is high-level waste, it holds 95 % of the radioactivity. It contains the highly radioactive fission products and some heavy elements with long-lived radioactivity.</td>
</tr>
<tr>
<td><strong>Hummocking</strong></td>
<td>Refers to lumpy terrain; or land that has an irregular shape; or a fertile, wooded area that is at a slightly higher elevation (less than 3 m or so) than nearby marshes.</td>
</tr>
<tr>
<td><strong>Hydroperiod</strong></td>
<td>The length of time (and seasonality) that water is present over the surface of the wetland.</td>
</tr>
<tr>
<td><strong>Intergranular aquifer</strong></td>
<td>Groundwater contained in intergranular interstices of sedimentary and weathered formations.</td>
</tr>
<tr>
<td><strong>Intermediate level waste</strong></td>
<td>Contains higher amounts of radioactivity and may require special containment. It typically comprises resins, chemical</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Sludges and reactor components, as well as contaminated materials from reactor decommissioning.</td>
<td></td>
</tr>
<tr>
<td><strong>Invertebrate</strong></td>
<td>Animals without backbones or internal bony skeletons. All animals except for the phylum Chordata (vertebrates) fall into this category, including insects, crustaceans, worms, corals, and mollusks.</td>
</tr>
<tr>
<td><strong>Irreplaceable</strong></td>
<td>Impossible to replace.</td>
</tr>
<tr>
<td><strong>Light water</strong></td>
<td>Ordinary water composed of two hydrogen atoms and one oxygen atom.</td>
</tr>
<tr>
<td><strong>Liquefaction</strong></td>
<td>The process by which sediment that is very wet starts to behave like a liquid. Liquefaction occurs because of the increased pore pressure and reduced effective stress between solid particles generated by the presence of liquid. It is often caused by severe shaking, especially that associated with earthquakes.</td>
</tr>
<tr>
<td><strong>Load Shedding</strong></td>
<td>An intentionally engineered electrical power outage caused by insufficient available resources to meet the prevailing demand for electricity.</td>
</tr>
<tr>
<td><strong>Low level waste</strong></td>
<td>It comprises paper, rags, tools, clothing, and filters etc., which contain small amounts of mostly short-lived radioactivity. LLW is not dangerous to handle, but needs to be disposed of more sensitively than normal waste.</td>
</tr>
<tr>
<td><strong>Mesozoic</strong></td>
<td>Period from 65 –150 million years ago.</td>
</tr>
<tr>
<td><strong>Neoproterozoic</strong></td>
<td>The Neoproterozoic is the geological era from 1000 Ma to 542 Ma (million years ago).</td>
</tr>
<tr>
<td><strong>Near Threatened</strong></td>
<td>The status of a species that does not satisfy the IUCN criteria for Vulnerable, Endangered or Critically Endangered, but is close to qualifying, or is likely to qualify for a threatened category in the near future.</td>
</tr>
<tr>
<td><strong>Power outage</strong></td>
<td>Equipment failure resulting when the supply of power fails.</td>
</tr>
<tr>
<td><strong>Palaeontology</strong></td>
<td>The study of prehistoric life forms on Earth through the examination of plant and animal fossils.</td>
</tr>
<tr>
<td><strong>Palaeoseismic evidence</strong></td>
<td>Refers to earthquakes recorded geologically, most of them unknown from human descriptions or seismograms. Geologic records of past earthquakes can include faulted layers of sediment and rock, injections of liquefied sand, landslides, abruptly raised or lowered shorelines, and tsunami deposits.</td>
</tr>
<tr>
<td><strong>Palaeoseismology</strong></td>
<td>The study of prehistoric earthquakes, especially their location, timing and size.</td>
</tr>
<tr>
<td><strong>Parabolic (as of dunes)</strong></td>
<td>Parallel dunes with trailing edges in opposite direction to the wind direction. Can be vegetated or unvegetated.</td>
</tr>
<tr>
<td><strong>Peak ground acceleration</strong></td>
<td>A measure of earthquake acceleration. Unlike the Richter magnitude scale Richter magnitude scale, it is not a measure of the total size of the earthquake, but rather how hard the earth shakes in a given geographic area.</td>
</tr>
<tr>
<td><strong>Pleistocene</strong></td>
<td>A geologic period usually thought of as the Ice Age, which began about 1.6 million years ago and ended with the melting of the large continental glaciers creating the modern climatic pattern about 11,500 years ago.</td>
</tr>
<tr>
<td><strong>Pliocene</strong></td>
<td>A geological epoch that began five million years ago and ended 1.8 million years ago; a period of geologic time seven to two million years ago.</td>
</tr>
<tr>
<td><strong>Pollution</strong></td>
<td>The introduction into the environment of any substance by the action of man that is, or results in, significant harmful effects to man or the environment.</td>
</tr>
<tr>
<td><strong>Prenatal</strong></td>
<td>Existing or occurring before birth.</td>
</tr>
<tr>
<td><strong>Pressurized Water Reactor (Nuclear technology type)</strong></td>
<td>Is moderated and cooled with light water that is not boiled in the reactor. The turbine is driven by steam from the</td>
</tr>
<tr>
<td><strong>Quaternary</strong></td>
<td>The youngest of the geological periods, extending from the end of the Tertiary (qv) 1.6 million years ago up to the present. It is divided into the Pleistocene, and the Holocene, which is the last 10,000 years.</td>
</tr>
<tr>
<td><strong>Radiation (nuclear)</strong></td>
<td>Energy that is released by radioactive atoms such as uranium. This type of radiation is called ionizing radiation as it contains sufficient energy to remove electrons from within the material they penetrate, it is this ability that makes this type of radiation harmful to life.</td>
</tr>
<tr>
<td><strong>Radioactive waste</strong></td>
<td>Radioactive material in gaseous, liquid or solid form, for which no further use is envisaged and which has the radioactivity in excess of background or exemption levels.</td>
</tr>
<tr>
<td><strong>Radionuclide</strong></td>
<td>Any species of an atom that is radioactive.</td>
</tr>
<tr>
<td><strong>Relictual</strong></td>
<td>Ancient surviving species, typically restricted to moist, cold habitats, but occasionally arid-adapted.</td>
</tr>
<tr>
<td><strong>Renewable resources</strong></td>
<td>A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable to its rate of consumption by humans or other users. Resources such as solar radiation, tides, and winds are perpetual resources that are in no danger of being used in excess of their long-term availability.</td>
</tr>
<tr>
<td><strong>Rift</strong></td>
<td>A long, narrow crack in the entire thickness of the Earth's crust, which is bounded by normal faults on either side or forms as the crust is pulled apart.</td>
</tr>
<tr>
<td><strong>Sea level</strong></td>
<td>The level of the ocean's surface. Sea level at a particular location changes regularly with the tides and irregularly due to conditions such as wind and currents. Other factors that contribute to such fluctuation include water temperature and salinity, air pressure, seasonal changes, the amount of stream runoff, and the amount of water that is stored as ice or snow.</td>
</tr>
<tr>
<td><strong>Sea state</strong></td>
<td>A scale that categorizes the force of progressively higher seas by wave height. This scale is mathematically correlated to the Pierson-Moskowitz scale and the relationship of wind to waves.</td>
</tr>
<tr>
<td><strong>Seismic hazard</strong></td>
<td>The physical effects such as ground shaking, faulting, land sliding, and liquefaction that underlie the earthquake's potential danger.</td>
</tr>
<tr>
<td><strong>Seismicity</strong></td>
<td>Earthquake activity.</td>
</tr>
<tr>
<td><strong>Seismotectonic region</strong></td>
<td>A region within which the active geologic and seismic processes are considered to be relatively uniform.</td>
</tr>
<tr>
<td><strong>Spent Fuel</strong></td>
<td>Nuclear fuel elements that are discharged from a nuclear reactor after they have been used to produce power. Spent fuel is thermally hot and highly radioactive.</td>
</tr>
<tr>
<td><strong>Stone Age</strong></td>
<td>The earliest technological period in human culture when tools were made of stone, wood, bone, or antlers. Metal was unknown. The dates of the Stone Age vary considerably from one region to another.</td>
</tr>
<tr>
<td><strong>Stratification</strong></td>
<td>The existence or formation of distinct layers in a body of water identified by differences in thermal or salinity characteristics (e.g. densities) or by oxygen or nutrient content.</td>
</tr>
<tr>
<td><strong>Taxon</strong></td>
<td>A means of referring to a set of animals or plants of related classification. Plural form of taxon is taxa.</td>
</tr>
<tr>
<td><strong>Tertiary</strong></td>
<td>Period from 65 -1.6 million years ago; The first period of the Cenozoic era (after the Mesozoic era and before the Quaternary period), spanning the time between 65 and 1.8 million years ago.</td>
</tr>
<tr>
<td><strong>Threatened</strong></td>
<td>Term used in its formal sense to denote one of the three categories of threat, as defined by the IUCN, viz., Critically Endangered, Endangered and Vulnerable.</td>
</tr>
<tr>
<td><strong>Transpressional</strong></td>
<td>Refers to a specific form of geological shearing. Geological shears relate to the structure of the geology, rocks and faults.</td>
</tr>
<tr>
<td><strong>Uranium</strong></td>
<td>A naturally radioactive and very dense element. Natural uranium contains 0.7 % of the isotope Uranium-235, needed for fission. Uranium enriched to 3-5 % in the isotope Uranium-235, is the principal nuclear fuel material used in today's nuclear power reactors.</td>
</tr>
<tr>
<td><strong>Vertebrate</strong></td>
<td>An animal with a backbone; includes mammals, birds, reptiles, amphibians, and fishes.</td>
</tr>
<tr>
<td><strong>Volatile organic compounds (VOCs)</strong></td>
<td>Organic chemicals all contain the element carbon (C); organic chemicals are the basic chemicals found in living things and in products derived from living things such as coal, petroleum, and refined petroleum products.</td>
</tr>
<tr>
<td><strong>Vulnerable</strong></td>
<td>The status of a species that has satisfied the IUCN criteria that indicate that it faces as a high risk of extinction in the wild.</td>
</tr>
<tr>
<td><strong>Wetland</strong></td>
<td>Lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface.</td>
</tr>
</tbody>
</table>