



FINANCIAL INSTITUTIONS
ENERGY
INFRASTRUCTURE, MINING AND COMMODITIES
TRANSPORT
TECHNOLOGY AND INNOVATION
PHARMACEUTICALS AND LIFE SCIENCES

International nuclear training

Glossary of nuclear financing

Law Firm of the Year –
The Lawyer Awards 2011

The definitions/explanations contained in this glossary should only be taken as a very general guide.

accrued interest	Interest which has arisen but is not yet payable.
advance	A drawing of money under a loan facility.
ALARA/ALARP	As Low As Reasonably Achievable/ As Low As Reasonably Possible, economic and social factors being taken into account. This is the optimisation principle of radiation protection.
amortisation	The gradual repayment of the principal of a loan over time.
announcement	In a new bond issue, the day on which a release is sent to prospective syndicate members, describing the offering and inviting underwriters and selling group members to join the syndicate.
arranger	A bank or lender responsible for arranging a loan transaction (including syndication).
back to back loans	Either two loans with identical terms where X borrows moneys from A, and then X lends the same moneys, on terms identical with X's loan from A, to Y; or a loan by A to X secured by a deposit of a like amount by Y.
background radiation	The naturally-occurring radiation arising from the Earth's crust and cosmic radiation.
base rate	The published interest rate at which UK banks will lend sterling to their most creditworthy customers.
base-load	The part of electricity demand which is continuous, and does not vary over a 24-hour period.
basis	The difference between two market prices or two interest rates.
basis point	One one-hundredth of one per cent. (i.e., 0.01%), typically used in expressing bond yield differentials (7.50% - 7.15% = 0.35% or 35 basis points).
benchmark bond	The most-traded bond.
bid	The price level at which buyers offer to acquire securities from sellers.
boiling water reactor (BWR)	A LWR, where the reactor heats the water inside the reactor vessel causing it to boil where the same water acts as the moderator, coolant for the core and steam source for the turbines.
bond	A negotiable certificate evidencing indebtedness - a legal contract sold by an issuer promising to pay the holder its face value plus amounts of interest (at a fixed or floating rate) at future dates.

BOO	Build, own, and operate.
BOOD	Build, own, operate and decommission.
book value	The value at which an asset is set in a company's balance sheet. The book value will often represent original purchase price less depreciation.
BOP	Balance of Plant
burn	The process of undergoing fission in the reactor core.
buyer credit	A loan provided by a bank to an overseas borrower, supported by a buyer credit guarantee from a state agency (e.g. ECGD) or bank. The finance is to be used by the borrower to buy goods or services from an exporter based in the state agency's country.
call	The right of an issuer to exercise an option to redeem bonds before their stated maturity, at a given price on a given date.
CANDU	CANadian Deuterium Uranium HWR
capital markets	The markets for medium and long-term instruments, predominantly bonds, notes and other equities and commodities.
capped floating rate notes	A form of floating rate note which sets an upper limit on the borrower's interest rate. The lender forgoes the possibility of obtaining a return above the cap rate should market interest rates exceed the cap rate, but in return receives a higher than usual margin over the inter-bank rate. The cap itself may be sold by the issuer to a third party.
central bank	The bank in each country responsible for directing a country's monetary policies.
chain reaction	A reaction that stimulates its own repetition, in particular where the neutrons originating from nuclear fission cause an ongoing series of fission reactions.
clearing system (in the bond market)	An organisation with which securities may be deposited for safe-keeping and through which purchase/sale transactions may be handled. The two foremost systems in the Eurobond market are Euroclear and Cedel.
club loan	Syndicated loan with syndicate of a small number of banks, 2 - 4 maximum usually.
CNE	Catastrophic Nuclear Event as defined by the International Nuclear Event Scale

COFACE	Compagnie Française d'Assurance pour le Commerce Extérieur - French ECA
collateral	Assets charged by a borrower to secure repayment of a loan, and which will be taken by the lender on non-payment by the borrower.
commitment	Amount of funds which each lender agrees to make available to a borrower under a loan agreement - also known as a participation.
commitment commission	Fee paid to lender in respect of that part of the commitment which has not yet been drawn down by borrower.
compliant bid	A bid that meets the awarding authority's stipulated requirements. An awarding authority may reserve the right to reject (and refuse to evaluate) a non-compliant bid.
compound interest	Interest payable on interest which has already accrued, e.g. £100 lent at 10% per annum, will after one year be £110 and after another year be £121 (i.e. 10% on £110). Compounding may occur annually or more/less frequently.
concession agreement	An alternative term for a project agreement. The parties may refer to a "concession" where a project provides a paid-for service to the public, such as a "concession" to operate a toll bridge.
consortium or consortium members	The group of private sector participants who have come together for the purpose of tendering for a project.
construction period	The period of the design and construction of the facilities that are the subject of the project.
control rods	Devices to absorb neutrons so that the chain reaction in a reactor core may be slowed or stopped by inserting them further, or accelerated by withdrawing them.
conversion	Chemical process turning uranium oxide into a gas to allow enrichment.
convertible bond	A bond convertible at the holder's option (or at the issuer's) into other securities of, or owned by, the issuing entity.
coolant	The liquid (often water) or gas used to transfer heat from the reactor core to the steam generators (PWR) or directly to the turbines (BWR).
core	The portion of a nuclear reactor containing the nuclear fuel components where the nuclear reaction takes place.

country risk	The risk that most or all economic agents (including the government and central bank) in a particular country will for some common reason become unable or unwilling to fulfil their international financial obligations.
coverage	An indicator of the safety margin for payment of debt service. Often, the ratio of net cash flow to debt service requirements.
credit committee	Every bank will have a credit committee, whose job is to scrutinise investments/loans and to confer authority on individuals within the bank to act.
criticality	The condition in a nuclear reactor where the fissionable material can sustain a chain reaction by itself.
cross default	A default which is deemed to have arisen under one agreement if a borrower defaults under any of its other loan agreements (see event of default).
currency-linked bond	A bond whose payments of principal and interest are valued by reference to one currency though actually made in another.
DBFO	Design, building, financing and operation.
debt equity ratio	The ratio of debt to equity in a commercial enterprise. A measure of the financial stability of a company and its ability to increase its level of total borrowings.
debt funder	A provider of debt finance to a project. In this context, the term covers a provider of third-party debt finance, including bank debt and bond finance, but excludes subordinated debt provided by a sponsor as a substitute for equity. Also known as a senior funder or senior lender, because the debt provided has priority to other debt (such as equity) and is repaid first by the project company.
debt service	Payments of principal and interest required on a loan over the period for which the loan is outstanding.
decommissioning	Removal of a facility (e.g. reactor) from service, also the subsequent actions of safe storage, dismantling and making the site available for other use.
default interest	The rate of interest payable on sums which are not paid on the due date of payment, typically higher than the normal rate of interest. The default interest rate is applied to the sum due from the date on which the sum due should have been paid. Default interest can be compounded with the principal. The rate should reflect the additional cost to the lender as a result of the default. If it is not a genuine pre-estimate of loss, it may be regarded as a penalty and be void.

delay event	A specified event excusing the project company from breach of its obligations that entitles it to additional time to perform (where compensation is also payable, the project agreement may refer to a compensation event).
direct agreement	An agreement creating a direct contractual relationship between a counterparty to the project documents and the project's funders.
discount	The computation of the present value of a given stream of future cash payments; also, the difference between the price of a bond and its face value, expressed as a percentage, for issues trading below par.
discount basis	A means of structuring non-coupon bearing securities so that a yield return may be provided by offering the securities at less than par and later redeeming them at their full principal amount. The capital gain realised on redemption should equate with the interest return for a security with comparable maturity which is coupon bearing.
dose	The energy absorbed by tissue from ionising radiation.
drawdown	Where the whole or part of moneys borrowed under a loan agreement physically passes to the borrower.
drawdown period	A specific period during which money may be borrowed under a loan agreement. Also known as availability period.
due date	The date on which interest or principal becomes payable.
due diligence	A comprehensive review of a borrower's overall financial position, usually conducted in conjunction with the documentation required for a new loan/bond issue etc.
EBRD	European Bank for Reconstruction and Development.
ECA	Export Credit Agency - a quasi-governmental institution that acts as an intermediary between national governments and exporters to issue export financing.
ECGD	Her Britannic Majesty's Secretary of State acting by the Export Credits Guarantee Department - UK ECA.
EIB	European Investment Bank.
EKN	Exportkreditnämnden - Swedish ECA.
enriched uranium	Uranium in which the proportion of U-235 (to U-238) has been increased from around 0.7% (natural uranium) to about 3.5% (reactor grade uranium) or 90% (weapons grade uranium).
enrichment	Physical process of increasing the proportion of U-235 to U-238.

EPC Contract	A contract for covering the engineering, procurement and construction of a facility.
equity funder	An investor who subscribes for equity in the project company or provides quasi-equity, in the form of subordinated debt. Also known as a junior funder or a junior lender, because the debt provided is subordinated to debt provided by the debt funders.
equivalent project relief (EPR)	The principle that, where the subject matter of a claim is common to the project agreement and a subcontract, the sub-contractor's entitlement is limited to the project company's entitlement. Used as means of getting around the prohibition on "pay when paid" provisions under the Construction Act 1996, many advisors on PPP projects now doubt its enforceability in a construction sub-contract.
Eurobond	A debt instrument denominated in one of the several Eurocurrencies and sold in the international bond market.
event of default	An event, the occurrence of which will enable the lender to demand immediate repayment of a loan. The events contained in a loan agreement may include non-payment, non-compliance with covenants etc.
EXIM	Export-Import Bank of the United States - US ECA
export financing	Transactions involving one or more of the ECAs which can be either supplier credit or buyer credit agreements providing direct loans, guarantees or interest subsidies to parties involved in export transactions.
facility	The arrangements whereby financing is made available. A loan document is also often described as a loan facility.
financial close	The stage in a financial agreement where condition precedents to the close have been satisfied or waived, all the documents have been executed, and draw-down on the loan become permissible.
fission	The splitting of an atom, which releases a substantial amount of energy (usually in the form of heat) that can be used to produce electricity.
fissionable (of an isotope)	Capable of undergoing fission: if fissile, by slow neutrons; otherwise, by fast neutrons.
foreign bond	A bond issue for a foreign borrower offered in the domestic capital market of a particular country and denominated in the currency of that country.
fuel assembly	Structured collection of fuel rods or elements, the unit of fuel in a reactor.

fuel fabrication	Assembling reactor fuel assemblies, using pellets of enriched uranium and zirconium tubes.
funder	Generally used to refer to a debt funder on a project, although can occasionally be used to refer to both debt and equity funders. Also known as lender.
gearing	Current ratio of total debts of borrower to its assets.
guarantee	Instrument being either a bond or guarantee, where performance of the obligations of a party to a credit or loan agreement are guaranteed by a third party, so that the third party will perform any obligations which the borrower fails to perform.
guarantee facility	A facility which sets out the terms and conditions upon which a third party (often a bank) agrees to guarantee the performance of the obligations of another party under e.g. a construction contract (sometimes known as a bonding facility where performance bonds rather than guarantees are to be issued).
heavy water	Water containing a high concentration of molecules with deuterium ('heavy hydrogen') atoms.
heavy water reactor (HWR)	A reactor which uses heavy water as its moderator.
HERMES	Euler Hermes Kreditversicherungs-AG - German ECA.
high-level waste (HLW)	The highly radioactive materials produced as by-products of fuel reprocessing or of the reactions that occur inside nuclear reactors. HLW includes irradiated spent nuclear fuel discharged from commercial nuclear power reactors and the highly radioactive liquid and solid materials resulting from the reprocessing of spent nuclear fuel, which contain fission products in concentration (this includes some reprocessed HLW from defence activities and a small quantity of reprocessed commercial HLW).
inter-bank rates	The bid and offered rates at which international banks place deposits with each other, e.g. London LIBOR, Paris PIBOR, Bahrain BIBOR.
interest coverage ratio	This reveals the ability of a borrower to pay interest payments on its loans out of cash-flow.
interest rate cap	An option-like feature for which the buyer pays a fee or premium to obtain protection against a rise in a particular interest rate above a certain level. For example, an interest rate cap may cover a specified principal amount of a loan over a designated time period such as a calendar quarter. If the covered interest rate rises above the rate ceiling, the seller of the rate cap pays the purchaser an amount of money to compensate him for the rise.

interest rate differential	The difference in the rate of interest offered in two currencies for investments of identical maturities.
interest rate mismatch	(also interest rate gap or cap.) The risk/opportunity banks face that a shift in interest rates will reduce/increase interest income. The mismatch arises out of the repricing schedule of assets and liabilities. The banks' traditional interest rate mismatch, lending long-term and borrowing in short-term markets, exposes them, for example, to the risk that rates will rise: as interest rates rise, low-yielding short-term liabilities will be replaced and repriced more rapidly than assets at a higher relative market rate to long-term loan.
intermediate-level waste (ILW)	A range of materials from reprocessing and decommissioning. It is sufficiently radioactive to require shielding and is disposed of in engineered facilities underground.
internal rate of return (IRR)	A calculation used to put a current value on future revenues from an initial investment; used as the measure of return on the investment made by shareholders in a consortium.
investment bank	Term applied to a financial institution engaged in the issue of new securities, including management and underwriting of issues as well as securities trading and distribution.
ITT	An invitation to tender (by submitting priced bids) issued to bidders by an awarding authority.
junior debt	Finance provided by the equity funders, who are also known as the junior lenders. Also known as subordinated debt.
KPI	Key performance indicator. A measure of the contractor's performance against the contract specification.
leasing	An arrangement whereby companies obtain land or equipment immediately, paying for it in instalments.
letter of credit	A letter issued by a bank to a person at the request of a third party whereby the bank (or Issuer) will pay to that person a sum of money upon presentation of specified documents.
letter of credit facility	A facility which sets out the terms and conditions upon which a bank will issue letters of credit on behalf of its customer.
liability conventions	The international conventions channelling liability for third party (outside the power plant) damage arising from a CNE including the Vienna Convention on Civil Liability for Nuclear Damage and the Paris Convention on Third Party Liability in the Field of Nuclear Energy.

licensee	A company, organization, institution, or other entity to which the domestic regulator grants a general license or specific license to construct, operate and/or decommission a nuclear facility, or to receive, possess, use, transfer, or dispose of source material, byproduct material, or special nuclear material in accordance with a county's domestic law.
light water reactor (LWR)	A common nuclear reactor cooled and usually moderated by ordinary (light) water.
low-level waste (LLW)	Radioactive waste which can be handled safely without shielding.
majority banks	The banks in a loan syndicate which have made the majority of the commitment available and which decide upon certain matters arising e.g. events of default.
management fee	A fee earned by the managers of a syndicated loan or a bond issue.
mandate	Authorisation from a borrower to proceed with arranging a syndicated loan or a new bond issue at terms agreed with the lead manager.
margin	Percentage above inter-bank rate or a base rate charged to borrower, as the interest on a loan/bond/note. On the basis that the loan/bond/note is funded by a bank at an inter-bank rate or at base rate, it represents the profit to the bank of making the moneys available.
material adverse change	This is the catch-all clause in an agreement, the effect being that if at any time during the life of an agreement there has been a material adverse change in the condition of the borrower, financial or otherwise, in the opinion of the lender, an event of default occurs. Borrowers will try to limit the width of this clause.
maturity	The date on which a given debt security or loan becomes payable to the holder in full.
mixed oxide fuel (MOX)	Reactor fuel which consists of both uranium and plutonium oxides.
moderator	A material such as light or heavy water or graphite used in a reactor to slow down fast neutrons thus increasing the likelihood of fission.
Moody's Investor Services	See rating.
multi-currency option	Option to take up a loan in any one or more optional currencies stated in a loan agreement.
natural uranium	Uranium with an isotopic composition as found in nature.
non-performing loan	A loan where the borrower is not paying interest or repaying capital as it falls due.

novation	Variation of loan documentation so that the seller is replaced by the buyer both as to rights and obligations.
NPV	Net present value. The value of future cash flows, discounted to today's value.
nuclear reactor	The heart of a nuclear power plant in which nuclear fission may be initiated and controlled in a self-sustaining chain reaction to generate energy or produce useful radiation.
off-balance-sheet	A bank's business, often fee-based, that does not appear on its balance sheet. Examples are trading swaps, options, foreign exchange forwards, standby commitments and letters of credit.
operator	Any person, organisation or government entity licensed to undertake the operation of a nuclear facility. Note this may not be the same as the Operator as established by the Liability Conventions.
option	A right given to a buyer or owner, for the payment of a premium, to buy or sell at current values a specified unit of a particular commodity or currency within a given period or at a given future date.
owner	The legal owner of the nuclear power plant.
participation	See commitment. A bank's share of the amount of an underwriting commitment of a syndicated loan or bond issue.
prepayment	A payment made before it is scheduled to be made.
pressured water reactor (PWR)	The most common type of light water reactor (LWR), it uses water at very high pressure in a primary circuit which is heated and used to heat water in a secondary circuit which is used to produce steam.
project finance	The financing of projects based upon a non-recourse or limited recourse financial structure where project debt and equity used to finance the project are paid back from the cashflow generated by the project and the financiers have no recourse or only a limited recourse against the other assets of the project sponsors.
put option	A contract allowing the holder to sell a given number of securities back to the issuer of such a contract at a fixed price for a given period of time.
quote	The market price of any given security.
rating	A letter grade signifying a security's investment quality. The most commonly used rating agencies are Moody's, Fitches and Standard & Poor's.
reactor pressure vessel	A strong-walled container housing the core of most types of power reactors. It usually also contains the moderator, neutron reflector, thermal shield, and control rods.

redemption	Extinguishing a debt through cash payment. The contractual right of an issuer to exercise optional redemption is also known as a call.
redemption price	A price at which bonds may be redeemed, or called, at the issuer's option, prior to maturity (often at a slight premium over par).
refinancing	Repaying existing debt and issuing new securities or borrowing a new loan or undertaking some other form of replacement financing arrangement, typically to meet some corporate objective such as the lengthening of maturity or the lowering of margins following construction.
relief	Specified events excusing the project company from breach of its obligations.
repository	A permanent disposal place for radioactive wastes.
reprocessing	Chemical treatment of used reactor fuel to separate uranium and plutonium and possibly transuranic elements leaving a much reduced quantity of high-level waste.
risk allocation	The process of apportioning responsibility for various risks, or operational or financial issues, to the different parties involved in a project.
risk matrix	A table identifying the risks involved in a project, indicating the provisional risk allocation for each risk and any mitigation of that risk, such as insurance.
SACE	Servizi Assicurativi del Commercio Estero - Italian ECA.
safeguards	The use of material control and accounting programs to verify that all special nuclear material is properly controlled and accounted for, as well as the physical protection (or physical security) equipment and security forces. As used by the International Atomic Energy Agency, this term also means verifying that the peaceful use commitments made in binding non proliferation agreements, both bilateral and multilateral, are honoured.
safety	The achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards.
secured loan	Loan given by a lender backed-up with the ability to resort to assets or revenues of the borrower should repayments not be made.
securitisation	Converting individual liabilities and assets into financial instruments that can be bundled together and traded in a marketplace.

security	The prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities.
security agent/trustee	A bank which holds security on behalf of a syndicate of banks or note holders.
security provisions	Arrangements under the terms of a new issue or a loan which provides for the holders or lenders to take security in the form of a claim (or mortgage) on certain assets in the event of default, or an undertaking by the borrower to preserve the security interests of the bondholders or lenders, e.g., through a negative pledge.
senior debt	Finance provided by the debt funders, who are also known as the senior lenders.
settlement date	The date when a transaction is formally completed. This is also used for calculating accrued interest when exchanging securities. Also referred to as value date or account date; usually seven calendar days after trade date in the Eurobond market.
settlement price	The price at which a transaction is formally completed.
SNIF	Syndicated note issuance facility.
sovereign borrower	Governments borrowing under their own name or through their respective Treasury or central bank.
sovereign guarantee	A guarantee provided by the host government that a loan or other obligation will be satisfied in whole or part if the borrower defaults.
spent fuel	Nuclear reactor fuel that has been used to the extent that it can no longer effectively sustain a chain reaction. Also known as used fuel.
sponsors	The private sector participants developing a project. Also known as project sponsors
SPV	Special purpose vehicle.
Standard & Poor's Corporation	See rating.
step-in rights	Rights as set out in the facility agreement which permit funders to step-in to the borrower's role on the project.
supranationals	Entities set up by several sovereign states e.g. World Bank, Asian Development Bank.

syndicate	A group of banks which act together in granting loan or guarantee facilities or act together in underwriting and distributing a new bond issue.
syndicated loan	A commercial banking transaction in which two or more banks participate in making a loan to a borrower. Interest is typically paid on a floating rate basis linked to short-term interest rates in a particular currency.
unavailability	The test for determining deductions from the unitary payment, by referring to standards for the provision of the plant
underwrite	An arrangement under which bond houses agree to each buy a certain agreed amount of securities of a new issue on a given date and at a given price, thereby assuring the issuer of the full proceeds of a financing.
underwriter	A bank engaged in the business of underwriting securities issues.
underwriting agreement	A legal document forming underwriting banks into a syndicate for a new issue and giving the management group (or lead manager, acting as their representative) the authority to assume certain responsibilities, such as setting the terms of the new issue and stabilising the price of the securities in the secondary market. In syndicates organised by US banks, this term is used to refer to a subscription agreement.
underwriting fee	That share of the gross spread of a new issue accruing to members of the underwriting group after the expenses of the issue have been paid.
unsecured loan	A loan where the lender has no assets of the borrower to go against if it is not repaid.
uranium (U):	A mildly radioactive element with two isotopes which are fissile. Uranium is the basic fuel of nuclear energy.
waste	High-level waste (HLW), Intermediate-level waste (ILW) and Low-level waste (LLW).
yield	Rate of return on a security as determined by its coupon and other characteristics, expressed as a percentage and annualised.