Market and related terms
2021-06-25: Janna, Ulrich, Simon, Hannah

italics: suggested definitions from issue 376

Missing in OEO from https://github.com/OpenEnergyPlatform/ontology/issues/376

- **contract:** *(Legally) binding agreement establishing rights and duties between parties. --> implemented in #756*
- **Delivery time:** *the amount of time that it takes for goods that have been bought to arrive at the place where they are wanted*
  - it is the time not the amount that matters
  - classify under temporal region, distinguish:
    - delivery time point: 0-dim temporal region
    - delivery time: 1-dim temporal region
- **Sender:** *the sender is the party who initiates the communication*
  - note: this is about the exchange of information not about exchanging commodities/products
    - oeo has: information content entity imported: *A generically dependent continuant that is about some thing.* -> possibly add a note to how this is used in oeo contexts
  - **parent:** agent
- **Receiver:** *the receiver is the party who gets information from the sender*
  - note: this is about the exchange of information not commodity (see above)
  - note: possibly related and available in OEO: <u>client</u>: A client is an agent that receives a product or service.-> however, client receives a product - this is not about information.
  - **parent:** agent
- **Bid:** *A bid is an offer made by an agent to another agent in an effort to exchange commodities or services via terms relating to price and quantity which will be part of the resulting contract.*
  - **parent:** document
- **Award:** *An award signifies that a supplier for a particular commodity or service specified in a bid has been accepted*
  - **parent:** document
- **Provider**: *agent that transfers commodities or services to other agents*
  - Comment: *typically defined in a contract*
  - Leans on FIBO: https://spec.edmcouncil.org/fibo/ontology/FND/ProductsAndServices/ProductsAndServices/ServiceProvider
  - **parent:** agent
- **Service:** *intangible activity performed by some agent for the benefit of another agent*
  - Leans on FIBO https://spec.edmcouncil.org/fibo/ontology/FND/ProductsAndServices/ProductsAndServices/Service
  - **parent:** agent
- **Dispatch assignment:** *The term 'dispatch' refers to resource planning at a power plant by the plant's operator.*
  - Discuss with energy experts too
- **Power plant portfolio:** *the particular combination or mix of different power plants, e.g. renewables and fossil plants within one business unit or company or trader.*
  - Discuss with energy experts too

Missing in OEO from https://github.com/OpenEnergyPlatform/ontology/issues/256
and not overlapping with those in #376

- **DeliveryInterval:** *the duration between repeated deliveries of services or commodities*
  - comment: often contractually fixed and often regular
  - **parent**: duration
- **FuelPriceRequest**
  - not needed
- **DispatchAssignment**
  - see above
- **Capacity - ok with existing definition for nameplate capacity**
  - <u>nameplate capacity</u>: *Nameplate capacity is the quantity value stating the maximum power a power generating unit or a power plant can generate, and the sum of the power ratings of all energy converting devices of that power plant.* _and <u>declared net capacity</u>: Declared net capacity is the quantity value stating the maximum power a power generating unit or a power plant can deliver to the electrical grid. It equals the sum of the rated powers of all plant generators minus all power used internally within the plant.
- **InstalledPower**
  - but available: <u>power rating</u>: Power rating is the quantity value stating the maximum power an energy converting device can convert.
  - InstalledPower = synonym for power rating
- **PlannedAvailability:** *A quality that describes the amount of time a power plant is planned to be operational per year.*
  - **parent**: quality
  - axiom: has quantity value some fraction value
- **Efficiency - ok with definition of efficiency value**
  - but available: <u>efficiency value</u>: An efficiency value is a quantity value stating the ratio between a process's inputs and the outputs that are used.

- efficiency as synonym for efficiency value
- **BlockSize:** *Block size is the declared net capacity of a power generating unit.*
  - **parent**: declared net capacity
  - axiom: quantity value of some power generating unit
  - add block as a synonym of power generating unit
- **CyclingCost**
- **FuelType** - different types of fuel are already included
  - the type of fossil fuel with which conventional power plants use to produce energy
- **UnplannedAvailability instead of UnplannedAvailabilityFactor:** *A quality that describes the amount of time a power plant is planned to be operational per year, but is not operational.*
  - **parent**: quality
  - axiom: has quantity value some fraction value
- **YieldProfile**
  - discuss with other energy experts
- **FullLoadHours**
  - The full load hours are a calculated measure to describe the utilization of an electricity generation plant. The value of the full load hours is obtained by dividing the annual amount of energy generated by the nominal output of the plant.
- **PowerClass**
  - not needed, rather special meaning
- **PowerPlantOperator**
  - operator of an electric utility generating station
  - role
  - **parent**: agent
- **Markup + Markdown**
  - an amount added or deduced to/from the cost price to determine the selling price
- **ConventionalTrader:** *A trader that trades the power of fossil fuel power plants.*
  - if trader is implemented => not needed, type of trader
- **DemandTrader:** *A trader that is the relay to agents that have a demand*
  - demand in oeo: *A demand is a realizable entity that is characterised by a person, organisation or object needing it for a specific purpose.*
  - discuss with other energy experts
  - if trader is implemented => not needed, type of trader
- **DirectMarketer**
  - a trader who is the relay between the energy exchange and power plant operators
- **Message**
  - a type of a signal with information
  - not needed
- **Signal**
  - an action, movement, or sound that gives information, a message, a warning, or an order
  - not needed
- **Channel**
  - not needed, rather special meaning
- **Product**
  - something (such as a service) that is marketed or sold as a commodity
  - manufactured commodity, disjoint from service
- **Portfolio**
  - see above, already defined if we define power plant portfolio
- **MeritOrder**
  - is the ranking of power plants (electrical generation) based on ascending order of price (determined by their short-run marginal costs of production)
  - DEU: "ist die Einsatzreihenfolge der Kraftwerke, die durch die Grenzkosten der Stromerzeugung bestimmt wird."
  - discuss with other energy experts

ToDo:

- implementation: Simon
- collect terms that still need discussion in new issues
- discuss some terms with other energy experts