Management of the Super Power Plant

# Business and Finance

The operation of the complex is mainly controlled by the business centre which is where most of the offices are found.

The centre is responsible for monitoring all the others, collecting data about how much electricity is being produced and using the statistics and information from around the plant to make informed decisions as to which of the energy sources are required for use on certain days of the week. This is, therefore, the main information hub and the central control centre for the entire complex. Instructions are distributed to the smaller control bases from this main one which makes sure that all of them are working in harmony to produce the best amount of electricity based on current demand. The business centre also receives data from the energy research centre where the climate sensors are based and from other weather sensors along the coast so that it can produce accurate graphs of weather patterns and gauge the amounts of electricity that will be generated and decide if it will be necessary to activate the biomass plant to make up the shortfall. As the main centre for finance, the business centre is also responsible for handling investment and making sure the electricity quota is met. They have access to enough information to decide how best to use the resources to ensure a profit is made and how to distribute grants and funding to the project to make sure they go to the best use.

# Engineering and the Smaller Divisions

Each of the smaller divisions of energy generation also has a control centre. For example, the wave and tidal generators are all connected back to a main base which is onshore with the rest of the complex. The function of these bases is to monitor an individual section of the complex. It would be impossible for the business centre to operate every single one of the generators at the same time so instead each one is controlled by a separate division. Each division is responsible for the operation of its own section; this involves the collection of data directly from the stations to find exact figures of electricity generation, ensuring that the contributing structures remain well maintained, and to operate the actual plant, i.e. shutting it down and starting it up again when required. The smaller divisions receive instructions directly from the command station and a leading figure heading up each division is required to attend daily meetings and conferences in the main business centre to make absolutely sure that their division is complying with the rules set down by the centre and that their electricity generation is meeting the expected quota. The key for this system to be successful is cooperation between the individual divisions, so it’s important that regular communication is maintained so that electricity demand can be met efficiently.

# Biomass Delivery

Biomass deliveries are authorised separately by a section of the business centre and are controlled via a building positioned directly adjacent to the drop off point. After placing an order from the biomass source, trucks delivering the fuel will enter through a side gate into the main body of the complex and deposit the load into the collection point which is joined onto the back of the power station (more photos available on the website). The trucks can then sign in and out in the building next to it which enables the main business centre to keep an accurate record of the amount of biomass moving into the complex.

# Working in the Research Centre

The energy research centre is vital for the future development of the power plant though it is not restricted to members of the complex only. It consists of multiple testing facilities and rooms which can be leased out to firms who wish to conduct test and experiments related to the production of energy. It boasts a number of up to date and high speed facilities and specialised equipment meaning research efforts can be focussed onto select areas by the centre. The energy research centre has some degree of independence from the main business centre, more so than the other divisions of the complex, but the business centre does have the power of veto if there is something in the power complex which seriously needs attention or focus on. The business centre is also the area which determines the proportion of the money which comes into the complex is assigned to the energy research centre. One of the main specialised areas of the energy research centre is a high voltage testing area, which is designed specifically for use in testing out the suitability of different materials for lightning conductors. There is also a workshop focussed on the testing of new materials to try and bring the “capacitor room” concept into reality, though this is likely to be an extremely extended project. Most of the engineering and innovation takes place here and without the designers constantly working on new ideas and testing new theories then it is likely that the complex would make no progress as technology grows around it. All new discoveries are immediately on site and in an exceptionally good position for testing, which makes this one of the most crucial buildings on the entire site.