

Caribbean Utilities Company Ltd. Primary School Essay Competition

Topic

Imagine that our islands were without electricity for one week. Describe what life would be like for these islands, our businesses, schools and at our homes during that week.

If by chance of an accident or a disaster, we lost electrical power for one week on Grand Cayman, it would be pretty dismal for most of us. Electricity you see for our country and my generation today has become a basic need and even to a large extent a necessity. Not like the days when my father, grandfather and grandmother appreciated it, if it was available and felt just ok if it wasn't available, since they were not as dependent as we are today. So as citizens we need to conserve wherever possible so as not to put excessive pressure on the utility company in overworking their equipment, which usually is the main cause for blackout and loss of energy for long periods of time.

Other causes can and have contributed to loss of power for longer periods of time. My mother and father always remind me about the time we had no electricity for a month after Hurricane Ivan almost destroyed our island. I was only six months old then, but can just imagine what a difficult time that would have been having a small baby who is hot, miserable and having to bathe me in a basin or bucket by pouring water over me. What a mess that must have been! I can still only imagine what it was like then and what it would be like now, if we got another long blackout here in the island for a week or more.

Businesses would suffer losses in supplies and especially those who deal in perishable goods like food, which would include meats, vegetables and liquids, such as milk, juices and any other items which would require refrigeration or air conditioning. Some large companies like Fosters, Kirks and Hurley's have backup generators, but these cannot run constantly like the Caribbean Utility company can and would have to be serviced often. My dad has shown me how a generator works and why it has to be serviced after running for a few hours. They probably have their own mechanics, but even with that, they may not be able to power off all of their freezers and would still have to end up throwing away a lot of food, which they could have sold, if the current wasn't off. Most businesses would have to shorten their hours of work and send their employees home, since they would not be able to operate normally. This would mean less pay for the workers and loss of money for the employer. Places like Cox Lumber, could still operate, since they sell mostly nonperishable goods like wood, furniture and building supplies. The only problem for them might be the operation of their cash registers and their cutting equipment. If it all comes down to meeting the customer's need they could use hand tools like a saw to cut measurements of wood or battery powered drills and saws and charge them using a store generator. I believe that some business will be able to cope while others will have some difficulty and then some may have to go out of business, if they lose all of their stock. Business should therefore have in place a plan to deal with any emergency.

Schools would have to close immediately because of the many safety issues with children in a school where there is no electricity. My father told me that only some schools have generators, but they are designated for use only during a natural disaster like a hurricane. Our computer labs would not be working, classroom lights and fans would not be able to operate and the classrooms would be very hot due to no air conditioning. We are really living like the Jet Sons we cannot do anything unless we have a steady supply of energy in the form of electricity. Take our canteen for example, it is very modern and everything works on electricity. If the cook does not have current, then we can't get any food to eat and everything gets thrown in the garbage. My dad also told me about mold and how sometimes, if a place like a school classroom is closed down and no air is in circulation, then these little critters will grow by the millions in a short time. This would create problems for the education department when reopening the school after a long period of closure. Some schools might have half day activities in the park or playground area, but this would be muggy and sweaty for the children and teachers. The water supply to the fountains would be warm to hot and everyone would be frustrated and stressed out! The Dart school might be the only one working, since they have lots of money to spend, including providing backup generators and portable air conditioners and water coolers for each classroom. I believe that many of the schools on the island would suffer in the event that a blackout occurs and remains for any period of time, so it's important for government schools to have a plan.

Our homes, whether it's a house, condo or apartment, would be upside down, with no current, that means no television, no microwave, no stereo music, no internet and no cell phone service or land line service. Daytime would be a disaster, with the house being like an oven, even with the windows open since Cayman's climate is hot and humid. Night time could be scary since we would have to use candles, kerosene lamps and battery powered lanterns. Reading would be bad on the eyes, since we would have to squeeze our eyes to see the writing in books. Cooking, bathing and using the bathroom would be full of issues, since there would probably be no pressure to get the water into the house, flush the toilets or take a shower. That means that showers would have to be taken by using bottles of water or if you have a camp shower, then that could be used. The kitchen would be a mess, since the refrigerator and freezer would defrost, causing the food to spoil and create an odor in the house. Some families may have better luck if they have a back-up, which can provide some comfort even if it is for a few hours each day. We cannot prevent disasters from happening and we surely can't tell when Caribbean Utilities will have a major blackout, but we can be prepared for these emergencies by having an emergency plan in place at all times.

Submitted by: JOSH LEVY

School: RedBay Primary School

Class: Mrs. Joan Powell

Date: December 2nd, 2013

Transmission substation

High voltage transmission lines

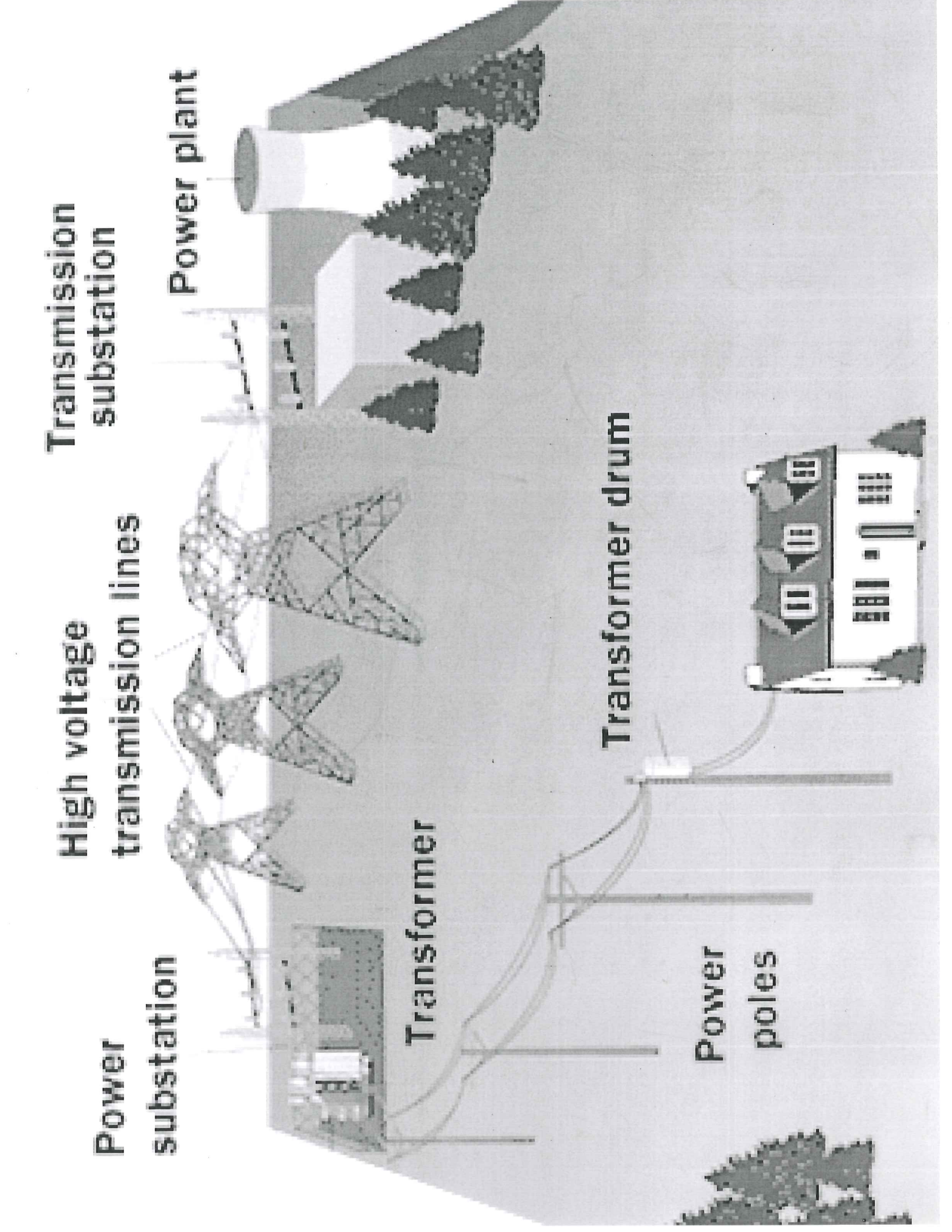
Power substation

Power plant

Transformer

Transformer drum

Power poles



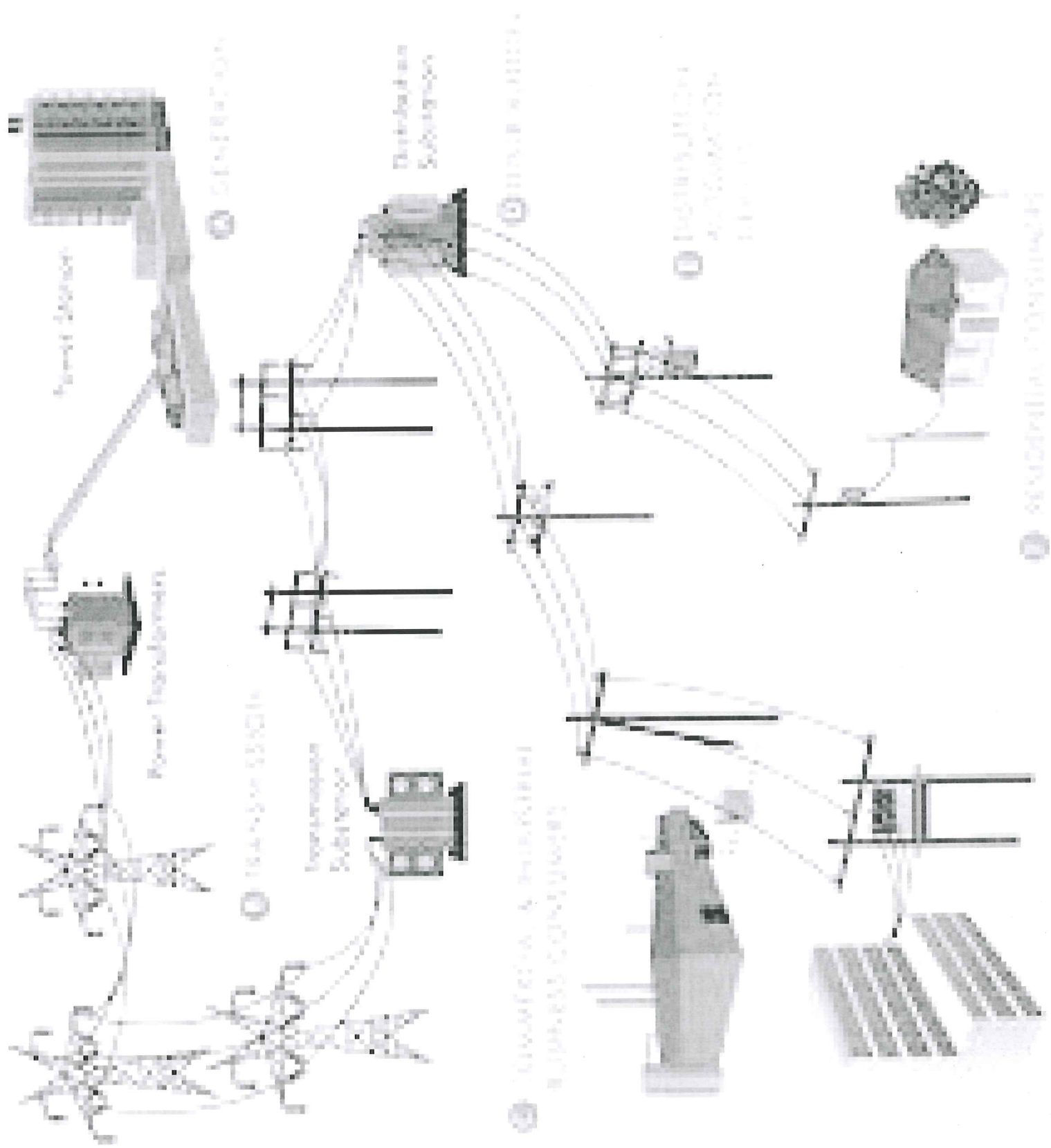
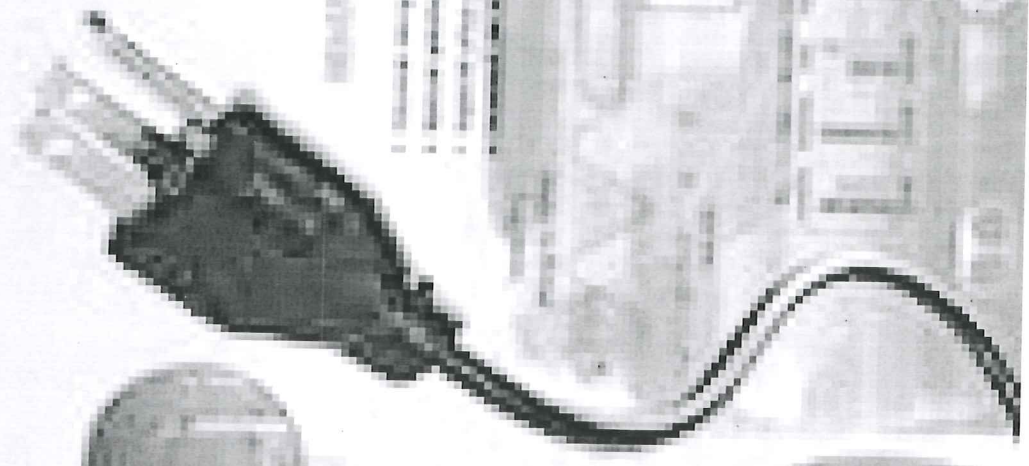
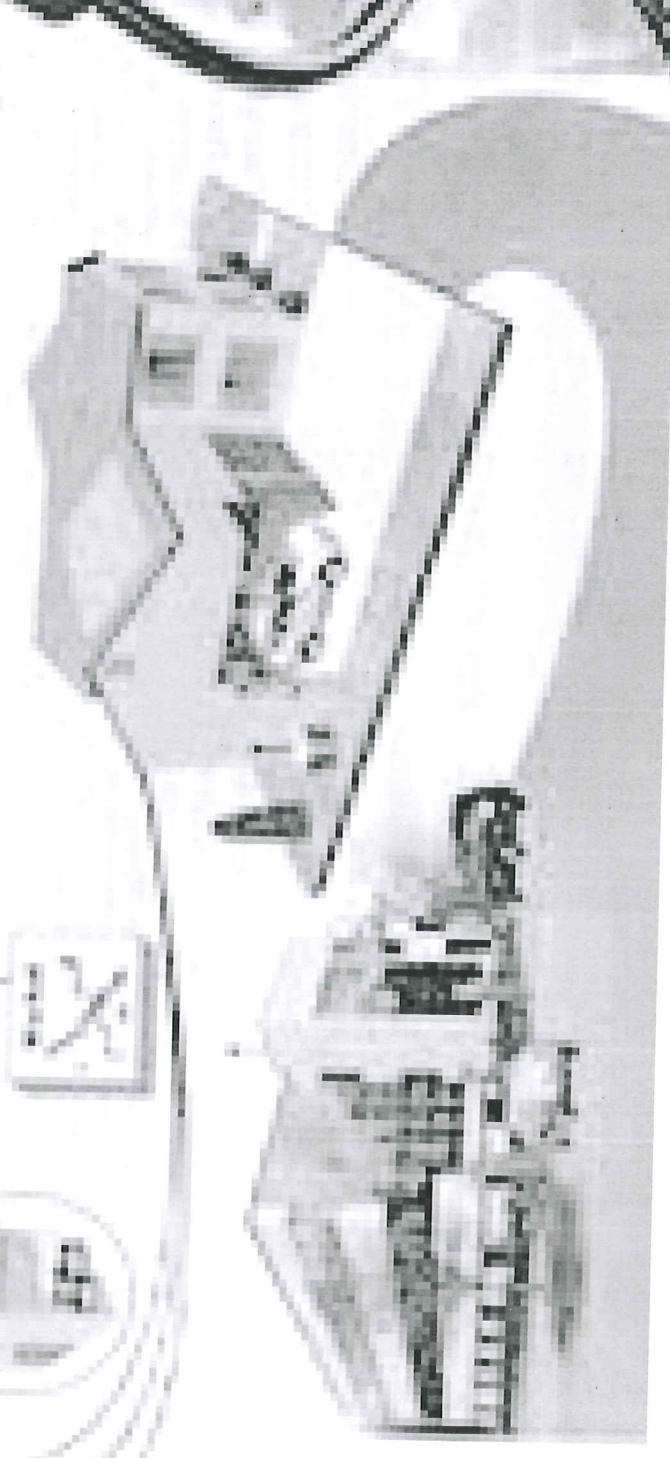
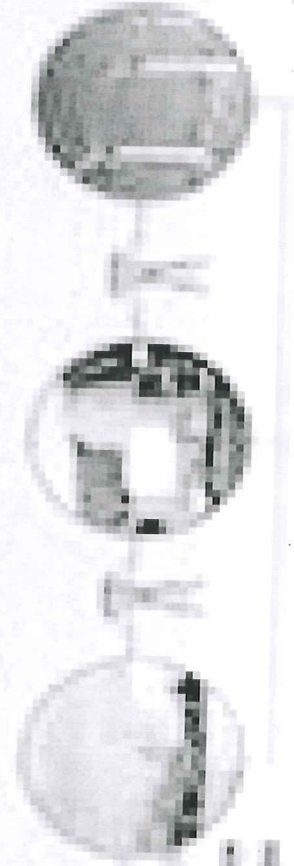


Figure 1: Power Distribution System

The Smart Grid Can Deliver



RESEARCH
IN
ENERGY
AND
ENVIRONMENT