WIND CHIMES

NEWS LETTER OF GWPL FAMILY

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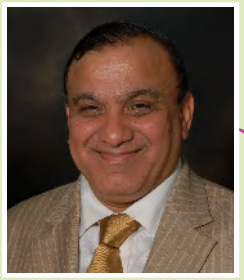

CEO TALK

As I share my thoughts with you, my mind is filled with happiness. Happiness over many happenings. Starting from the fact that the searing summer is behind us and that the monsoon rains are cooling us and filling our reservoirs. But the most important happiness comes from two significant developments at GWPL. The first is us having received an order to execute a 200 MW wind farm project in Maharashtra. The second is that our 2 MW WTG has been cleared by C-WET and included in its RLMM list as of end June '11, making us the only company with two offerings in the Multi-MW category in the country. These milestones should make each one of us justifiably proud of our organisation and feel more confident on our future growth. The Wind Energy sector is witnessing substantial growth in India and with advancement in technology creating ability to tap low wind areas as we are doing, as well as eager investors feeling confident in investing in wind energy, the outlook appears bright and the advantages are in our favour.

Like true professionals, instead of resting on these successes, we are charging ahead on both fronts. An independent team, under the able leadership of Mr. V. Vasudevan, has been created for the 200 MW project, which will be executed in the Vashpet area, Sangli district of Maharashtra. Infrastructure has been created at the site for this team to function and the work on installing the prototype of this 2.5 MW WTG is underway. Our technology partner for this WTG – Fuhrlander – is deputing their experts to train our team on this prototype and assembly at the plant.

Similarly, we have started work on the second 2 MW WTG at Kayathar, adjacent to our existing 2 MW prototype. We plan on additional installations of this 2MW WTG at sites in MP. We continue to generate interest and inquiries for the proven 750KW and 225KW WTGs where we have now established a track record and are building on it. Like Power and Position, Happiness also brings with it responsibilities, if it is to be permanent. Here I would like to outline three key areas:

1. Cost Control: We all have the responsibility to reduce costs. There are efficiency improvement opportunities available in every department. Identifying and attacking such areas should be as much as our task as our routine department work. It can be as simple as relying on electronic medium or taking double sided printouts to enabling decisions that help us and our supply chain partners innovate and reduce costs.

2. Ability to plan, anticipate and mitigate: For executing large projects, planning and anticipating issues play a central role in our ability to deliver on our committed targets. Let us acknowledge that there will be challenges that we have not dealt with before and that there may be problems that we have not accounted for. However, the foresight to prepare for contingencies and the ability to proactively work towards a resolution will be the yardstick by which our success will be measured.

3. Processes and systems: We have committed to our customers a rigorous reporting system right from procurement to manufacturing to erection and commissioning. These systems, while required by our customers, are necessary for us to be able to work as a team and scale up our operations. Therefore while the focus is on delivering to our plan, it is as important to document, communicate and maintain records of our progress so that our fellow team members may find it easier to understand and support our respective areas. Proactive review meetings will also help us in implementing the aggressive targets in time.

I wish our company continued success and let us ensure that each one of us works as a team and contribute towards meeting our committed targets.

Warm Regards
M. N. Sudhindra Rao

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by **P.B. RAMESH**
Sr.Vice President

The Hydrogen Office Project (Scotland) implements the first GWP47–750KW turbine in Europe.

The Hydrogen Office project was set up to support the accelerated development of the renewable hydrogen, fuel cell and energy storage industries in Scotland. The project's focus is to support education, research and development, and policy support initiatives in this sector. The Hydrogen Office Project combines a GWP47-750KW wind turbine with a hydrogen production, storage and fuel cell system. This allows the energy system to store energy generated from the turbine when the wind is blowing, for days that it is not.

Project background

It is estimated that Scotland has six times more renewable energy potential than it currently uses in electrical energy annually.

Energy storage technologies such as hydrogen increase Scotland's capability to more fully harness its vast renewable energy resources, offering significant long-term employment and carbon reduction benefits. Notably, energy storage technologies bring into play opportunities not currently open to intermittent renewable energy sources, including: i) grid balancing and peak power provision; ii) load balancing during grid outages or surplus renewable generation, and iii) a scalable alternative to oil as a transport fuel. Fuel cells offer significant efficiency and carbon benefits. They are increasingly commercially viable today for a wide range of applications and are very well suited to the provision of backup or uninterruptible power, using a number of fuel sources, including natural gas, biogas, methanol and hydrogen.

The Hydrogen Office Project was formally opened by the Right Honourable First Minister of Scotland, Alex Salmond, in January 2011. The inauguration was attended by Mr Rao, CEO of GWP Ltd, who discussed future plans for GWP in the UK with Mr.Salmond.

The GWP47 – 750KW wind turbine has a hub height of 55m and a maximum tip height of 79m. It is the first turbine on a Dock Wall in Scotland and now forms a key feature of the skyline overlooking the Firth of Forth. On a clear day, the turbine is one of the few turbines visible from Scotland's capital city, Edinburgh. The Hydrogen Office Demonstration Centre forms a great facility for showing future clients the GWP47 – 750KW turbine.

At a cocktail party, one woman said to another, "Aren't you wearing your wedding ring on the wrong finger? "

The other replied, "Yes I am, I married the wrong man."

Kid : "Dad, can we go to McDonald?"
Dad : "Only if you can spell Mcdonalds.
Kid thought for a minute, turned around, and said : "Can we go to KFC instead"?

The phone bill was exceptionally high. Man called a family meeting on Saturday to discuss.
Dad : This is unacceptable. I don't use this phone, I only use my work phone..
Mum : Me too. I hardly ever use this phone..
Son : "I use my office mobile I never use the home phone..
All of them are shocked and together look at the maid, who's patiently listening to them..
Maid : what? So v all use our work phones.. Not a Big deal...!

by
Mehul Lakhani
Assistant Manager, CEO Office.

DEPARTMENT INSIGHT

A Brief on Maintenance Methodology.....

by **Mahesh Kasat**
General Manager, Silvassa

Maintenance:

The process of maintaining or preserving someone or something, or the state of being maintained is known as maintenance.

The Importance of Maintenance:

The importance of an effective maintenance program cannot be overlooked because it plays such an important role in the effectiveness of Lean manufacturing. As in personal health care insurance, maintenance may be considered the health care of our manufacturing machines and equipment. It is required to effectively reduce waste and run an efficient, continuous manufacturing operation, business, or service operation. The cost of regular maintenance is very small when compared to the cost of a major breakdown.

Purpose of Maintenance:

The main purpose of regular maintenance is to ensure that all equipment required for production is operating at 100% efficiency at all times. Through short daily inspections, cleaning, lubricating, and making minor adjustments, minor problems can be detected and corrected before they become a major problem that can shut down a production line. A good maintenance program requires company-wide participation and support by everyone ranging from the top executive to the shop floor personnel.

Types of Maintenance:

a) Breakdown Maintenance:

Breakdown maintenance is the emergency repair of inoperable equipment performed by operators or maintenance crews. The plant and maintenance supervisors are responsible for emergency repairs. The Utility and Maintenance Shops should develop a co-ordinated plan to efficiently handle emergency breakdowns.

b) Preventive Maintenance (PM):

Preventive maintenance is the care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of failures either before they occur or before they develop into major defects. It can be divided into two sub-groups:

- **Planned maintenance:**

Planned Preventive Maintenance (PPM) or more usual just simple Planned Maintenance (PM) or Scheduled Maintenance is any variety of scheduled maintenance to an object or item of equipment. Specifically, Planned Maintenance is a scheduled service visit carried out by a competent and suitable agent, to ensure that an item of equipment is operating correctly and to therefore avoid any unscheduled breakdown and downtime.

- **Condition-based maintenance:**

Condition-based maintenance, is maintenance when need arises. This maintenance is performed after one or more indicators show that equipment is going to fail or that equipment performance is deteriorating.

c) Corrective Maintenance:

Corrective maintenance can be defined as a maintenance task performed to identify, isolate, and rectify a fault so that the failed equipment, machine, or system can be restored to an operational condition within the tolerances or limits established for in-service operations.

d) Total Productive Maintenance:

It can be considered as the medical science of machines. Total Productive Maintenance (TPM) is a maintenance program which involves a newly defined concept for maintaining plants and equipment. The goal of the TPM program is to markedly increase production while, at the same time, increasing employee morale and job satisfaction.

e) Reliability-Centered Maintenance:

Reliability-centered maintenance, often known as RCM, is a process to ensure that assets continue to do what their users require in their present operating context. It is generally used to achieve improvements in fields such as the establishment of safe minimum levels of maintenance, changes to operating procedures and strategies and the establishment of capital maintenance regimes and plans.

Basic Features:

The RCM process described in the DOD/UAL report recognized three principal risks from equipment failures: threats to safety, to operations, and to the maintenance budget. Modern RCM gives threats to the environment a separate classification, though most forms manage them in the same way as threats to safety. RCM offers four principal options among the risk management strategies: on-condition maintenance tasks, scheduled restoration or discard maintenance tasks, failure-finding maintenance tasks, and one-time changes to the "system" (changes to hardware design, to operations, or to other things). RCM also offers specific criteria to use when selecting a risk management strategy for a system that presents a specific risk when it fails. Some are technical in nature (can the proposed task detect the condition it needs to detect? does the equipment actually wear out, with use?). Others are goal-oriented (is it reasonably likely that the proposed task-and-task-frequency will reduce the risk to a tolerable level?). The criteria are often presented in the form of a decision-logic diagram, though this is not intrinsic to the nature of the process.

HAPPY TIDINGS

GLOBAL WIND POWER LTD.

e-newsletter - July 2011

Now, the Alangulam SS in our loop

Chairman of our prestigious Customer - Riddhi Siddhi - at Alangulam site

Customer inside our Control Room

Our Tenkasi Team enjoying the success of Commissioning Activity at Alangulam SS

Mr.Vasudevan - Sr.Vice President planting a sapling at Tenkasi

MY JOB TALK

By N. Sreenivasulu,
Senior Engineer, WRD

Hi One and All,

I am here in this family, from almost 2 years. The people here are so experts, flexible and co-operative in nature and also self driven. I found with GWPL family that the Management is down to earth in nature, talks to every individual of every team with personal touch also and great co-ordination between the Departments, which are highly valuable and necessary characteristics of a growing organization. In my view WE stand at:

The enterprise as a hand requires training and co-ordination before any experience can be provided at all. The pen as development is the means of delivery, and again, has to fit the hand (enterprise). However, it can have multiple designs, and best fit is key here. The point of delivery is influenced by all other elements, and to leave a lasting experience, it has to have a good interface with the customer and with the pen and hand. What I like about it is that the delivery of the experience is so fragile and a culmination of a huge enterprise and development activity. I'm still getting used to this metaphor and I'm sure it works with US,....KEEP ROCKING GWPL..... Feeling proud of to be a part of GWPL family.