



Summary Report

CASE STUDY

OF THE

TANGUISSON POWER PLANT BARRIGADA, GUAM

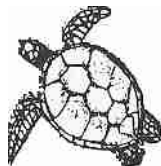
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July 18, 1997

TABLE OF CONTENTS

Report One: Situation Assessment, November 22, 1996

1.0	Introduction	1
2.0	Assessment	2
3.0	Findings	3
3.1	Guam Networks	3
3.2	Political Pressure on Tanguisson	4
3.3	Damaging Effects on the Units	4
3.4	Damaging Effects on the Workforce	5
3.5	A Recurrent Issue... Workers Fear for Their Safety	5
3.6	The Workforce's Central Issue Unpredictability	5
4.0	Recommendations	6
4.1	Encourage An Emergent Management Style	6
4.2	Encourage Participation as the Vehicle to Increased Predictability	7
4.3	Make Use of Existing Informal Employee Networks	8
4.4	Improve Measures for Employee Safety to Improve Morale	8
4.5	Support the Formation of Cross-Sectional Teams	8
4.6	Utilize Informal Networks to Communicate With the Public	9
4.7	Recognize the Window of Opportunity	9
4.8	Activate an Internal Communication System	10
5.0	Summary and Future Directions	10
5.1	Management Elements that Emerged During the Assessment	10
5.2	Evaluation and Tracking Elements for Improved Performance	10
5.3	Summary of Recommendations	13
	Figure One: Elements of the Emergent Management System at Tanguisson Power Plant	12
	Appendix: Ideas for Further Consideration	14
	Report Two: Strategic Review, February 24, 1997	16
	Report Three: Transition: From Recovery to Production, July 18, 1997	20

SITUATION ASSESSMENT

THE TANGUISSON POWER PLANT, BARRIGADA, GUAM

Conducted by: James A. Kent and Eric Casiño

1.0 Introduction

The Guam Power Authority (GPA) entered into a contract with HEI Power Corporation/Guam (HPG) on September 30, 1996 to have the latter take over the management of the Tanguisson Power Plant. The actual transfer of administration of the facility from GPA to HPG was effective on November 11, 1996. This contract, referred to as the Energy Conversion Agreement (ECA), stipulates that HPG will refurbish, operate, and maintain the power plant in such a way that it will again produce electricity to its full capacity of approximately 50 megawatts.

Currently the plant is able to generate only about 1.5 megawatts because both generating units at the plant are in a state of disrepair. The units were installed 20 years ago. Maintenance and replacement of parts in the last several years has been inadequate to run the plant efficiently.

Under the terms of the ECA, all 43 employees at Tanguisson will remain on the GPA payroll. Supervision by HPG will operate within Guam Civil Service Regulations. Replacements of these employees will also be under GPA control. HPG, however, will have the power to fill four positions--the plant superintendent, operations manager, maintenance manager, and general accountant.

HPG contracted with James Kent and Eric Casiño of James Kent Associates (JKA), to assist HPG with the cultural aspects of the takeover and the reorganization process. JKA was retained on the assumption that bringing Tanguisson back to full capacity will require not only technical but also organizational overhaul within a cultural context.

The initial assignment was to conduct a "situation assessment" of the cultural and social setting of the Tanguisson workforce and management for the purpose of improving morale, communication, and productivity.

During the situation assessment period (which is distinct from the technical evaluation of the entire plant and its equipment to be done by HPG), the consultants gained the confidence of the many workers they met and interviewed. For this reason, this report will maintain that trust and confidentiality; no names of sources of information will be given.

The following report embodies a description of the (1) Assessment / Discovery Process™, (2) Findings, (3) Recommendations, and (4) Future Directions.

2.0 Assessment

JKA generates data for assessing cultural and social issues by using a method known as the "Discovery Process.™ *This* proprietary process, trademarked by JKA, allows interviewers to access informal or formal social situations and discover the natural dynamics of how people communicate and relate to each other.

Discovering natural routines and communication flow is important for establishing the baseline situation and for generating from this knowledge a strategy of intervention designed to improve production.

Before physically entering the Tanguisson plant premises to conduct interviews, we reviewed and analyzed the "Personnel Management Contract" between GPA and HPG; therefore, we had established the general framework for approaching possible lines of investigation. As an example, we knew before we entered the plant the distinction between staff positions HPG has control over, and those remaining under GPA control and supervision.

We also had prior knowledge of the fact that a local Guam executive had been selected and hired by HPG to take charge of reorganizing both the technical and personnel divisions of the Tanguisson plant operation. This was an important development because it allowed the consultants and the new Plant Supervisor to review the range of scenarios needed to address existing challenges and create solutions to improve staff and workforce relationships and performance. Several strategies were developed and implementation begun by the Plant Supervisor, during our consultation period.

After a brief and informal courtesy meeting with the Maintenance Supervisor and Operations Supervisor, we took a guided tour of the facility, which helped us understand the physical parameters of the plant and its two units.

The Operations Supervisor supplied us with a recent organization chart showing the basic divisions of the workforce, e.g. the major distinction between "operations" and "maintenance." and within the latter, the distinction between "mechanical" and "electrical/instrumentation" personnel. The organization chart became a handy tool for tracking down personnel during the on-going work-shift schedule--day, swing, and graveyard shifts.

3.0 Findings

3.1 Guam Networks

While Tanguisson is hidden in a cul-de-sac at the foot of a cliff, it is a public facility whose energy output or lack thereof impacts the whole of Guam. We discovered, even before locating the plant site, that Tanguisson and its location are known to the people of the island.

This was discovered in the preliminary mapping of the location of natural gathering places where local residents come together to shop, eat, drink, and talk about current events and issues in the community. Examples of such gathering places are restaurants like American Cafe, Kings, Denny's, and especially Shirley's, which has several locations on Guam. We identified these places by asking the locals about where they normally meet other people to discuss daily events.

These natural gathering places are important because they are the setting for the informal communication channels that carry both facts and rumors. They normally receive and process news ahead of such formal channels as TV, newspapers and newsletters

3.2 Political Pressure on Tanguisson

While the Tanguisson plant was producing to capacity in its early years, "load shaving" increasingly became common because the units were not properly maintained. The problem was not one of personnel, but the fact that "government bosses" ordered employees to keep the generators continuously running. This order left little time for maintenance. There was no time to stop the machines for the necessary repairs.

3.3 Damaging Effects on the Units

Without proper maintenance and repairs, the various parts of the units began to show the expected wear and tear. Leaks in the condenser tubes allowed seawater to contaminate the water in the condenser from which water from the recycled steam was pumped back to the boiler. Contaminated steam affected the blades in the turbines. Various other leaks in the lines and tubes connecting the various elements in the units forced stoppage, or cut down efficiency. Brown-outs rather than reliable electric current became associated with Tanguisson, and this eventually affected the morale of the plant personnel.

3.4 Damaging Effects on the Workforce

"Machine-fatigue" and unpredictability in performance and output were reflected in the psychology and productivity of the workforce. The workforce couldn't buck the political system, nor could they improve the plant without adequate technical support and encouragement. The result was a pattern of dread, fear, frustration, and fatigue. The failure of the machines was reflected in a sense of failure and hopelessness in the workforce. The morale of the workers dropped along with the collapse of productivity with an attendant increase of concern for the unsafe conditions in the plant

3.5 A Recurrent Issue... Workers Fear for Their Safety

Safety issues were a part of every discussion. The talk reflected the general mistrust of a management system that forced workers to operate in and tolerate known unsafe plant conditions. For example: several operators said that they were advised to bypass or block the "fire-eye" --the mechanism that tells if the fire has died inside the burners and which, when operating, would trigger the automatic shut down of the fuel that feeds the burner in order to avoid build up of pressure. Without this warning and timely shut down, a serious explosion could result.

3.6 The Workforce's Central Issue . . . Unpredictability

A pattern of unpredictability and uncertainty sapped the strength of management and workforce. When will the bosses approve the requisition for supplies? When will the next break-down occur? Which part of the plant may have to be repaired? Who do we blame when the public complains about outages? How long will the plant superintendent stay in his current post? The uncertainty in personnel tenure was especially acute because of the GPA practice of moving people around the various power plants. In a climate of

unpredictable turn-over, long-term planning was not possible, not to mention the uncertainty of obtaining spare parts and introducing meaningful repairs.

REPLACING THE ISSUE OF DOUBT AND UNPREDICTABILITY, WITH CONFIDENCE AND PREDICTABILITY IS THE CENTRAL CHALLENGE THAT HPG/GPA MUST DECISIVELY ADDRESS THROUGH ITS' MANAGEMENT TEAM AT TANGUISSON.

4.0 Recommendations

On the basis of our situation assessment of both the internal organization of the Tanguisson management and of the informal networks we surveyed in the larger Guam social environment, we offer the following recommendations.

The first four recommendations address internal issues at the plant; the second half addresses the communication of issues to the larger public.

4.1 Encourage An Emergent Management Style

Our primary recommendation is for HPG to encourage an "Emergent Management Style." By this we mean that management could be tailored to the inherent characteristics of the workforce and the tasks involved with running an efficient power plant. The elements and characteristics of such a management style are spelled out below (4.2 - 4.8). In general, however, this style of management requires that HPG should avoid perpetuating terms and concepts that remind people of an earlier failed system. For example, we recommend that HPG eventually drop "superintendent" and "supervisor" and substitute "team captain" or "team coordinator." The Plant Supervisor title would be changed to Plant Manager or another term that is more compatible with the "team" concept.

HPG should develop an organic management style which introduces changes that are aligned with the basic rules of respect that exist within the culture of the workforce. For example, "getting rid of dead-wood" should be accomplished through an internal process rather than being mandated from outside.

It should be noted that this creative approach to management at Tanguisson has been thoroughly discussed with James Perez j the newly appointed Plant Supervisor who is currently following these concepts in the process of reorganizing the staff and workforce.

4.2 Encourage Participation as the Vehicle to Increased Predictability

Because unpredictability was found to be a central issue, establishing predictability must be addressed as a major management concern. The way to increase predictability is to encourage participation in all aspects of the management and production process. We found the workers were either passive observers or critics of the existing management system while operating from different "pockets" of isolation. Participation puts the worker into a partnership with management. The workers gain ownership of the process of putting .the Tanguisson Power Plant back on line. We discovered a commitment and desire among the workers to participate, to offer input, and to see their ideas entertained and discussed if not eventually adopted.

For example, workers and technicians should be encouraged to participate during the technical evaluation and assessment, since they are familiar with parts and processes that need to be repaired or replaced. The desire for participation is a healthy trend and techniques have been worked out with the Plant Supervisor for initial implementation.

4.3 Make Use of Existing Informal Employee Networks

We discovered that outside the formal roles and divisions of functions are networks of individuals who relate to each other informally. They share their concerns and exchange ideas. There are individuals in these networks who are natural caretakers, communicators, and analysts. These informal networks are valuable assets if recognized and harnessed, because they can carry and disseminate new ideas and approaches more effectively than through formal lines of command and communication. Information should be placed into the informal networks before it is communicated through formal channels. This allows the workers to anticipate a coming announcement and take pride in already knowing what is to be announced.

The Plant Supervisor has been given the names of the various individuals discovered by the assessment team and is beginning to use them in his organizational efforts.

4.4 Improve Measures for Employee Safety to Improve Morale

Safety issues are a particularly worrisome aspect of unpredictability. The workers we interviewed were upset and dismayed that the "government bosses" did not care for their physical safety. They believe that their welfare is secondary to satisfying public demand for an adequate supply of electrical power. Numerous stories about the violation of safety rules were related. Within these stories were expressed personal fear for one's own life and the lives of their fellow workers. Consequently, HPG has already begun addressing safety measures that support this recommendation.

4.5 Support the Formation of Cross-Sectional Teams

The primary vehicle for creating participation in management is to establish teams made up of people from operations, maintenance, and results laboratory. These are specific groupings brought together to address definite task-

assignments such as development of a comprehensive electronic monitoring system, improvement of the parking lot, or establishment of a central gathering place for coffee breaks and conversations. These teams are able to concentrate and focus bursts of energy to complete these assignments within several days, a week or month. By making the teams cross-sectional, the traditional division between "maintenance" and "operations" breaks down and allows a system-wide awareness of common solutions. These cross-sectional teams create the foundation for supporting a participatory management process.

4.6 Utilize Informal Networks to Communicate With the Public

Because Tanguisson is a public utility, HPG has a special responsibility to maintain open communication with the public in the course of repairing the plant. HPG cannot shut the plant down for repairs without a plan for managing public reaction and cooperation. We suggest that there is a "window of opportunity" for a positive approach to public understanding of the events that will be taking place over the next seven months.

4.7 Recognize the Window of Opportunity

Four events come together to create a window of opportunity for HPG. (1) The effects of typhoon Dale, (2) The turnover of Tanguisson to HPG, (3) The completion of Cabras II, and (4) The overriding concern for employee safety. The focus is to help the public understand that the typhoon did disrupt essential services on Guam; that HPG has to shut down Tanguisson in order to overhaul the two units; that the activation of Cabras II would take up the slack while Tanguisson is down; and employee safety requires that the rebuilding effort be thorough so that safety will not be compromised under HPG management.

4.8 Activate an Internal Communication System

We recommend that a communication system be first articulated internally through employee teams and informal networks so that they will own it and through ownership align themselves with HPG's management directions. They then can talk about activities at the plant to their friends and relatives and other networks that spread throughout the community. Formal information dissemination through the media and the GPA's Public Information Office can supplement the word of mouth informal channels to the general public once the informal channels are established, up and running and reliable.

5.0 Summary and Future Directions

Until Tanguisson becomes operational in June 1997, HPG management must establish and maintain the momentum resulting from assessment, evaluation, repair, refurbish, reorganization, and workforce training.

5.1 Management Elements that Emerged During the Assessment

The end-result of an effective management direction is efficient and safe productivity. In the case of Tanguisson, productivity is measured not only in a reliable output of electricity at full capacity, but also in the satisfaction of those working in the plant. During our assessment we found several elements that, when managed properly, will accomplish the goal of creating a new era of management direction under HPG leadership.

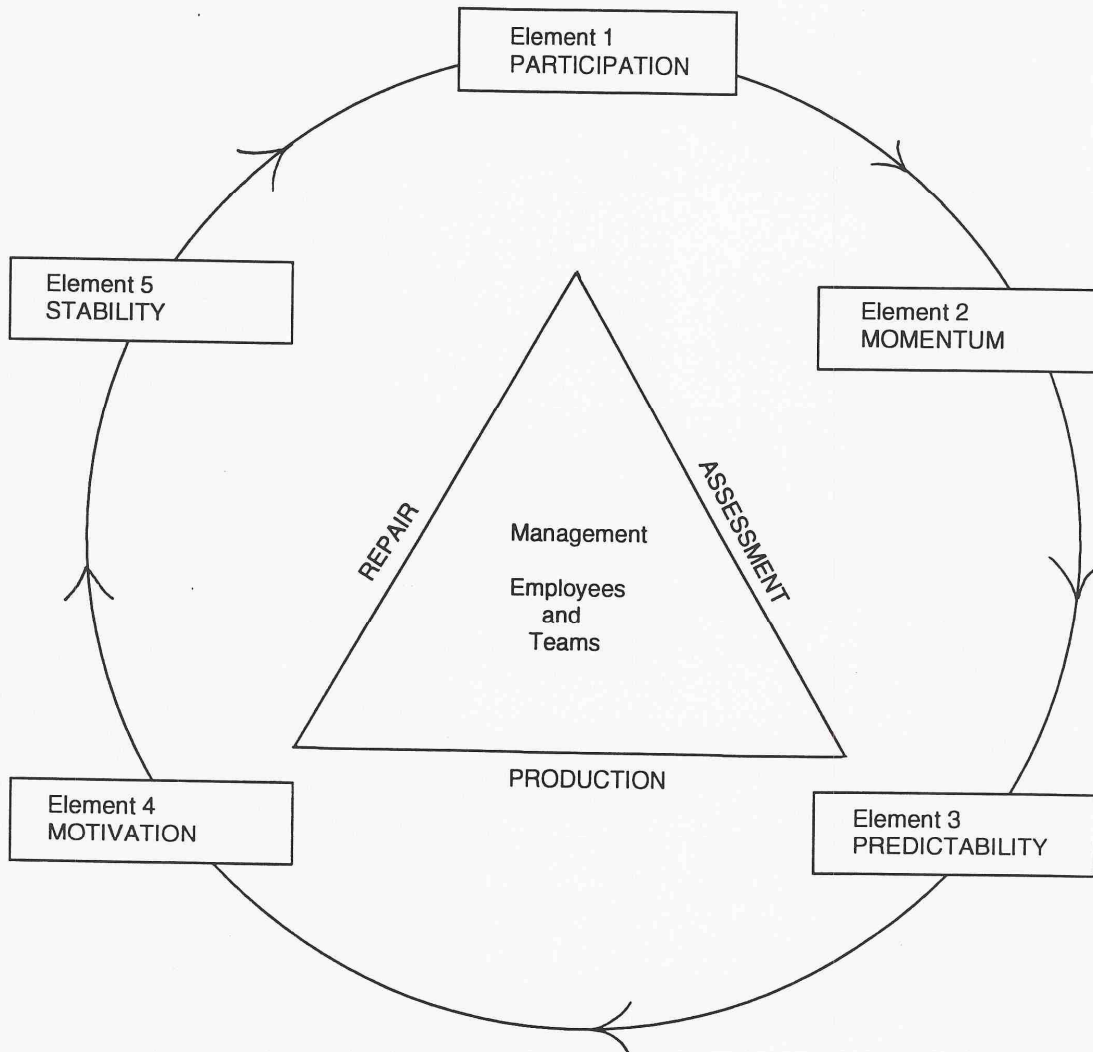
5.2 Evaluation and Tracking Elements for Improved Performance

We found five elements that create thresholds for improved human involvement in management at Tanguisson. These five elements when

assembled in a management system lead to efficient production and employee ownership in the management process. The elements can be tracked and evaluated as to performance accomplishments. The working relationship of these five elements in a management sequence is illustrated in Figure 1 (See insert following page 13).

The five elements found to be of primary importance are: (1) Participation (2) Momentum (3) Predictability (4) Motivation

Figure 1
Elements of the Emerging Management System
at the Tanguisson Power Plant



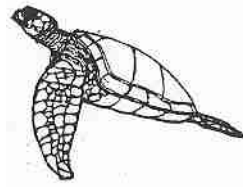
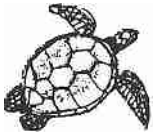
The five elements of the outer circle are highly interactive and in practice do not necessarily take place in this order. However, in the early days of an emerging management system, it is helpful to think in terms of the sequence represented.

The inner triangle represents the tasks to be accomplished over the next seven months.

5.3 Summary of Recommendations

JKA identified and discussed in this report two areas for management action during the assessment and refurbishment of the Tanguisson Power Plant.

1. Strengthen workforce participation as a vehicle for increasing predictability and productivity; and,
2. Involve informal community networks to facilitate the dissemination of information designed to protect HEI/HPG from unnecessary community criticism or political disruption while accomplishing Tanguisson's return to production.



Ideas for Further Consideration

The ideas included in this appendix were taken from out of the various discussions with the workers.

- To increase trust and openness the Plant Supervisor could meet with all personnel to personally make available the GTA-HPG agreement within the next several days.
- Develop the symbol of the KEY to Tanguisson Power Plant, given to the Plant Supervisor at the turnover ceremony. The KEY was accepted but it has not been "turned to start up the power plant". Building towards the "turning of the KEY" at the HPG opening of the plant gives all personnel a ceremony 'to celebrate the end of the old and the beginning of the new.
- HPG officials should drop all public reference to competition with the other power plants. Competitive talk breeds ill will and unnecessary criticism. HPG's focus should be on the quality product and excellence with which Tanguisson power will be delivered.
- Some workers miss the family activities that used to be a part of working at the power plant Several opportunities present themselves for picking up on this tradition once more: Family Clean Up Day, fixing up and maintaining the park next to the plant, Bar B Que for special events, sports teams, etc.
- The first cross sectional team to work with the up-coming assessments has been organized with more teams to follow.

- Tanguisson translates to Parrotfish. This could be developed as a logo for signage around the power plant, or placed on coveralls, etc. This has symbolic value in the Chamorro culture as well as environmental value as a special and unique marine life.
- Pave parking lot and redesign by moving the lights to the other side. This would open up a corridor to provide separate access to the beach outside of the power plant fence. Also an electric gate and monitor would remove the necessity for a security guard.
- Develop a room for a plant wide "gathering place". Move all trophies and other recognition items to this area.
- Pay attention to the Navy language structure used in some parts of the plant. The language of the people reflects their values and relationship to place and to each other. Use the language when appropriate, such as "support the fleet" which means, "Pull together for a common purpose".
- Develop a functional organizational chart that reflects the dynamics of the Emerging Management System.
- Begin immediately to provide safety equipment and express concern that no one is to take a human risk for the sake of a machine.
- Keep HPG management clear and distinct from GPA in decision-making, but involve GPA in information flow and accountability loop when necessary.

- Do not use management techniques that can be associated with the "old" management system: i.e. information control by supervisors, formal communications only, line of command, etc.



Field Report

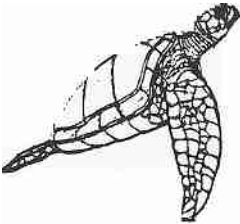
STRATEGIC REVIEW

OF THE

TANGUISSON POWER PLANT
BARRIGADA, GUAM

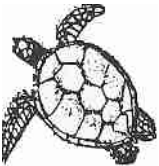
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February 24, 1997

Field Report

Strategic Review: Tanguisson Power Plant Operations, Barrigada, Guam

Conducted by: James A. Kent

1. Strategic Review

The Strategic Review of the Tanguisson Power Plant Operations took place between February 17 and February 21, 1997. The review is based on the Recommendations and Ideas for Further Consideration sections contained in the Situation Assessment document dated November 22, 1996. The review was conducted at this time to bring into alignment the management concepts and actions that have been created and implemented at the Power Plant subsequent to the November report. This is a period of transition that is taking place between the assessment phase of the HPC project and the beginning of the refurbishment or repair phase. The Strategic Review focuses on two overall areas for management action which are listed on page 13 of the Situation Assessment. These areas are:

- Strengthen workforce participation as a vehicle for increasing predictability and productivity; and,
- Involve informal community networks to facilitate the dissemination of information designed to protect HPC from unnecessary community criticism or political disruption while accomplishing Tanguisson's return to production.

2. A Crisis

The timing of this Strategic Review could not have been better. A crisis with the asbestos contract had occurred. Jim Kerber was called in from Honolulu to assist with the negotiations. The work force was very concerned about the possibility that a delay in implementing the asbestos cleanup would delay the opening of the Power Plant. The workers were taking this as a serious matter and were relieved to hear on Friday, February 21, that the contract negotiations had been completed and work would proceed. It was also important to the morale of the workers that HPC sent Jim Kerber to address this issue immediately upon receiving word that the local management needed help. This was a statement to the workers and their community networks that HPC is available to them when they are needed. As one worker expressed it "there's something good happening up there". Both of these events, the contract crisis and Jim Kerber responding immediately, enabled the work force to express their concerns and to celebrate having this potential disruptive delay settled quickly.

3. Team Concept

The rank and file of the workers has accepted the "Team Concept". They like the ability to work in cross skill areas and to have members of the work force become team leaders regardless of their former rank in the supervisory system. The team concept is producing predictability and confidence in the work force and workers are taking ownership of the work that needs to be done. Concern was expressed over and over again that the workers wanted this team concept to continue into operations once the repairs are completed. In addition, they want everyone to be on a team, including the nine people on the three shifts in the control room.

What has been tapped by this team management concept is an underlying cultural value that exists in many parts of the Pacific and Asia. That value is expressed as "the group (family, team, network) is more important than the individual". This is counter intuitive to the GPA management structure that was in place previously, which was based on the individual (supervisor, hierarchy, chain of command) being more important than the group.

4. Concerns About The Group Concept

Although the concept of the group being more important than the individual is valuable, it also raises two concerns. The first concern is that the dedication ceremony in June should be designed to recognize the teams and not just the Plant Manager. James Perez is aware of the potential problem that could occur if he is unreasonably singled out as "the Manager" without the equal recognition of the workers who have produced the renovations at Tanguisson. The second concern is the existence of two GPA supervisors who still cling to the old concept of line of command and hierarchy. A strategy could be developed that encourages these two people to leave, without using undue power and authority to make it happen. There is precedence for this to happen based on the removal of seven people from the work force in January. Workers felt that this was done by management with dignity and respect and there have been no negative repercussions.

5. The Spirit of Tango

The "Spirit of Tango" vision statement produced by James Perez captures the essence of the romance and mythology of the culture. In discussing this vision statement with him, we decided to introduce the language of the statement into everyday talk. In this manner, through the word-of-mouth networks, workers will become familiar with the concepts in their day-to-day work environment. In word-of-mouth communication very little should be put into memo form until all information has been processed informally. Decisions can then be put into writing. Then the people who receive written documents will have ownership because of prior knowledge of the information. James Perez is skilled in this process.

6. Management Evolution

The management concept continues to evolve. The CPR team may evolve into a Procedural Team for the repair phase. Three functions are now clear: James is responsible for the cultural process and overall development of the Tanguisson management system with the help of HPC. Vern has taken over the need for a technical person to handle contracts, etc. It should be clear that this is his strength and that he should be cautious not to cross over into face-to-face management activities. Amy, starting out as office manager, can rapidly grow into the administrative arm of the management team. A weak spot remains in that there is no Assistant Plant Manager to handle the everyday coordination and responsibility that is necessary for HPC's operation.

A solution that would fit the emerging culture at Tanguisson is for HPC to provide an Assistant Plant Manager position to work directly with the Plant Manager. This announces that the top two management positions are filled with professionals that will manage within a team concept. This gives the Plant Manager an HPC employee to rely on, which is critical for continuity of HPC management. Currently, if the Plant Manager has to be away, the management falls into the hands of GPA personnel. This Assistant Plant Manager position, if created, should be filled with a team member from the ranks. This person would function as a facilitator (one who helps people discover the answers) not a supervisor (one who gives out commands and orders).

7. Working for HPC

There is a slight problem on the horizon of which James Perez is aware. In many of my discussions with the workers, they asked why it was not possible for them to also work for HPC. When asked why they would want to do that, they responded that this is the first time that they believe that they are useful, involved and part an important project. They would like for that to continue. This is a compliment to HPC; however, the workers must understand that this is a public/private partnership and that the conditions are set as negotiated at the time of the partnership agreement. Even if HPC wanted to work differently, they cannot.

8. Informal Community Networks

There is awareness about the transition at the Tanguisson Plant in the informal community networks. There is information about HPC and their efforts to involve the workers. Workers at the Tanguisson Plant appear to be the primary source for the information in the networks. They frequent family barbecues, rooster fights, soft ball games, and other activities where they are putting out a positive word about Tanguisson. Restaurants are also carrying explicit information about the activity at Tanguisson. From a management perspective, it is important to know that community understanding and acceptance are critical to HPC's success.



Highlights Report

TRANSITION: FROM RECOVERY TO PRODUCTION

TANGUISSON POWER PLANT BARRIGADA, GUAM

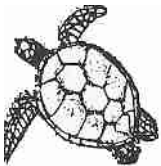
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July 18, 1997

HIGHLIGHTS REPORT

Transition: From Recovery to Production

Conducted by: James Kent

1.0 Findings

The Spirit of Tango (see Strategic Review, page 3, February 1997) was in evidence throughout the period of July 6 - 11, 1997. There was enthusiasm among the employees, contractors and management about having test run Unit Number One. The reason for the enthusiasm, according to several sources, was the high degree of trust and confidence that has been placed in the workers and contractors during the recovery period. The cooperative environment was highlighted when Jim Kerber and John Tanner pointed out that the crews from the various contractors are cooperating and supporting each other in a manner not seen in other job situations. The usual "conflict and cantankerousness" among contractors has been absent resulting in a high degree of professionalism and good-natured humor. This in turn has created a situation where the product and job is the primary mission, thereby allowing employees of Tango to be in a learning rather than reactive mode during this period. One contractor made and distributed T-shirts to teams and other contractors with a Tango team logo on them. They are becoming collectors' items with some workers expressing that they did not want to wear the shirt everyday because it would wear out.

In addition, overtime employees arriving from other generating plants run by GP A had questions about how they could come and work at Tango. When asked what was unique about the Tango site the response was: "everyone supports you" and "everyone cares more for you and what you are doing".

The team effort, as well as the appointment of Mike Alvarez to assist the Plant Manager, has produced this ambiance in the work place accounting for the expression of cooperation in the above two stories. Mike is a natural problem solver and good listener who came from the Tango work force. He compliments James Perez who is a systems thinker, strategist and a culturally aware manager.

There are two management processes at work that contribute to this overall corporate spirit. One is a process called *In time problem solving*. The other is the creation of a *gathering place* by placing a tarp and picnic tables at the side of the plant by the front entrance.

1.1 In Time Problem Solving

In time problem solving is the process whereby a worker asks another worker for help with a problem and is immediately involved in discovering his own solution.

The person who is asked for help physically takes the person asking for help through an experience to work out the answer to his question. This was true whether it was a machine part that could not be found, a person that needed to be located, or a management question needing attention. In most instances, people seemed to know where everyone was and where to find the solution to the problems. If they did not, they went off together to find the solution. This process creates participation and momentum among the employees and contributes to the feeling that "everyone supports you" (see JKA, Situation Assessment, Figure 1, November 22, 1996).

This experience was distinctly different from my first and second visit. Before when someone asked another for help they were verbally not physically directed to find the answer. Much of this effort was wasted because the person giving the direction did not seem to care if the person with the problem solved it or not. There was no learning, participation or momentum created from the interaction, which led to many problems going unattended and worker disinterest.

1.2 A Gathering Place

In time problem solving is supported by the creation of a *gathering place* at the Plant which changes how the workers interact. The new *gathering place*, picnic tables under the tarp serves as a common area where issues can be discussed, problems worked out and any employee can be accessed within a minute or two. It is clear that this outside area has replaced the "hidden areas" (the many little rooms throughout the plant where employees hid out) that I found in the initial Situation Assessment (see paragraph 4.2: Encourage Participation as the Vehicle to Increased Predictability, page 9),

Several elements make this new gathering place successful

- There is an intercom where people can be accessed as they talk over their Issues.
- It is located near the storage of the soft drinks in the parts warehouse (another gathering place). People on their way to pick up a soft drink naturally connect under the tarp.
- Smokers have a place to go and talk rather than just standing around having a smoke.
- James Perez and Mike Alvarez make themselves available at the gathering place on a routine basis so employees and contractors have access to them without having to always meet in their formal offices on the Plant floor.

The ability to find people out in the open, rather than having to search the hiding places, has created an atmosphere with a major impact on worker moral and the efficiency of team development and performance.

If this gathering place is relocated similar conditions should be replicated i.e. easily accessible intercom, soft drinks near by, picnic tables, tarp, etc. It is often hard to create a new location for a gathering place unless similar conditions are reproduced. Otherwise no one will use it. As a management strategy, an outside gathering place should be supported for worker integration and the hid outs discouraged as contributing to worker fragmentation.

2.0 Fatigue and Weariness

Underneath the excitement and activity of the last several months, it was discovered that this was a weary and fatiguing work force. While the anticipation of starting the generation of electricity gave a boost to the employee energy level from time to time, it was clear that the "edge was off" for workers to maintain an excitement and anticipation about the start up. It was also clear that if the Dedication was to have its intended effect, celebrating an "ending of the old and a beginning of the new", employees could not work right up to the morning of the Dedication. The fatigue would be carried over through the Dedication into the next week. The c'4rfYover would minimize the effectiveness of the ceremony to inspire new commitment, motivation and stories as Tango moves into production. Fatigue has been in this work force before (see Situation Assessment, 3.4 Damaging Effects on the Workforce, page 7). It is important not to allow conditions to exist that bring back old memories and behaviors that are connected to another time at the Plant and a totally different reason for fatigue.

2.1 Preparation and Celebration

It was decided to address this issue by shifting the energy away from weariness by developing ownership in the Dedication. The two days before the Dedication were targeted to be used to create a different routine. In Chamorro culture, before a celebration, the home or celebration area is thoroughly cleaned and made ready for the guests. At my suggestion, Jim Kerber and James Perez, shifted from a strict work orientation to workers preparing their place for guests. It was decided to take Thursday and Friday before the Dedication to focus on cleaning the celebration area and preparing it for the Saturday guests. The two days of cleaning would be capped with a Bar B Que on Friday afternoon for the workers, families and contractors putting them il1to a celebration mood (see Situation Assessment, Appendix, Ideas for Further Consideration, page 14). This preparation period has the effect of making the Dedication part of a three day celebration creating a feeling of *transition*. Three days of preparation and celebration was emphasized because it also has symbolic meaning within the culture.

2.2 Clean Up

During this same time period April Samulewicz was coordinating a formal clean up of the Plant and Tanguisson Park and preparing for the Dedication. By using the momentum of the formal clean up, the employees can participate by cleaning and painting their areas, thereby creating ownership in the process i.e. the clean up was not done only by hired contractors but by the Tango team as well. Everyone can and will take pride in the final result.

There were two other improvements that have symbolic meaning:

- Quality signage on the road into the Plant gives recognition to the public and workers that Tango exists and HPG is proud of it.
- A beautiful park on the way into Tango will create a good feeling about coming to work.

These two events, the *house cleaning* and the *Dedication* have the potential to launch new energy into the work force to coincide with the generation of new energy from a reconstructed plant. The stage is set for the teams to continue their development and cross training for the production phase.

3.0 The Dedication: Statements and Remarks

The statements to be made by HEI/HECO presenters were edited to reflect a continuity of purpose and direct relationship to the recognition of the culture within which the plant operates. Items to comment on were selected for each speaker that connected to the sentiments, perceptions and pride that the people in attendance feel for their island.

4.0 Community Gathering Places

A new community gathering place was discovered. After its discovery, James Perez and I visited the Cafe Latte located at the Chamorro Center. The owner is a woman who is well networked throughout the Island in government circles. She was delighted to meet James. Her name also happened to be Perez. It was not long before the two of them had established that they were related. Her son, Robert Perez, runs the Espresso machine at the University of Guam. His machine is located in front of the Micronesian Research Center. This site has been used previously to network information about Tango into the academic and student populations.

Also monitored were the previously defined gathering places (see Situation Assessment 3.1 Guam Networks, page 6) to input new information about Tango and to monitor what information was in the community networks. The information remains up-to-date and positive about HPG and their efforts at Tango in all of the

gathering places. For instance at Wings, a Chinese restaurant near the Guam Airport Hotel, the owner expressed satisfaction "that the Tango Plant was about to produce electricity". I confirmed that was true, how good the work force is, and that HPG is very pleased with their involvement in the project.

The information in the networks is of such quality that the employees of Tango must be continuing to tell their stories, keeping their friends, families and peers up to date. Clearly the information remains positive and detailed enough to be coming from knowledgeable sources.

5.0 Tango and HEI-Hawaii Clarification and Integration

As Tango moves closer to production, HEI-Hawaii must address the management concerns that are arising. Some of the items gleaned from discussions include: What will be the relationship between HEI-Honolulu personnel and the Tango Plant? Will the relationship be consultant, supervisory or management? Given the Team concept, what will happen to the Superintendent positions when these positions turn over? What do you want the Plant Engineer to do? Does this position have a clear description? Who is Amy responsible to and for what functions? Who evaluates her? Can a petty cash fund be created, so local managers do not have to front end large expenses from their own funds? Is an accountant needed at Tango? Is Mike Alvarez going to be appointed the Assistant Manager? Who should James Perez be responsible to and for what management tasks?

5.1 Changing Dynamic

When these issues were probed I found confusing lines of communication and authority developing between Tango and HEI-Honolulu. This is to be expected as the project matures and moves out of the crisis stage of repair into sustainable production. While our attention has been focused on developing systems at Tango, primarily team building, experiential learning, and non-dependency relationships, not addressed to date is how the HEI-Honolulu office evolves in this creative undertaking. The Honolulu team, especially Jim Kerber and April Samulewicz, have worked hard at developing new personnel and systems at Tango. Jim Kerber has been especially diligent in focusing on schedule deadlines and using his experience to show James Perez and Mike Alvarez how to work with and make decisions about contractors and other management relationships. As the people on site grow and develop into their jobs there is a changing dynamic in relationships and responsibilities that HEI-Honolulu should address.

During this transition, it is opportune to review how a field and headquarters Structure could be developed given the on-the-ground, culturally based team concept at Tango. In addition, since REI is expecting to expand into other Pacific markets, it is essential to have a clear concept of how the relations, management

and/or support of a field operation should evolve and change. Using the Tango experience to construct such a concept is efficient and appropriate.