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# Northwest Territories Power Corporation

## Strategic Plan 2012 - 2014



October 26, 2011

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# **NTPC Strategic Plan 2012 - 2014**

## **Introduction**

The electricity industry in the NWT continues to experience consistent change. Continuous financial, operational, environmental, and regulatory pressures; all the while dealing with aging infrastructure are challenging the management of utilities throughout the country and beyond. In order to successfully manage a utility in this environment, a carefully crafted strategy is required.

NTPC's Board of Directors approved a formal strategy in September of 2010. NTPC's Board of Directors has since indicated that a significant change is required in NTPC's focus and mode of operation in order to meet the needs of its customers and its shareholder the GNWT while maintaining the vision, mission and values previously laid out.

This document and the strategy presented herein represent a significant change from past strategies which included business development, partnerships and new technology evaluations. The presented strategy for NTPC is one of focusing on the core business and three fundamental concepts that we will refer to as our pillars and inherent to the business NTPC operates as well as its customer's needs. These pillars are:

1. Reliability
2. Cost Effectiveness
3. Meet Commitments

By focusing on these three fundamental needs of our customers, not only will NTPC bring value to its customers but also its shareholder.

This report includes the following:

- NTPC's Vision, Mission and Value Statements
- NT Hydro/NTPC/NT Energy Board of Directors' Goals
- Review of the State of the Industry and NTPC's Operating Environment
- Long-term Objectives for NTPC and NT Energy
- A Strategy for Achieving the Long-Term NTPC Objectives
- Supporting Business Drivers
- Supporting Initiatives for the Period 2012-2014

## **NTPC's Vision, Mission and Values Statements**

NTPC's long term vision, mission and value statements are as appropriate today as when they were first drafted and introduced. These will continue to guide NTPC in its future direction of meeting if not exceeding the expectations of its customers and shareholder.

### **Vision**

To be regarded as an exceptional utility, up to the challenge of delivering safe, reliable and fair-priced power through a territory-wide system that is efficient and sustainable.

### **Mission**

Meet the electricity needs of the Northwest Territories, today and tomorrow, by generating and distributing reliable power across Canada's most challenging operating environment.

### **Values**

In achieving the Corporation's Vision and Mission, we will endeavour to:

- communicate in an open and timely manner
- be cost effective in the utilization of all resources, always remembering that we are spending the customer's money;
- be responsive to our customers and their changing needs;
- act ethically and honestly treating employees, customers and others with fairness, dignity and respect;
- commit to the safety of our employees and the public;
- respect and protect the environment in all our activities to ensure a sustainable environment for the NWT; and
- strive to increase shareholder value in the long-term.

## **NT Hydro/NTPC/NT Energy Board of Director's Goals**

- The Corporation will put public and worker safety first.
- Our customers will have the tools and knowledge they need to understand energy consumption, drivers of consumption and how to conserve energy.
- The Corporation will provide energy on a timely and competitive basis to serve new energy demand.
- Customers will benefit from our continued commitment to exploring and implementing operational efficiencies.
- The Corporation will be a recognized leader in partnering on energy projects with aboriginal organizations and communities.
- Stakeholders will notice an increase in communication by the Corporation and affirm the messaging is current and relevant.
- The Corporation will make a major contribution to development of new energy sources in the NWT.
- Employees will see us as a great place to work – innovative, proactive and driven to meet the expectations of our shareholder, customers and communities.
- The Corporation will be proactive in investigating renewable energy technologies that are cost-effective and technically feasible.
- Northwest Territories residents will acknowledge the Corporation as environmentally responsible.
- The Corporation will be capable of managing and delivering large scale energy generation and transmission projects.
- Communities will see us as preferred partners, contributing to the future energy plan for the Northwest Territories and partners will join with us to be major contributors to the development and operation of new energy resources in ways that meet the North's unique environmental needs.
- The Corporation will pursue opportunities and development that is consistent with an integrated power grid in the NWT.
- Our customers will benefit from our socio-economic development activities
- The Corporation will be an exporter of energy where the benefits of such export primarily accrue to the NWT.
- Our shareholder will benefit from the economic returns of our profitable and financially strong company.

## **Review of the State of the Industry and NTPC's Operating Environment**

The environment in which the Corporation operates has a significant impact on how business strategy is developed and pursued. Like any company, issues such as the general performance of the economy, competitive pressure in the market, and the political environment must be considered when evaluating potential strategic opportunities and threats. The following is a brief overview of the key external factors facing the utility.

### **NWT Market Conditions**

The NWT is largely a resource-based, trading economy with exports representing 65% of the total GDP. Over 90% of exports are 2 goods: diamonds and oil. Between 1999 and 2005, the NWT benefited from rapid economic growth and investment primarily in the mining and oil and gas industries. In 2007 the resource sector accounted for 75% of all investment. Over the last few years, economic activity has been steady or declining with limited new growth prospects.

The NWT economy declined from \$3.4 billion in 2005 to \$3.3 billion in 2010; a drop of \$137 million or 4%. NWT population growth has been minimal, increasing only 1% since 2006 compared to 7% growth in the Yukon, 9% in Alberta and 8% in Nunavut. Over this same period CPI is up 11.9 from 107.4 in 2006 to 119.3 in 2011.

There has been a net loss of 84 businesses since 2005 – a decline of 3% (source - Industry Canada - tax records). While this figure is linked to reduced resource exploration and development, it can also be a sign of a maturing economy as some smaller businesses are consolidated. However, the over-riding factor is that NWT investment declined 41% over the past five years, compared to 61% growth in the Yukon.

Public administration (government) is the largest employer in the NWT, accounting for 1 in 5 jobs. Overall, the service industry, which includes government, retail trade and related businesses accounts for 82% of total NWT employment.

There is a substantial disparity in business and job opportunities across regions in the NWT. There are 33 recognized communities in the NWT. Most communities are small, with 23 (70%) having a population under 700 residents; 10 communities have fewer than 200 residents. Yellowknife, with a population of 19,700 is the largest community and the only city in the NWT. Any population growth that has occurred over the last several years has been concentrated in Yellowknife and other regional centres.

Public sector spending has been on the rise since 2009 however this stimulus spending does not offset a 62% decline in mineral investment since 2007. While prices for commodities like oil and gold are at record highs, exploration and investment in the NWT is low.

Over the last several years the diamond industry has propped up the economy of the Northwest Territories. When one considers declining oil and gas production, maturing

diamond mines, and no other mines firmly in the development phase other than Gahcho Kue (diamonds) many are not optimistic on the mid to long term outlook for the economy. New resource development in the coming years will be critical to sustaining the NWT economy over the long term.

On the bright side, Federal Cabinet has issued the Order-in-Council approving the Mackenzie Gas Project. This project is for a 1,196 kilometre natural gas pipeline system along the Mackenzie Valley to connect northern onshore gas fields with North American markets. Conclusion of the regulatory process is a significant milestone for the project which could provide substantial economic benefits to the NWT and Canada.

In addition to Gahcho Kue there are 6 new potential mining properties. Together these seven projects represent over \$2 billion in new capital investment. This only represents the direct impacts of the projects. Most are located in the North Slave Region, with the exception of Prairie Creek in the Dehcho Region and Tamerlane in the South Slave Region. These new developments are in various stages of environmental permitting. If they proceed, the direct and spin-off effects from these mines will inject new growth into the territory and help to offset some of the declines that will be experienced when existing diamond mines exit the industry.

#### Impacts of Market

Over the past 5 years NTPC customer growth has been very slight, increasing by 325 customers to a total of 8,760, which on average is less than a 1% annual increase in the number of customers. NTPC's two industrial customers are no longer operating gold mines and now consume minimal power in care and maintenance mode. Sales growth is concentrated in major centres. Wholesale unit sales have grown just over 1% in the past 5 years. Revenue from the utility's largest customers has been weak for a number of years with minimal prospect of improvement in the near term.

Although an accurate prediction of future economic performance is difficult, it would appear that without any new large customer developments a 'best case' scenario over the next few years would be a relatively flat economy while 'worst case' would involve a steady decline in both customer numbers and customer load.

#### External Cost Pressures

The Corporation's largest operating expense is wages. The Corporation is competing with utilities across North America for trades' and technical positions and the utility industry as a whole is struggling to meet human resource needs in the face of an aging workforce demographic. Recruitment for specialized positions is taking longer which places added cost pressure on the system as service needs must be met through increased overtime or through contract services.

The second largest expense is fuel. Over the past several years fuel costs have continued to rise with an increase of 35% in the past 6 years. Resupply options for many communities in the north are limited to a single annual delivery which eliminates the option to purchase at lower cost if prices fall during the year. Once fuel reaches

NTPC's tanks in many northern communities, the cost is further impacted by higher transportation costs.

Inflation has averaged 2.5-3.5% over the last several years. Under normal circumstances a utility would expect sales growth to significantly offset inflationary cost pressures. With flat sales NTPC is working to manage its controllable costs such as supplies and travel to within inflation however without a rate increase net income will continue to decline. Adjusting rates to reflect current costs is important to the long term financial viability of the Corporation; however without future sales growth the need to operate at the lowest possible cost will continue to be a priority and a challenge.

Orderly replacement of aging infrastructure is important in order to maintain or improve reliability of service. NTPC has invested over \$120 million in infrastructure over the past 6 years to replace existing assets.

Typically the Corporation has experienced capital project costs increasing ahead of inflation which has continued to impact rates through higher costs. The Corporation strives to achieve best value for its customers through a competitive tendering process wherever possible. The magnitude and specialized nature of some of the larger NTPC projects has not always provided optimum conditions for competitive pricing due to capacity limitations within the NWT. Distance from suppliers and higher overhead cost associated with construction in remote communities also add to overall project cost. The Corporation will however continue to work with and to offer opportunities for northern businesses to compete for our work. For example, this fiscal year we have had success in bundling projects to achieve better pricing.

#### Workforce/Industry Demographics

The issue of ensuring long term sustainability of critical utility skills has rapidly increased in importance over the last few years. The challenge has been more an issue of finding employees with specific utility skill sets rather than higher levels of education. As in some other industries, utilities are experiencing increased competition for scarce essential skills. Competition for utility trades, engineering, regulatory and experienced management is rapidly increasing. This is compounded by the demand from large local companies seeking generic skills (management, engineering, finance, I.T., etc.).

While the relative isolation of the NWT makes the recruitment of skills to the territory difficult, the utility experiences on-going recruitment of its existing management and technical staff, and has experienced increasing turnover.

It is becoming generally accepted that the concept of company loyalty has diminished as a 'new generation' of workers have taken their place in the workplace. These workers place increased priority on ensuring their own interests are met and in a competitive environment are more likely to switch employers in order to better meet their needs.

In the past, unsuccessful efforts to acquire specialized skills reinforced the importance of offering competitive compensation levels; the utility underscores the need to remain vigilant in ensuring competitive compensation and benefits.

Workplace demographic issues in terms of forecasted retirements and the need for long term planning for staff replacement also continue to be a critical issue. Of 176 employees 101 are age 45 and older, 65 are age 50 and older and 16 are age 60 and over.

The issues of skills retention and succession planning are now generally considered to be among the most critical facing our industry. Consensus points to a long term skills shortage which will require companies to dramatically revise the strategies used to attract and retain critical talent.

To a large degree, critical utility skills are recession proof. The industry itself is not cyclical in nature and it is expected that the current economic crisis will not significantly impact the supply or market value of these skills. In contrast, non-critical skills are easier to obtain in a weak economy (although attracting non-critical skills has never been an issue).

The utility's long term strategies related to skills attraction, development and retention will increase in importance. A largely 'Home grown' approach will be required for trades, technical skills and some senior staff positions. Long-term succession planning, training and retention strategies must be maintained. The Corporation's employees are made up of 28% indigenous aboriginal and another 27% are made up of Northerners who have lived more than ½ of their life in the North.

#### Aging Infrastructure

Many of the Corporation's power plants date back to the 1970's and 1980's and even earlier for some of the hydro plants on the Snare/Yellowknife system. Since the Corporation was formed in 1989 there have been six new diesel plants built out of a total of 24. It is expected that over the next 3 years two will be rebuilt. Typically power plants can be expected to have a life of 30 – 40 years. Rather than building costly new plants, where practical the Corporation has utilized its existing assets and invested in new technology, installed where possible the latest fuel efficient engines and upgraded existing plants. This has, in our opinion, provided good value to the customers by controlling costs whilst at the same time ensuring our plant and equipment are in good condition and able to provide reliable power to its customers. The inevitable aging of the basic infrastructure and plants will continue to require the Corporation to invest in capital projects to maintain its equipment and to provide a reliable power supply to its customers.

In addition to its diesel plants, the Corporation's Hydro plants also continue to age and significant capital investments will inevitably be required to maintain these assets. This can be seen for example in the current capital project to construct a new dam at the aging Bluefish plant, estimated to cost \$37.4 million. This project alone can be expected to add about 2.4 c/kWh to the cost of electricity in the Snare/Yellowknife

system. Over the next 20 years or so, multi-million dollar upgrades/repairs can be expected on other hydro plants, including the Bluefish plant (constructed in 1937), Snare Falls (constructed in 1961) and Taltson (constructed in 1967). Being aware of these requirements so far in advance means the Corporation will be able plan for these works such that they are completed in a cost effective and timely manner.

In order to understand the current condition of the Corporation's assets and to prioritise and plan accordingly its future investments, a risk/condition assessment will be undertaken of all the major assets. The results of these assessments will drive the capital plan going forward. It can be expected that the Corporation will continue to target capital investments where they are most needed.

### Environmental Sustainability

The Corporation believes in protecting the environment. This is why we keep environmental sustainability at the forefront of all activities - from daily plant maintenance, to line work and from capital projects, to office work. All activities are conducted through the framework of an ISO 14001 compliant Environmental Management System.

Some of our high-level sustainability initiatives include maximizing the use of renewably generated hydropower, evaluating other forms of renewable generation (e.g., solar, hydrokinetic, photovoltaic, wind), reducing the consumption of diesel and natural gas wherever possible, measuring and reporting greenhouse gas emissions, and remediating impacted soils related to historical operations at our plant sites. And of course a large part of our environmental sustainability approach is our conservation culture.

### Conservation Culture

There is an expectation by the Corporation's customers as well as its shareholder that it will promote a conservation culture in the North. A significant challenge to Northerners is the cost of living, a major portion of which is the cost of power.

As Northerners we are all in it together, which is why the Corporation champions a conservation culture with its customers, taking a lead by example role. Besides maximizing the use of renewable hydropower, but there are other, smaller steps that we take to reduce power consumption that go right down to each individual employee and customer.

NTPC participates in two significant waste reduction initiatives: partnering with community members to burn waste oil for heat recovery, and recycling waste glycol. These two initiatives save on shipping and disposal costs (and purchase costs for glycol) for these otherwise waste products. NTPC supplies residual heat to buildings in three communities, again taking a waste product (heat) and putting it to good use. Some of the in-house initiatives we have undertaken to reduce our environmental footprint include the installation of energy-saving devices:

- low flow toilets
- water saver taps
- On-demand hot water heaters
- Electric boilers at our hydro sites
- Block heater timers
- Espar heaters (a low energy way to warm up vehicles in the winter)
- LED lighting
- Energy efficient and timed engine bay lighting
- Energy efficient streetlights

NTPC also works with customers to help them reduce consumption, and has provided energy audits and informative energy-saving tips in bill stuffers in an effort to decrease customer's power demands. Energy conservation is everyone's responsibility, and we take that responsibility seriously.

### Generation/Transmission Outlook

Although diesel generation will continue to be the primary source of reliable energy production for many of our remote communities, work is underway to improve the operational efficiencies and on-going management of these assets. As well, opportunities to harness local sources of energy supply are being examined across the Territory. There are a number of small and medium scale (500kW – 50 MW) opportunities to expand the hydro capacity and the transmission grid infrastructure in the NWT. Other local, non-renewable sources of supply, such as natural gas already contribute significantly to reduced energy costs and options to maintain it as part of the Territory's energy supply mix need to be considered. Local community energy supply projects would serve to reduce greenhouse gas emissions and diesel fuel consumption in communities and could potentially meet emerging industrial load in the territory. Other community scale renewable alternatives that provide continuous energy supply, such as geothermal and biomass show considerable promise, while intermittent renewables such as wind and solar power are becoming part of sustainable energy production in the North. Smaller scale, renewable generation projects provide immediate environmental benefits, but in most cases do not serve to stabilize or reduce power rates without a government subsidy. More immediate territory wide cost reductions though can only be realized by investing in larger scale, proven energy technologies.

There are a handful of larger scale hydro opportunities in the NWT (100 – 1000 MW) that would have a more immediate impact on the cost of living by creating the foundation for a larger NWT grid, reducing power rates and enhancing reliability across the North. These larger scale projects would also create wealth and long term returns for project owners but are only possible where there is considerable market demand – far beyond current NWT community loads and growth projections. Given the vast distances and widely dispersed population base of the NWT larger projects are only possible where a substantial power market materializes. This is possible either from the emergence of a major industrial project (like the Mackenzie Gas Project) or through grid connection with the rest of Canada.

Grid expansion within the NWT and inter-connection with the rest of Canada could be done as part of a phased approach to reducing costs for residents and communities as well as diversifying the NWT economy. Grid connection would expand the customer base, spread costs more broadly and reduce greenhouse gas emissions, while enhancing system reliability. It could also provide a catalyst for sustainable economic development by reducing risk for prospective developers and industry in the North. For example, access to renewable grid connected energy would eliminate the need for stand-alone diesel plants; reduce environmental impacts and the cost of doing business in the remote North.

With on-going support from the shareholder and other public agencies, the Corporation is well placed to work collaboratively with communities to explore small scale renewable energy opportunities and to work with aboriginal and private sector partners to explore larger scale, wealth creation projects that could result in legacy energy infrastructure that benefits residents, communities, the environment and the economy.

### Regulatory Outlook

As a fully integrated utility, NTPC's operations are subject to a variety of regulations. Meeting these regulatory requirements places demands on resources and adds to the cost of doing business. Examples of the types of regulations and how they impact the cost of providing electricity services are discussed below.

NTPC's enacting legislation as a Crown Corporation of the Government of the Northwest Territories (GNWT) guides its relationship and reporting requirements with its shareholder. Historically NTPC's annual filing requirements included Corporate and Capital Plans and Annual Reports. On a less frequent basis, NTPC applies to its shareholder for borrowing approvals.

Over the past few years, the GNWT has taken a much more active role in energy policy; looking at ways to reform the electricity industry in the NWT including rates, regulation and electricity subsidy programs. This activity has placed increased demand on NTPC to supply information and strategic advice and to participate in studies to support these initiatives. This level of activity is expected to persist into the future as energy issues and the cost of living are anticipated to remain priorities of the government for the next several years.

Environmental regulation continues to evolve in the NWT, along with the Boards put in place to provide oversight for the regulatory regime. NTPC has an Environmental Management System (EMS) that advocates best practice when it comes to safeguarding the fragile environment of the NWT. NTPC invests in training and in environmentally friendly alternative products as a way to mitigate the risk (and cost) of environmental incidents. Proper handling of hazardous materials and an orderly plan to clean up existing sites are key elements of NTPC's EMS.

More recently NTPC has been involved in environmental permitting processes for a new dam project. This process involved multiple regulatory bodies, a comprehensive

application, consultation and hearing processes and will ultimately result in on-going environmental monitoring actions, all of which add to the cost of doing business. It is expected that large projects undertaken by NTPC are likely to require a similar level of environmental review and oversight and in the future, project costs will reflect the cost of complying with environmental regulation.

Safety regulation is another area where the NWT is evolving. Safety is a top priority at NTPC. Safeguarding employees and the public from the hazards of NTPC activities, products, and services is critical to the long term viability of NTPC. Ensuring that tasks are performed safely in a challenging operating environment is a day-to-day reality for NTPC employees. When the Workers Safety & Compensation Commission (WSSC) looked at updating workplace safety regulations for the NWT, NTPC worked with other stakeholder groups to provide input into the process. While the new regulations are not complete, it is expected that they will be more rigorous than the regulation that is currently in place and will add to the cost of providing electricity service.

As an electric utility providing service in the NWT, NTPC also falls under the oversight of the NWT Public Utilities Board (PUB). The PUB has broad powers under legislation to set rates and to consider any other matters related to the operations of NTPC that it deems relevant. A general rate application (GRA) is the primary process that the PUB uses to review the operations of NTPC, including the revenue requirement and cost of service to set rates. Historically a GRA has cost upwards of \$2 million which in turn is reflected in the cost to provide electricity. More recently, the GNWT is looking at ways to streamline the regulatory process in order to lower the cost of a GRA. NTPC continues to participate in discussions with the GNWT and the PUB to support regulatory reform.

### **Long-term Objectives for NTPC and NT Energy**

NT Hydro will act as a holding company for both the primary regulated business of NTPC as well as NT Energy the primary unregulated business. Other regulated companies may exist as subsidiaries of NTPC and other non-regulated companies may exist as subsidiaries of NT Energy should that be warranted. Other regulated and non-regulated companies may also fall beneath NT Hydro as sister companies to NTPC and NT Energy as the situation may dictate. This corporate structure is still subject to a review and recommendation from a third party corporate structure specialist and the GNWT Department of Justice.

NT Hydro, NTPC and NT Energy continue to exist because they provide value to customers and thus the shareholder the GNWT. NTPC endeavours to provide its shareholder value indirectly by supplying cost effective and reliable power to its customers, the residents of the NWT. NTPC as well as NT Energy also provide direct value to their common shareholder by carrying out GNWT initiatives and programs.

NT Energy will provide value to the shareholder by executing government driven initiatives that require utility experience and knowledge while allowing NTPC to focus on the core business of providing exceptional service to its customers.

NT Energy is well placed to work collaboratively with communities to explore small scale renewable energy opportunities and to work with aboriginal and private sector partners to explore larger scale, wealth creation projects that could result in legacy energy infrastructure.

Much of NT Energy's work will be exploratory in the near term, seeking to quantify and define available resources, educate about opportunities and work in partnership with stakeholders to examine local and regional energy options at a community and regional scale. A five year plan is being developed for the shareholder that builds on the principles of the NWT Hydro Strategy, NWT Energy Plan, The NWT Water Stewardship Strategy and the Greenhouse Gas Strategy. This plan proposes to continue important exploratory work and to identify a host of potential energy options for the NWT as part of an energy road map for the future. The long term vision is to harness cost effective, local energy supply sources and where possible to integrate this energy supply into an expanded grid system in the NWT.

Customers largely evaluate NTPC's performance on these basic categories:

1. Reliability of Supply
2. Cost Effectiveness (the price of electricity)
3. Meeting Commitments Made

#### Reliability

While NTPC works within one of the most challenging environments in Canada, NTPC must endeavor to meet the needs and expectations of its customers with respect to reliability. Several initiatives are planned that directly support this objective and are outlined in the initiatives portion of this document.

An example of an initiative supporting reliability is the development of Key Performance Indices (KPIs) measuring reliability of service in the communities NTPC serves. These are industry standard measures that will allow comparison of NTPC's service to that of other utilities. Other examples include the development of a computerized maintenance management system as well as risk/condition based assessments of all NTPC assets. These initiatives will allow NTPC to better plan and manage maintenance activities as well as capital replacements. Both will improve reliability as well as cost effectiveness in the long run.

#### Cost Effectiveness (the price of electricity)

NTPC needs to be efficient and effective with its resources looking for cost effective solutions to its challenges. While uncontrollable expenses continue to increase, every effort must be made to demonstrate that controllable costs are held at or below inflation.

Two significant initiatives support this principle. Firstly a reorganization of the corporate structure was undertaken to not only look for areas to reduce cost but also examine what areas NTPC was not effectively managing the delivery of electricity to its

customers. This will improve reliability and ensure we can meet commitments made to customers; in some cases also reducing costs.

Additionally a companywide initiative of looking at specific areas of the organization has been undertaken to reduce costs while maintaining two Board directed principles:

- Not initiating any job cuts impacting existing staff
- Not hurting NTPC`s ability to function effectively in the long term

#### Meeting Commitments Made

It is imperative that NTPC and its employees meet commitments made to customers. This will largely be achieved by shifting the corporate culture to one of having a business focus as well as increasing respect for both customers as well as the shareholder such that every effort is made to fulfill commitments made to these two groups.

Steps have already been made to communicate to employees at all levels of the organization the importance of customer satisfaction such that the customer and shareholder perceive value in retaining NTPC in its present form. These messages will be reinforced over the coming months and years at all levels of the organization.

## **A Strategy for Achieving the Long-term NTPC Objectives**

Corporate strategies to be successful must be understood by all levels of an organization and this highlights the need for a simple straightforward strategy. It is generally accepted that simple strategies are far more likely to succeed. Employees need to comprehend and endorse as well as understand their contribution to the larger corporate strategic plan.

A corporate strategy is likely to fail should it not recognize that the foundation of every organization is its people. Furthermore, without employee excellence every aspect of a corporate strategy will fail to deliver full value to an organization.

Employee excellence is the foundation of NTPC's strategy. Outlined below is the message that has already been and will continue to be emphasized with NTPC's employees, indicating that they are imperative to NTPC's overall success.

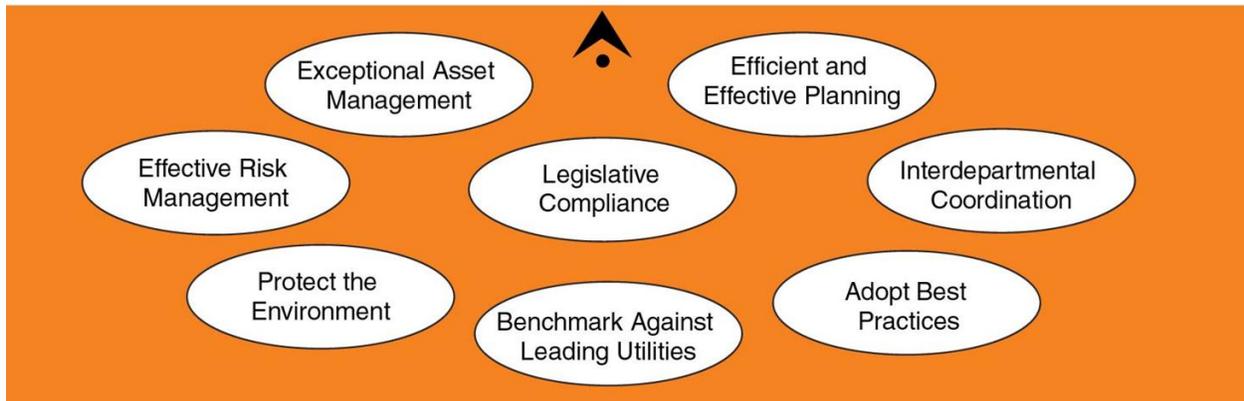
### **Achieving Employee Excellence**



Within this strategic element, specific key components of employee excellence are emphasized that are imperative while operating in NTPC's environment, to achieving success for employees. While a long list of components could have been identified as important to employee excellence, the most significant were selected in the interest of keeping the strategic message simple and straightforward.

Operational excellence can only be fully recognized once employee excellence is achieved. Fundamental to achieving success in a core business industry such as NTPC is achieving excellence in its operation throughout the organization. Further strategic elements of the corporate strategy cannot be achieved without significant success in operational excellence.

## Achieving Operational Excellence



The components listed above describe the most important aspects of achieving operational excellence in the environment that NTPC operates at this specific period in time. Again while this list could have been made much more exhaustive, it is imperative that this list resonate with each and every employee within the Corporation to ensure maximum likelihood of achieving alignment and focus amongst the entire workforce.

Customer service excellence can only be truly realized once employee and operational excellence are achieved. Fulfilling customer needs is paramount to NTPC's overall success as outlined in its primary objective. Therefore specific attention must be given to this strategic element if NTPC is to achieve its primary goal. Key components indicated below are requirements of achieving customer service excellence in the NTPC environment.

## Achieving Customer Service Excellence



Achieving customer service excellence will require continued efforts by management to ensure the culture of NTPC is one of being committed to our customers. This will require that NTPC continues to look for ways to serve its customers better and maintains a customer focus.

In business the ultimate success of any shareholder focused organization is measured by its financial performance. In NTPC's case as a crown corporation shareholder value and customer value must be balanced by senior management, the Board of Directors as well as the shareholder. None the less financial performance is the ultimate measure of NTPC's performance.

It stands to reason that financial performance to a large extent is a result of employee, operational, and customer service performance. Without these elements a business cannot ultimately achieve financial excellence or success. Thus, some emphasis must be placed on all strategy elements in order to implement a successful strategy. Outlined below are some of the most important key components for NTPC with regards to achieving financial excellence.

## Achieving Financial Excellence



While many components are important to achieving financial excellence, these six were selected respecting NTPC's present situation and operating environment.

The Board of Directors' goals will be met through achievement of excellence in the core strategic elements of Employee Excellence, Operational Excellence, Customer Service Excellence and Financial Excellence. Obtaining excellence in any element relies on excellence achieved in the preceding element.

NTPC's strategy elements are summarized below:

### **Employee Excellence**

Strengthen the Corporation by emphasizing employee development and safety while encouraging and supporting a workplace where employees feel valued and recognized for their efforts.

### **Operational Excellence**

Strengthen the Corporation by emphasizing effective and efficient use of our assets while using well thought-out planning and execution.

**Customer Service Excellence**

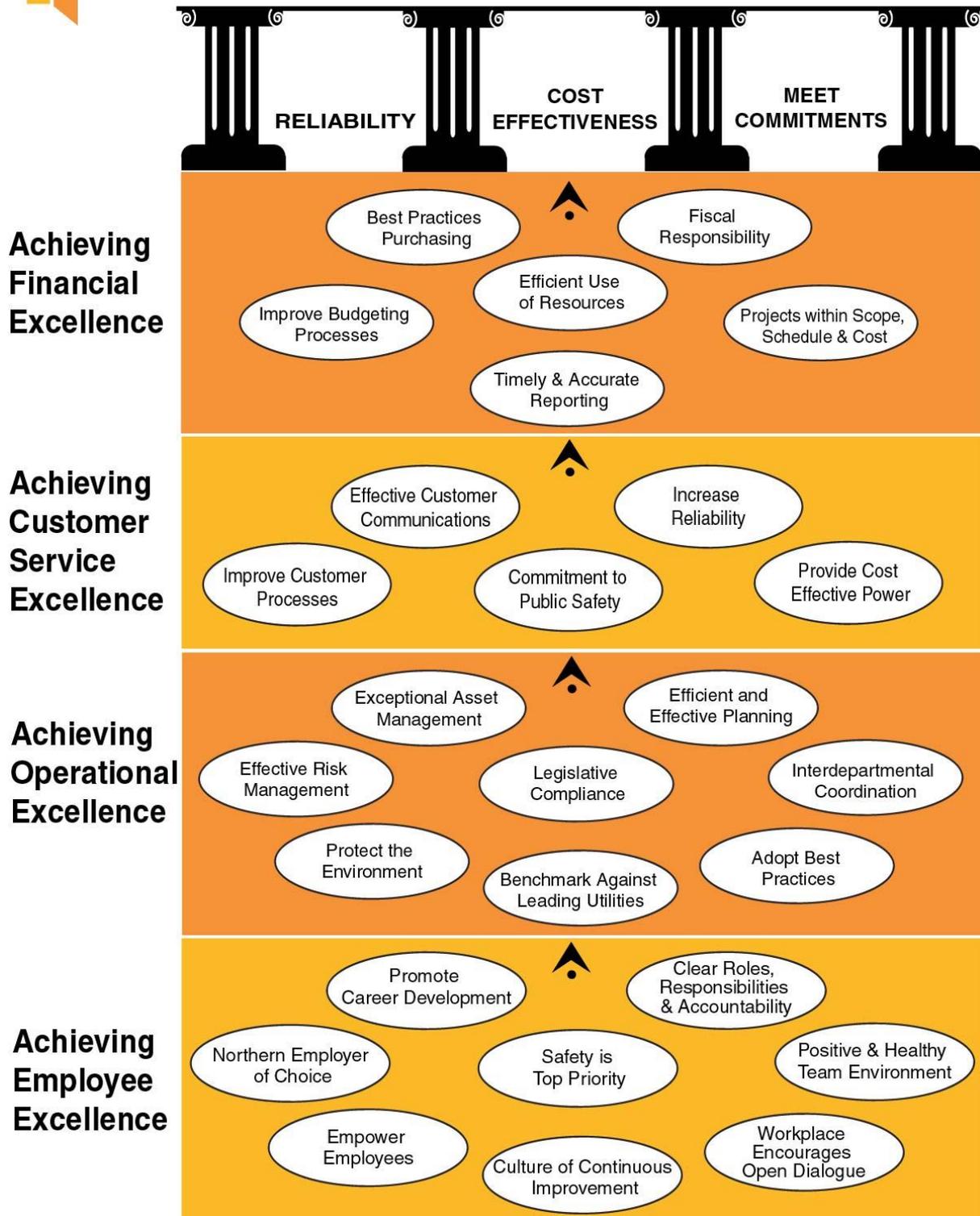
Providing excellent value and service to our customers, while delivering reliable service and ensuring public safety.

**Financial Excellence**

Efficient use of our resources and information so as to ensure the financial health of the Corporation is maintained.

All of the elements of NTPC's strategy elements as well as pillars have been combined on one simple to understand strategic plan overview. The strategy outlined thus far is presented below as it will be distributed throughout the organization.

# Optimum Shareholder Value



Achieving “Optimum Shareholder Value” through a balanced focus on the pillars of Reliability, Cost Effectiveness and Meet Commitments promised by the Corporation.

This simple tool can be displayed throughout the Corporation and utilized by employees in making their day to day decisions, ensuring those are in alignment with the corporate strategy.

This is also an effective means of letting all levels of the organization know what to focus on as well as a filter to be used in determining what activities are not contributing to the overall corporate objectives.

As already mentioned communicating strategy to all levels of an organization is as imperative to successful execution of the strategy as the strategy itself. The strategy as presented has been communicated to all employees, largely in face to face sessions and where that was not possible by providing copies of the presentations delivered to all employees.

While it is evident that achievement and realization of benefits requires pre-cursor strategy elements be developed; all strategy elements will be worked on concurrently to accelerate the ultimate benefits to the customers and shareholder.

## **Supporting Business Drivers**

While strategy is fundamental in setting corporate direction, it is not the only aspect that dictates direction. Therefore it is imperative that all business drivers be in alignment to ensure that the efforts of the Corporation are focused.

### **Targets and Objectives**

The targets and objectives of an organization are important in determining not only what an organization accomplishes but also the method in achieving them. The targets and objectives of the President & CEO must be in alignment with corporate strategy as must senior managements and the entire management team as they cascade downwards. Without this critical alignment the organization cannot focus on the initiatives that will ultimately support the organization's three overall objectives:

#### **1. Reliability**

*Increase reliability of our core operations using sound and cost effective practices that ensures long term sustainability.*

#### **2. Cost Effectiveness**

*Improve efficiency in order to control costs over the long term while not exposing the Corporation to adverse risk.*

#### **3. Meet Commitments**

*Match or exceed performance commitments in all aspects of our operations.*

Therefore the President & CEO's targets and objectives should fall into the four strategic elements while emphasising the key components of each:

### **Employee Excellence**

- Safety is Top Priority
- Clear Roles, Responsibilities and Accountability
- Promote Career Development
- Northern Employer of Choice
- Empower Employees
- Positive & Healthy Team Environment
- Culture of Continuous Improvement
- Workplace Encourages Open Dialogue

### **Operational Excellence**

- Legislative Compliance
- Efficient and Effective Planning
- Interdepartmental Coordination
- Adopt Best Practices
- Benchmark Against Leading Utilities
- Protect the Environment
- Effective Risk Management
- Exceptional Asset Management

### **Customer Service Excellence**

- Commitment to Public Safety
- Increase Reliability
- Provide Cost Effective Power
- Effective Customer Communications
- Improve Customer Processes

### **Financial Excellence**

- Efficient Use of Resources
- Fiscal Responsibility
- Projects within Scope, Schedule & Cost
- Timely & Accurate Reporting
- Improve Budgeting Processes
- Best Practices Purchasing

### Key Performance Indicators

Key performance Indicators (KPIs) are an important aspect of changing behaviours within an organization and can be a valuable tool in shifting culture from one of entitlement to that of achievement.

KPIs should also be structured within the four strategic elements such that they support the key components of each element and thus the corporate strategy.

When selecting KPIs it is also imperative that an organization “measure what matters”. Measuring specific aspects of NTPC performance will shift the behaviours of its employees with regards to that measure. Therefore KPIs need to be selected carefully ensuring that intended behavioural shifts are assisted while not causing unintended behavioural consequences.

KPIs should perform one of two important roles. Directing the actions of management and employees by modifying behaviours or provide key information used to drive the business in the intended direction.

Not only is it important to communicate KPIs to the Board of Directors but also to employees on a regular basis, informing them of present status as well as progress made. This will assist in keeping them engaged in moving the organization forward as well as achieving a business focused culture.

KPIs will be communicated quarterly to Board members as well as the organization’s employees via the Powerline Plus publication.

## **Supporting Initiatives for the Period 2012 - 2014**

Initiatives were developed for each area of the Corporation respecting the resources available in that area. Each initiative below indicates which Division of NTPC will have the lead role and responsibilities to ensure a timely and effective completion.

Additionally for each Division the four basic strategy elements were considered to ensure that each Division was contributing to the overall balanced approach of NTPC's Strategy.

## **Employee Excellence Initiatives**

- ***Implement and Communicate Strategic Plan (Corporate)***
  - Develop and communicate a Board approved strategic 3 year plan for NTPC. The plan will be focused on the core business and achieving excellence throughout all aspects of the core business.
  - A well developed and communicated strategic plan will help to align and focus employees throughout the Corporation. This will ensure NTPC excels at its core business and deliver value not only within regards to employee excellence but in all strategic elements.
  - Target completion November 2011.
  
- ***Develop and Implement KPIs (Corporate)***
  - Develop and implement Key Performance Indicators (KPIs). The KPIs shall be spread across all four strategic elements and guide employees as well as management in all aspects of the business i.e. Operations, Finance, Engineering, IT etc. While management may monitor specific KPIs monthly; the complete set of KPIs will be communicated to the Board of Directors and Employees on a quarterly basis.
  - A well-developed set of KPIs will not only modify behaviours within an organization, potentially changing the culture of an organization, but also help to align and focus employees as well as management throughout the Corporation. The KPIs developed will attempt to shift the culture towards being business focused and also one of achievement.
    - Target completion January 2012.
  
- ***Root-Cause Analysis Training (Corporate)***
  - Root-cause analysis training will be delivered across operations, engineering, safety and environmental portions of the Corporation. This will be done through self-study as well as in group exercise sessions.
  - Many recent investigations have identified only contributing

factors; not going far enough to get at the heart of the matter. Root-cause analysis is imperative in order to get at the core of incidents and accidents. If the root cause is not identified, all initiatives carried out as a result will only correct superficial indicators and not address the core issue.

- Target completion February 2012.
- ***Improve Safety Culture (Safety)***
  - The success of any safety program depends on buy-in and participation from management and employees alike – a team approach. NTPC already has a strong safety program and now needs to improve the safety culture.
  - Safety staff will ensure existing components of the safety program are complete, simple, accessible, user-friendly, and well-communicated to staff.
    - Target completion - on-going.
  - Employees will receive necessary safety training.
    - Target completion November 2011 Mandatory Training Block
  - The Supervisor Safety Training program will help management understand and fulfill their role in the safety of the Corporation.
    - Target completion December 2012.
  - Safety staff and managerial staff will work together to present the concept of safety as a life value, not as a set of rules to be followed.
    - Target completion - on-going.
- ***Review Remote Plant Operations and Staffing Utilization (Hydro & Thermal Operations)***
  - In 2004/05 Remote plant operations staff working hours were reduced with the loss of the NorthwesTel service contract and the removal of many primary customer service duties.
  - Recent assessments of both the Customer service functions and plant operations showed that they can be improved by either increased part time hours or by returning them to full time status.
  - Contract Operators have also replaced staff in several diesel standby locations but renewal of contracts is difficult and customer service consistency is not maintained.
  - A complete evaluation will be completed and if advantages outweigh additional costs, staff may return to full time service and contractors may be replaced by part time staff.
    - Target draft report submitted to senior management, December 2011.
    - Implementation if acceptance is recommended, April 1, 2012.
- ***Create Development Plans to Improve Performance & Increase***

***Employee Engagement in Department (Human Resources)***

- Identify skills gaps. Draft development plans to address skill gaps and improve skill levels.
  - Target completion January 2012.

- ***Technical Skill Training for Trades (Hydro & Thermal Operations)***

- Based on current manpower evaluations, develop and implement structured trades training for staff to address changes in technology and skill gaps identified as a group. This initiative will allow staff to be more effective in maintaining industry specific equipment not normally addressed in previous training and employment.
  - Target completion January 2012 (completed October 2011).
  - Target continued annual completion thereafter.

- ***Recruitment and Retention Strategies (Human Resources)***

- Review and update recruitment methods in order to attract and hire top talent.
  - Target completion – on-going, initial recommendations by March 2012.
- Implement flexible hiring arrangements for positions that are hard to fill.
- Utilize employee development and succession planning as a tool for employee retention.
- Inform employees of support for education leave.
  - Target completion February 2012.
- Develop and implement a plan to integrate NWT high school and post-secondary students into the NTPC workforce and encourage them to pursue careers that have potential to result in future job opportunities at NTPC.
  - Target completion March 2012.
- Continue to enhance innovations in employment such as job sharing, working from home, and sabbaticals to give our employees options.
  - Target completion – on-going.

- ***Develop 5 Year Plan and Responsibility Alignment (Information Technology)***

- Develop and communicate a detailed five year plan that will help guide the direction of employees within the IT department and align department objectives to corporate strategy. Implementation of the plan will bring increased operational efficiency and productivity to the IT department and NTPC.
  - Target completion March 2012.
- Identification and correction of any gaps or inefficiencies that

exist between IT functional requirements and IT employee responsibilities. This will help ensure system reliability, cost effectiveness and customer support demands are met by the IT department.

- Target completion September 2012.

- ***Identify Skills Gaps and Create Development Plans to Improve Performance & Increase Employee Engagement (Finance)***

- Realign department reporting relationships to better meet the needs of internal and external customers and update job descriptions to clarify roles and responsibilities.
  - Target completion March 2012.
- Assess employee performance against a matrix of core skills to prioritize areas for improvement. Create employee development plans to start addressing deficiencies.
  - Target completion for development plans March 2012 with plan implementation on-going thereafter.

- ***Orientation Program (Human Resources)***

- Review and update the Corporation's Orientation Program to ensure a welcoming introduction to and understanding of the Corporation, their home community and the Northwest Territories in order to give new employees a great start in their new job.
  - Target completion March 2012.

- ***Management Skills Development (Human Resources)***

- Identify basic management skills requirements (i.e. leadership communication, team building, conflict resolution and decision making skills).
  - Target completion March 2012.
- In conjunction with senior management, identify skills gap and training opportunities to develop skills required.
  - Target completion June 2012.
- Educate managers on corporate policies and procedures, the role of the supervisor in labour relations, collective agreement requirements and performance management.
  - Target completion September 2012 on-going thereafter.

- ***Fill the Trades (Linepersons) Complement (Transmission & Distribution)***

- It has been difficult to attract and retain qualified Power Linepersons to the north due to an on-going shortage of this trade Canada-wide. Regular fulltime staff provides greater stability to our operations and in general provide a higher level of customer care over contract employees. The Corporation

- needs to review and refine approaches to attract and retain Power Linepersons.
    - Target completion September 2013 (contingent on completion of Collective Bargaining).
  - Work with the local communities to propose a cost sharing arrangement to hire local apprentices that will ultimately assist in the long term retention of employees.
  - Completion of opening talks/information exchange with Inuvik and Fort Smith.
    - Target completion April 2012.
  
- ***Develop Skills Requirements to New Organizational Structure (Engineering)***
  - The Engineering Department will be re-organized to provide more effective project delivery services as well as meeting the demands of technical Operational support. The new structure will require additional skill-sets that are currently lacking. This includes Project Management and Hydro Engineering. Recruitment of the required skills will be sourced from within Canada and overseas. Existing Staff will also be trained in Project Management and specialized technical areas where required.
    - Targeted completion of new staff hires August 2012.
    - Existing staff training in technical areas will be on-going but in the key project management area essential skills training for existing staff will be complete by end of 2013.
  
- ***Systems Orientation and Training Program (Information Technology)***
  - Identify current gaps and develop and implement a structured orientation and training program to properly educate NTPC staff on hardware, software and business systems maintained by the IT department. This will help to eliminate deficiencies between expected and installed product knowledge for new and existing staff thereby increasing employee productivity.
    - Target completion September 2012.
  
- ***Communicate in An Open and Timely Manner (Corporate Communications)***
  - Increase internal communications in an open and timely manner, including but not limited to notification of media releases, reporting of quarterly KPIs in the Powerline Plus, e-communique updates after the quarterly Board of Directors' meetings.
    - Target implementation September 2012, quarterly summary reports thereafter.

- ***Empower Employees with Communications Tools and Reference Materials (Corporate Communications)***
  - Upon approval of the Corporate Identity Standards, create, communicate and maintain a set of templates to be used by employees in internal and external communications.
  - Goal is to ensure consistency and professionalism of corporate documents and develop pride and confidence for those employees who may struggle with communications tactics.
    - Target completion of corporate identity standards September 2012.
    - Internal communication and data base completed by March 2013.
  
- ***Development of Core Employee Skills (Human Resources)***
  - In conjunction with Managers/Directors, develop a training profile for each position as part of Performance Assessment process.
    - Target completion November 2012.
  - Work with Managers/Directors to identify training opportunities to develop core skills required.
    - Target completion March 2013.
  - Track core training required and provide cost estimates for inclusion in the budgeting process.
    - Target completion September 2013.
  
- ***Complete Supervisor Safety Training Program (Safety)***
  - In an effort to improve safety culture we are developing a supervisor safety training program that defines all safety responsibilities for supervisory staff (e.g., directors, managers, project monitors, lead hands).
  - All supervisory staff will be provided this training.
  - This program will be made available to WSCC and industries across the north for their use.
    - Target completion for training and implementation December 2012.
  
- ***Increase Environmental Awareness (Environment)***
  - Revisit the Environmental Management System (EMS) with the intent of simplifying processes for employees.
  - Improve the EMS training program.
  - Communicate our EMS in a fresh way through employee training and frequent contact with staff.
  - Ensure management buys-in and takes ownership of EMS.
    - Target completion December 2012.

- ***Improve Waste Management (Environment)***
  - Operations staff, especially Plant Superintendents and Operators deal with hazardous waste (e.g., lube oil, glycol and filters) on a daily basis.
  - Labelling of drums, logging of waste, and shipping of waste needs improvement in some areas.
  - Environmental staff will work closely with Operations management to educate employees on proper waste management.
    - Target completion December 2012.

## **Operational Excellence Initiatives**

- ***Outage Notification Process Improvement (Corporate)***
  - Outage notification was identified as a weakness of the Corporation. The process will be improved such that all individuals that are required to manage outages are immediately notified of their occurrence and status.
  - Being aware of the occurrence of an outage is imperative to being able to manage it and thus minimize outages to customers. Improvement will reduce outage times and ensure they are responded to effectively.
    - Target completion March 2012.
- ***Benchmark Against Comparable Utilities (Corporate)***
  - KPIs that can be compared to comparable utilities will be utilized to evaluate NTPC's targets for adequacy as well as its performance in these areas relative to its peer utilities. Some experience with NTPC's developed KPIs will be required to understand its existing performance as well as desired performance improvements.
  - Being able to compare to our peer utilities will help meet customer expectations with respect to reliability as well as cost of service. Additionally benchmarking will aid in discussions with NTPC's regulatory and shareholder.
    - Target completion January 2013.
- ***Develop and Implement a Maintenance Program (Corporate)***
  - Develop a preventative maintenance program that is specific down to the distribution switch, breaker, motor and pump level outlining what maintenance shall be performed to ensure that equipment will operate reliably and at a minimum life cycle cost. The system will be computer based and integrated with the corporate financial system ensuring that other corporate assets are effectively leveraged.

- A well-developed maintenance program will improve reliability as well as reduce the life cycle costs of maintaining corporate assets. An effective computer based system will also improve the delivery of the maintenance program as well as ensure maintenance staff is effective in implementing it.
  - Target completion March 2014.
  
- ***Soil Remediation Program (Environment)***
  - Continue to remediate offsite impacted soils each year.
  - Remediate onsite impacted soils as plants are decommissioned and abandoned.
  - Maintain strong communication with communities and regulators.
    - Target – on-going.
  
- ***Develop Risk Assessment Framework (Engineering)***
  - The Corporation’s assets are aging and will require on-going regular and major maintenance and eventually replacement. In order to assess the condition of the existing assets and to then prioritize the overhauls/upgrades and planning for replacement, a condition assessment survey will be completed for all the assets.
    - Target completion of framework for completing the surveys will be developed for the thermal plants by December 2011 and for the hydro plants and T&D by March 2012.
  
- ***Identify All Land Use Issues (Transmission & Distribution)***
  - NTPC has a variety of assets located on lands owned by others. In some cases there are agreements in place to cover their placement and there are other situations where there are currently no rights on file. The plan is to compile a complete listing (from existing data bases and records) of who owns the land we currently occupy in all of the locations across the Territories. Fort Smith will be documented first and used as the model to follow to continue to document the balance of the Territory.
    - Target completion Fort Smith review December 2011.
    - Target completion all of the Territory December 2012. This first step will identify the scope of the land issues and a plan can then be developed on correcting any trespass situations.
  
- ***Develop 5-Year Departmental Plan (Human Resources)***
  - Draft goals and objectives that HR intends to accomplish in the next five years.
    - Target completion February 2012.

- Send this draft out to management employees within the Corporation for input.
  - Target completion March 2012.
- Finalize the plan, how it will be accomplished, by when, and by whom. This will be based on the corporate strategic plan and will be the basis for team and individual objectives each year.
  - Target completion May 2012.
  
- ***Develop Detailed Asset List (Transmission & Distribution)***
  - The asset list will be compiled in conjunction with the condition and risk survey. The completion date will mirror the dates set out in the condition/risk surveys.
  - There will be implementation of a new strategy to collect asset information as the new equipment arrives in our stores (items such as new transformers).
    - Target implementation March 2012.
  
- ***Develop 5 Year Plan (Environment)***
  - Map out what the environment department intends to accomplish in the next five years, how it will be done, when, and by whom. The 5 year plan will be a road map of where we are taking the organization from an environmental perspective.
  - This will be based on the corporate strategic plan and will be the basis for team and individual objectives each year.
    - Target completion March 2012.
  
- ***Develop 5 Year Plan (Safety)***
  - Outline what the safety department intends to accomplish in the next five years, how it will be done, when, and by whom. The 5 year plan will be a road map of where we are taking the organization from a safety perspective.
  - This will be based on the corporate strategic plan and will be the basis for team and individual objectives each year.
    - Target completion March 2012.
  
- ***Business Process Improvement to Clarify Roles, Responsibilities and Accountabilities (Finance)***
  - Map key financial processes and identifying internal controls in order to provide assurance of accurate and timely financial reporting.
    - Target completion March 2012.
  
- ***Implementation of A Management Accounting System – Budgeting and Reporting (Finance)***
  - Modify financial reports to facilitate management accountability

throughout the organization and make it easier for people who make day-to-day spending decisions to understand their role in managing costs.

- Target completion September 2012 (phase I), April 2013 all areas.
- Modify the budget process to facilitate resource allocation based on forward looking business plans that address strategic priorities.
  - Target completion April 2012 Operations budget (partial implementation).
  - Target completion April 2013 all areas.
- ***Develop A 5 Year Corporate Training Plan (Human Resources)***
  - Draft corporate training goals and objectives that HR would like to accomplish in the next five years.
    - Target completion May 2012.
  - Send this draft out to management employees for review and input.
    - Target completion June 2012.
  - Finalize the plan, including budgeting funds to accomplish the plan.
    - Target completion September 2012.
  - Determine how the plan will be accomplished, by when and by whom.
    - Target completion September 2012.
- ***Succession Planning (Human Resources)***
  - Assist management in creating/updating succession plans for all senior and middle management positions, as well as other key positions identified in the Corporation. This will include the identification of core skills/competencies required for these positions.
    - Target completion May 2012.
  - Assist management in completing a skills gap analysis and develop individual training plans, including timelines, for employees identified in succession plans to ensure they are prepared to meet the challenges of the position. Employees who have been identified in the medium to short-term range should be advised they are in the succession plan and development towards succession should not be undertaken unless the employee has expressed interest.
    - Target completion September 2012.
- ***Improve Maintenance Planning For Hydro Site Annual Shut Downs (Hydro Operations)***
  - Hydro shut downs are regularly scheduled 8 to 12 months in

- advance and comprise of key elements identified in the 50 year Hydro maintenance plans and deficiencies identified since the previous plant shut down.
  - Shut downs need to be optimized to minimize down time vs. the costs of replacement diesel generation, diverted water to maintain water license values, labour costs and overall reliability. When correctly done, overall costs are minimized and system reliability is maximized.
    - Target: Prior to May 2012 shut down season and then on an annual basis.
  
- ***Evaluate/Modify Work Protection Code for Effectiveness (Transmission & Distribution; Safety)***
  - The existing work protection code is causing safety concerns and delays in performing routine daily tasks. The review will be to benchmark our current practice/code against industry standards and implement the findings accordingly.
    - The target completion June 2012.
  
- ***Obtain Work Procedures (Transmission & Distribution)***
  - Work procedures for the T & D Group are a critical component for doing work safely in a high risk environment. It was also identified in the last external audit there is an opportunity to improve in this area. The plan is to explore opportunities to purchase this documentation from an existing industry expert and develop in house procedures for work methods specific to the NTPC environment on a go forward basis.
    - Target completion June 2012 to purchase from an existing source.
    - Target December 2014 to have developed the balance of the required documents.
  
- ***Business Process Improvement (BPI) (Human Resources)***
  - Working with IT, we will review time entry, leave and attendance, as well as other payroll and human resource procedures.
    - Target completion August 2012.
  - BPI and the automation of manual processes will provide time to perform more value added services to the Corporation. HR processes will be optimized to achieve more efficient results.
    - Target completion April 2013.
  
- ***Financial Systems Improvement Project (Information Technology; Finance)***
  - Address project identified reporting deficiencies to ensure

information produced is timely and accurate and thus allows for improved decisions regarding the financial well-being of the Corporation to be made.

- Target completion September 2012.

- ***Obtain Distribution/Transmission Standards  
(Transmission & Distribution)***

- NTPC's existing distribution standards are in need of significant upgrade. The plan is to set up a distributions standards committee and review the existing documentation and determine what options are available to achieve a complete upgrade to compliant standards.
  - Target completion for review completion and recommendations on how to proceed by September 2012.

- ***Develop Corporate Identity Standards  
(Corporate Communications)***

- Create a corporate identify standards program for NTPC including, e-mail, telephone voice messaging, letters, facsimile, pantone colours and the use of corporate logo.
  - Target completion September 2012.

- ***Implementation of A Management Accounting System -  
Budgeting and Reporting (Finance)***

- Modify the budget process to facilitate resource allocation based on forward looking business plans that address strategic priorities.
- Staged project starting with Operations budget changes for 2012/13 budget, all other areas will be completed for the 2013/14 budget.
- Develop new financial reports to present a clear picture of the true cost of business (e.g. removing the smoothing effects that come from rate regulation).
  - Target completion September 2012 (phase I).

- ***Electronic Media and Image Bank  
(Corporate Communications)***

- Develop an electronic media and image bank in iManage, accessible to all departments within the Corporation for use in publications such as the Annual Report.
  - Target implementation December 2012 and on-going thereafter.

- ***Carry Out Asset Condition/Risk surveys  
(Hydro & Thermal Operations)***

- The systematic review and assessment of all assets will confirm

- their conditions and identify and trend problematic conditions.
  - This is a key step to ensure maintenance and capital replacement schedules can be integrated to ensure their continued reliability and maximum life.
    - Target completion for hydro sites and regional diesel plants December 2012.
    - Target completion for remote and standby plants February 2013.
  
- ***Carry Out Asset Condition/Risk Surveys (Transmission & Distribution)***
  - The surveys will be completed based on level of asset importance in achieving our objectives of providing reliable power at the lowest possible cost.
    - The stations will be completed first with target completion December 2012.
    - The transmission lines will follow with target completion December 2013.
  - The distribution assets will be last to be completed but it is important to note that we continually work on these systems and collect asset information on an on-going basis.
    - Target completion December 2015.
  
- ***Develop Detailed Asset Lists (Hydro & Thermal Operations)***
  - In conjunction with asset Condition/Risk assessments, the detailed asset list will provide a high level of granularity to the process and allow the identification of key components of assets.
  - Once completed the detailed asset lists will be used to provide a basis for our on-going maintenance program. All assets will then be divided into three main maintenance categories;
    - run to failure and replace,
    - run to failure and repair,
    - Or schedule maintenance to prevent failure.
  - The review of these works then allow detailed maintenance plans including material costs as well as both labour hours by trade to complete these works
  - The completion of this will allow long term budgeting and planning to ensure the human resources; funds and materials are available to complete the on-going maintenance program.
    - Target completion for hydro sites and regional diesel plants end of 2012.
    - Target completion for remote and standby plants October

2013.

- ***Correct Audit Items (Health, Safety & Environment)***
  - Safety/environment non-conformances are noted during HSE audits at NTPC facilities.
  - Historically only low percentages of audit items were corrected by Operations staff.
  - HSE and Operations staff will cooperate to assign required completion dates for audit items. Regular meetings will be held to ensure commitments are met.
  - To be measured as a KPI.
    - Target completion December 2012.
  
- ***Regulatory Requirements for Bluefish (Environment)***
  - The Bluefish dam replacement project has many environmental regulatory requirements. Half of an environmental position has been dedicated to this project until completion.
  - Environmental staff will keep in close contact with engineering staff and regulators to ensure all requirements are met and the project team is kept apprised of these requirements.
    - Target – construction phase environmental completion March 2013.
  
- ***Automation Improvement and Standardization (Engineering)***
  - The existing PLC programs operating in the Corporation's diesel plants have been developed over the last decade. These programs have not been installed or programmed on a common basis and this has created issues with reliability and problems with dispatch of the units in some plants. The thermal plants will have the existing PLC programs modified so that they all use the same basic architecture and program design.
    - Target completion all thermal plants with a PLC March 2013.
  
- ***Maintenance Planning Improvements (Hydro & Thermal Operations)***
  - Maintenance staff and contractors now complete regular maintenance, preventative maintenance and emergency repairs on equipment and facilities based on previous trends or on failure.
  - The selection and implementation of a computer based maintenance program will improve both operational and efficiency.
    - This is a three step program and as well as the final selection of an integrated maintenance program it also includes the Asset Condition/Risk assessment and the detailed asset lists. Both of these are described above

- Target completion March 2014.
- ***Reduce Lost Time Incidents (Safety)***
  - This will be a result of a well mapped out 5 year plan and an improved safety culture. While this cannot happen overnight, it is achievable as employees and managers change the way they view safety.
  - To become top quartile for severity and frequency.
    - Target completion December 2014.

## **Customer Service Excellence Initiatives**

- ***Communications Plan - General Rate Application (Finance)***
  - Develop and implement a communication plan to raise customer and shareholder awareness of rate pressures and efforts taken by the Corporation to reduce costs to keep rates as low as possible.
    - Target plan completion November 2011. On-going communication thereafter.
  
- ***Incorporate Customer Service Function (Transmission & Distribution)***
  - The existing structure is to be re-aligned to have the Customer service group report through the T & D group. This will ensure a direct reporting line for all functions considered to be part of the delivery system. This change will allow the customer to be dealt with in a consistent manner whether they are requesting service to their home or needing to discuss their account no matter where they reside. This new structure will eliminate duplication of efforts and provide a one stop experience for both the customer and internal inquiries.
    - Target completion of detailed organization plan will be available for review and subsequent implementation by December 2011.
  
- ***Install a 2.5 MW Engine in Behchoko (Hydro Operations)***
  - The community of Behchoko 's electrical supply is provided by the Snare Hydro System with a 40 KM tangent Transmission line from the Snare to Yellowknife transmission line. In the event of a failure of the line or a hydro system outage, the community's power is generated by a standby diesel plant at Frank Channel
  - Due to the continued growth of the community, The electrical requirements of the community can no longer be met at peak periods in winter months with the existing engines and equipment in the event of a hydro system failure
  - Two of the Corporation's Emergency Units have been deployed and interconnected to meet electrical requirements in the short term should an outage occur
  - By installing a new 2.5 MW unit, the capacity, and reliability issues will be corrected. The unit was purchased in September 2011
    - Target date for the shipment to Calgary for the site modifications November 2011.
    - Redesign and construction of a switch gear module and winterize the generator unit. October 2012.
    - Final installation of the unit at Behchoko, site works and

commissioning March 2013.

- ***Regular Updates to Our Website ntpc.com (Corporate Communications with assistance from IT)***
  - Regular review of posted material, including quarterly updates by departments as required i.e. rate changes, community events and involvement.
  - Review peer utilities and add more information of interest and value to the customer including energy conservation.
    - Target implementation and initial updates December 2012 and on-going thereafter.
  
- ***Improvement of Plant Reliability Program (Hydro & Thermal Operations)***
  - Both operations groups have made it a priority to reduce outages by improvements to our existing processes.
  - By determining the root cause of the outages, repeat occurrences do not occur at the site. This information is then used at all sites to modify maintenance procedures or operating practices as may be required.
  - Critical work plans are developed to ensure maintenance works and emergency works do not cause unnecessary outages
  - Root cause training will be completed for key staff to ensure the processes are followed.
    - Target completion - critical work plans are on-going.
    - Target completion Root cause training February 2012.
  
- ***Stakeholder Communications (Corporate Communications)***
  - Increase and continue regular stakeholder communications to the shareholder, customer, communities and employees.
  - Including increased media releases, annual community letters/report card to local governments, increased participation in organizations such as Chambers of Commerce, Safety Association etc.
    - Target completion March 2012 and on-going thereafter.
  
- ***Improve Stability of Snare/Yellowknife System (Engineering)***
  - The existing Snare/Yellowknife system is prone to instability. Typically the system will 'hunt' if there are small disturbances causing power quality and reliability problems as well experience outages that could sometimes be eliminated with improved electrical protection and control systems.
    - The existing hydro system will be have a co-ordination study completed by March 2012 and a stability study by October 2012. Any recommendations from these studies will be

assessed and included in the long term asset management plan and capital planning process.

- Target completion for installation of new electronic controllers (governors) on three Snare units September 2013.
- Target completion December 2013.

- ***Explore the Potential For Using Social Networking (Corporate Communications)***

- Investigate the use of social networking (i.e. Facebook and Twitter) as a customer service tool i.e. example notification of power outages, general customer contact and communications.
  - Target completion June 2012 for pilot project.

- ***Long Term Capacity Planning for Inuvik and Norman Wells (Thermal Operations & Engineering)***

- Both generating communities are presently supplied with natural gas to fuel electrical generation. The long and short term availability of natural gas has become questionable and alternate generation must be considered
- The approval, design, procurement and construction of alternate generation must be completed before gas supplies are interrupted and customers are left with unreliable alternatives.
  - Target date for Contingency planning including the potential installation of additional diesels is on-going.
- Long term planning is dependent on the continued duration of the gas supplies in the communities and will involve operations and engineering staff.
  - Target completion of plans June 2012.

- ***Development of a Customer Focused Culture (Information Technology)***

- Improve IT related communication to and from internal customers for goals of achieving a customer driven service culture.
- Heighten the IT department's delivery of customer service excellence through department education on customer service techniques and improved solution delivery.
- Deploy IT Customer Satisfaction Survey to NTPC employees and address findings from it. The survey will help IT determine problem areas to focus resources on to improve the delivery of IT services for supporting NTPC's needs and daily operations.
  - Target completion July 2012.

## **Financial Excellence Initiatives**

- ***Reorganization (Corporate)***
  - An examination and realignment of the organizational structure is required to ensure that all departments are structured effectively such that the number of required FTEs is minimized while service excellence is maximized.
  - The structure will also ensure coordination issues are minimized within each department as well as interdepartmentally.
  - Operations will largely be organized into two generation production groups (Hydro & Thermal) and delivery will be within the T&D group.
  - The entire organization will consist of only three management layers:
    - President
    - Directors/Senior Managers
    - Managers
    - Target completion January 2012.
  
- ***General Rate Application (Corporate; Finance)***
  - Prepare a general rate application exploring all avenues to reduce costs to keep rate increases as low as possible and at the same time ensuring that the rate structure supports the long term sustainability of electricity service to customers.
    - Target completion date February 2012 for filing and up to 12 months to complete process.
  - Engage the shareholder in discussions on how to work together to keep rates as low as possible and explore options for shareholder participation and/or regulator process reforms that help to lower the overall cost to customers.
    - Target October 2011 to commence discussion and on-going dialogue until application is filed in February 2012.
  
- ***Cost Savings Through Efficiency And Effectiveness (Corporate)***
  - Use KPIs to identify areas for potential process improvement to drive efficient and effective use of resources.
  - Quantify potential savings for each of the Top 5 initiatives by function (Operations, Engineering, IT, HR, Finance, T&D).
  - Prioritize list of areas for process improvement on the basis of materiality of potential savings and estimated probability of success.
    - Targeted completion phase I December 2012 and on-going thereafter.

- ***Acquire The Taltson Water License and Implement A Comprehensive Water Effects Monitoring Program (WEMP) (Hydro Operations)***
  - The Corporation must apply for and be granted a water license to continue to operate its Taltson facility beyond January 1, 2012. The license will include amended requirements to complete a comprehensive water effects monitoring program (WEMP). Once approved, the scheduling and completion will affect the rate structure in the south slave. Prudent implementation and monitoring will minimize the effects.
    - Target date application & hearings September 21 –completed.
    - Review draft water license November 2011.
    - Receive water license December 2011.
    - Target submission for WEMP April 2012.
  
- ***Development of A Business Focused Culture Including Improvement to The Capital Planning Process (Engineering)***
  - The existing culture within the Engineering Department does not provide enough emphasis on project justification including accurate budgeting and delivery. The Department will be organized with a structure that will provide greater emphasis on the project justification criteria and estimating and also will be include Project Managers that will be held accountable for timely delivery and cost control.
    - Target completion for department reorganization will be complete by December 2011.
    - Target completion for culture change December 2013. Measurement KPI at that time is the number of projects completed on time and within 10% of budget will be at least 90% with no projects over budget by more than 30%.
  
- ***Charter Sharing With GNWT, Northern Stores, Co-Ops And Hamlets In The NWT (Hydro & Thermal Operations)***
  - The Corporation must often utilize charters to respond to critical situations in remote communities. Often aircraft available can take either additional passengers or freight on the flights to and from the community.
  - By developing relationships with the communities and their entities, costs could be reduced. Failing a cost sharing agreement, freight could be hauled at no charge to benefit the rate payers and residents of the community and thereby improving our public image.
    - Target initial implementation March 2012.

- ***Computing Infrastructure Virtualization And Consolidation (Information Technology)***
  - Implement server virtualization techniques to reduce the number of physical servers and related capital and operational expenditures associated with server purchase, maintenance, and deployment.
    - Target deployment March 2012.
    - Target optimization 2015.
  - Design and implement desktop virtualization to reduce the total cost of ownership associated with desktop computing requirements. Reduction in capital hardware expenses, software licensing and operational maintenance and deployment will be realized.
    - Target deployment March 2012.
    - Target optimization 2014.
  
- ***Voice Over Internet Protocol (VOIP) Integration (Information Technology)***
  - Integrate Area Office and Hydro Plant Voice Over Internet Protocol phone systems to realize cost savings benefits associated with interoffice long distance phone calls.
    - Target completion March 2012.
  
- ***Move Towards In House Overhauls Of Critical Equipment And Prime Movers (Thermal Operations)***
  - The Corporation has spent over 1.2 million in overhauls for contractors in 2010.
  - By allowing maintenance staff to complete both minor and major overhauls on critical equipment and prime movers, the contractor fees can be lowered in both the short and long term.
  - Internal resources capable of performing these tasks will also reduce lead time required to source competent contractors now completing much of the works
    - Target completion for additional tools and equipment sourced and received March 2012.
  - Parts and labour requirements will be identified in the maintenance program.
    - Target completion April 2012 for initial scheduled prime movers.
    - Target completion March 2013 for critical equipment.
  
- ***Donations & Sponsorships – Return On Investment (Corporate Communications)***

- Assess existing Donations and Sponsorship Policy for value for money and alignment with corporate goals, identify areas for improvement and update Policy for Board approval.
  - Target completion June 2012.
- Develop and implement internal and external communication plan to communicate Policy changes.
  - Target implementation September 2012 upon approval of the updated Policy.
- ***Evaluate Hydro Costs To Better Match Other Utilities (Hydro Operations)***
  - The Corporation must review our costs, practices and procedures in an effort to reduce operational costs in the Hydro Rate Zone. Cost increases in this group affect the costs paid by all rate payers in the NWT and affect our shareholder's ability to obtain a fair rate of return on their investment.
    - Target completion September 2012.
- ***Reduce Dependency On Contractors (Transmission & Distribution)***
  - Contractors are costing the T & D group approximately 2 million dollars per year. One quarter of this is spent on forestry line clearing activities with the balance going to supporting our line crew's work program due to a shortage of power linemen. The plan is to explore alternative avenues to reduce dependency on the forestry contractors and to have our employees monitor local equipment owners to carry out work that falls outside the critical zone.
    - Target completion for the first trial on the transmission line between Fort Smith and Pine Point October 2012.
  - The second step is to recruit power linemen that have a desire to live and work in the Territories. As mentioned under employee excellence there will need to be some changes to the collective agreement to facilitate this effort. Part of this plan will be to hire local apprentices as also described under Employee Excellence Initiatives.
    - Target completion December 2012.
- ***Complete Bluefish New Dam Project On Schedule And On Budget (Engineering)***
  - The Bluefish new dam project is the most expensive project the Corporation has undertaken. The target is to complete this project within its budget of \$37.4 million. This is a very high profile project and will have a significant impact in the power rates. In order to control the rate impact and minimize any

negative feedback from the shareholder and customers it is important to complete the project for the budget of \$37.4 million.

- Target completion November 2012.

- ***Community Initiatives In Support Of Environment (Environment)***

- Design, develop, and implement an environmental sponsorship program.
- Offer grants to communities to complete community-based initiatives in support of the environment.
- Part of the corporate donation program.
  - Target completion December 2013.