



STRATEGIC INITIATIVE BUSINESS PLAN for

Process Excellence

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TABLE OF CONTENTS

- 3 EXECUTIVE SUMMARY**
A one-page overview containing key information about the initiative, including strategic rationale, marketing strategy, financial summary and high-level timeline
- 5 STRATEGIC RATIONALE**
A high-level summary of the strategic rationale of the initiative and how it aligns to the strategic goals and key values of NYPA.
- 7 INITIATIVE OVERVIEW**
A range of background and scene-setting information pertaining to the initiative, including why the initiative is being suggested and what it aims to achieve.
- 8 SOLUTION**
Key information around the proposed solution, including suggested business model and governance structure.
- 11 BENEFITS AND REVENUE**
Quantitative information around annual benefits expected as a result of the initiative. These benefits include cost savings and increased revenue. The section also includes a benefit realization overview.
- 13 FUNDING FOR THE INITIATIVE**
High-level specification of the intended funding sources that will be used to fund the implementation.
- 14 COSTS AND RESOURCES**
Quantitative information around annual cost and resources required to implement the initiative, as well as any permanent on-going costs that will be incurred as a result of implementing the initiative.
- 16 IMPACT TO MARKET**
A high-level market analysis, followed by details around how the initiative is expected to impact customers segments and NYPA's products and service offerings.
- 16 ORGANIZATIONAL IMPACT**
Overview of how the initiative is expected to impact NYPA's business units, including an overview of the skills required and whether those skills currently exist in the organization.
- 18 EXTERNAL STAKEHOLDER IMPACT AND MARKETING PLAN**
Overview of how the initiative is expected to impact NYPA's external stakeholders.
- 18 RISKS**
A high-level risk overview, specifying key risk information such as the probability and severity of key risks, risk owners and action plans.

EXECUTIVE SUMMARY

Strategic rationale and drivers of the initiative

The process excellence initiative will establish streamlined, sustainable processes that balance cost efficiencies alongside risk, and realign internal resources to support the transformation of NYPA described in the 2014-2019 Strategic Vision. These efficient and optimized processes will provide a foundation for the other strategic initiatives introduced as part of the 2014-2019 Strategic Vision.

NYPA, like any business, has evolved significantly over time. In some cases, these changes in business focus can lead to redundant and anachronistic processes which contribute to a reduction in overall efficiency. The process excellence initiative will provide structure to the identification of inefficient processes and apply a holistic approach to their redesign in order to deliver benefits in three areas: cost optimization, environmental improvement and risk assessment and balancing.

Process redesign could, for example, automate a manual process by establishing an electronic approval workflow and audit trail that is consistent across several business units. This improvement would streamline and standardize the process, reduce time between hand-offs, eliminate paper use, and provide increased controls through electronic logging and reporting. It would provide benefit in all three targeted areas identified above. In cases where the three benefit areas may be in conflict, an approach will be taken to strike a balance amongst them to ensure that the costs are appropriate, the environmental impact is positive or neutral, the risk is evaluated and mitigated wherever possible, and that sufficient controls are in place.

Business model

The business model is simple: the cost of dedicated staff to identify and implement business process improvements across NYPA will be funded, over time, through the realized savings from successfully executed projects. Based on preliminary research of peer utilities and an initial evaluation of opportunities at NYPA, it is anticipated that process efficiency efforts will result in reduced operating costs and facilitate the reallocation of resources to areas in the organization with growing need, thereby maximizing organizational efficiency. Benefits realized as a result of the process excellence function will be tracked to ensure the anticipated outcomes are achieved, with the results effectively communicated across NYPA.

Thoughtful and effective internal engagement is a crucial component in implementing a culture of process excellence. Employees must understand that the intent of the initiative is to make their work more manageable and rewarding; this understanding will allow employees to embrace and own the positive changes resulting from process improvement. Key to the success of the process excellence initiative will be a steadfast adherence to its three drivers and guiding principles: cost optimization and environmental sustainability, balanced alongside an assessment of risk.

Continuous improvement efforts will also reinforce, with our stakeholders, NYPA's commitment to be an efficient and streamlined business.

An initial high level review with senior management identified over 40 processes are candidates for review and this will be the starting point for the process excellence initiative. Costs of the initiative include the salaries of the process excellence team, training, software, and trade organization membership; these will be funded via internal operating expenditure and capital expenditures as appropriate.

Financial Summary

The table below illustrates the anticipated net cash flow once anticipated costs are deducted from the total anticipated cost savings and increases in revenue.

Category	2014	2015	2016	2017	2018	2019	2020	Post-2020
Total cost reduction and revenue	\$ -	\$ 1,346	\$ 2,691	\$ 4,037	\$ 5,383	\$ 6,729	\$ 6,729	\$ 6,729
Site O&M expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
HQ/Overhead/Other expenses	\$ 358	\$ 743	\$ 672	\$ 672	\$ 672	\$ 672	\$ 672	\$ 672
Capital expenses	\$ -	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total expenses	\$ 358	\$ 943	\$ 672	\$ 672	\$ 672	\$ 672	\$ 672	\$ 672
Third-party funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net cashflow	\$ (358)	\$ 403	\$ 2,020	\$ 3,365	\$ 4,711	\$ 6,057	\$ 6,057	\$ 6,057
Accumulated net	\$ (358)	\$ 45	\$ 2,065	\$ 5,430	\$ 10,141	\$ 16,198	\$ 22,254	\$ 28,311
Discounted net	\$ (358)	\$ 380	\$ 1,797	\$ 2,826	\$ 3,732	\$ 4,526	\$ 4,270	\$ 17,986

All numbers are \$ '000

Initiative NPV	\$ 35,158
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The financial summary reflects the total costs and saving/benefits associated with this initiative. Net savings (time and money) will provide necessary resources to support NYPA's vision and initiatives, in addition to mitigating potential costs and/or rate increases in the future.

High Level Timeline

Activities	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016
Strategic Initiative begins		◆								
Formalize team governance, structure and goals										
Identify process improvement opportunities for business plan										
Define methodology and tools/templates to be used										
Select initial projects										
Select Process Excellence staff										
Kick-off and implement initial projects										
Ongoing Screening of future projects										
Ongoing implementation of projects										
Ongoing communication throughout organization										
Process Excellence success established, ongoing function										◆

Risk of the initiative

The risks associated with the initiative can be grouped into the following key areas:

- 1. Resistance from employees:** Without effective staff engagement, there is a potential for some process changes to be perceived as efficiency measures aimed at staff reduction. If employees feel uninvolved in process improvements, they may be less cooperative and the success of improvements could be in jeopardy. Understanding and addressing this potential employee concern before changes are implemented will help the initiative succeed.
- 2. Benefits not sustained:** Measurement and control are key aspects to ensure the success of this initiative. There is a risk that processes will revert to the previous inefficient state without effective benefit measures and controls to ensure improvements are sustained.
- 3. Opportunity Cost:** Most departments and groups tend to have multiple tasks, assignments and processes as part of their job responsibilities and deliverables. A process excellence initiative in one area may temporarily impact other processes as a result of time and resources devoted to the specific process improvement area.

STRATEGIC RATIONALE

Business strategy and rationale

The evolution of NYPA has led to inefficiencies in some areas due to silo-ed, outdated and overlapping processes. There have been one-time efforts to deliver process improvements that have resulted in increased efficiency. These include: Project Summit, which led to the reorganization of scheduling and settlement in February 2014; the ReCharge NY process definition project that allowed the new program to launch smoothly and without

issue; and the S3-Forecast Energy Revenue process improvement project that increased overall process throughput by more than 200% as a result of an overall reduction in both cycle time and the resources needed to execute the process.

There are also several process improvement efforts currently underway. For example, Project PI in Operations which has the objective of clarifying and streamlining processes associated with non-recurring Operations projects for the engineering and project management departments. These one-off improvement projects demonstrate that there are both opportunity and capability to embed process excellence within NYPA culture.

Establishing a Process Excellence function will deliver significant benefits by providing structure to the identification of inefficient processes and a holistic approach to their subsequent optimization. It will deliver improvements through cost and/or risk reductions while a specific focus on sustainability will also ensure environmental benefits. In addition, it will increase the efficiency of internal business operations and provide a strong foundation for the implementation of the 2014-2019 Strategic Plan. It is likely that once a comprehensive assessment of the potential for process improvement is carried out and there is greater clarity about the exact processes that will be assessed under the initiative, the ultimate benefits of the process excellence function will be found to be higher than estimated in this business plan.

In line with the new Strategic Plan and Mission, NYPA must continue to measure its performance. Part of the initial work of the Process Excellence team will be a more thorough study of best in class utilities that will result in the establishment of benchmarks and metrics to assess performance.

Alignment with strategic goals

Strategic goal	Type and Degree of impact	Description of impact
Financial Effectiveness: Maximizing the financial capacity of NYPA to make capital investments that help achieve our goals	Positive - Medium	Potential projects have an anticipated financial benefit equal to multiples of the initial investment.
Operational Effectiveness: Maximize the efficiency, reliability and flexibility of our assets and organization	Positive - Medium	Effective processes, with clarity around tasks and roles, are repeatable and reliable, with minimum defects. This increases NYPA's ability to transmit and generate power reliably.
Value From Energy: Maximizing the benefit / minimizing the negative impact of each unit of energy delivered to the state / customer	Positive - Low	The launch of low cost power programs will benefit from efforts to define program processes at the start. Clarity around steps and roles reduces issues and risks associated with new processes, and will increase their efficiency. Streamlined processes will better support the implementation of Energy Efficiency projects.

Alignment with key values

Values	Degree of impact	Description of impact
Sustainability	Positive - High	The framework includes a specific focus on sustainability efforts
Safety	Positive - Low	Clear, well understood processes will improve safety
Compliance	Positive - Low	Clear, well understood processes will improve compliance
Environmental Responsibility	Positive - Medium	The framework includes a specific focus on sustainability efforts
Employee Development	Positive - Medium	NYPA employees will have enhanced process excellence capabilities

INITIATIVE OVERVIEW

Description of the opportunity

Research into process efficiency programs at peer utilities demonstrated organizational benefits from investing in improving the efficiency of internal business processes. The success of such initiatives depends on the current condition of organizational processes, the suitability of the methodology used to assess and address the issues identified, and the effectiveness of implementation. While the success of individual process improvement projects may vary, evidence suggests that benefits from process improvement can be significant.

For example, the Jacksonville Electric Authority (JEA) implemented a similar program with eight dedicated staff members and has realized \$579 million in hard and soft cost savings since 2000. The dedicated staff was supported by a larger group of trained and certified employees from different business sectors, allowing JEA to complete over 580 projects since 2000. For one process project, JEA conducted an assessment of the equipment needed on service trucks, including how equipment was used and where it was stored. JEA was able to eliminate unnecessary items on the trucks and improve access to those items used most frequently. Eliminating unnecessary items translated to a reduction in truck weight and fuel savings which became significant when totaled for the entire fleet. Changing the layout of items on the trucks translated to less time spent looking for equipment needed for each task, and allowed workers to identify missing equipment before traveling to a job site. It also improved safety, as this was one of the criteria used to determine the location of equipment on the truck.

Within NYPA there is clear support for process improvement. Discussions with the Executive Management Committee (EMC) have led to the recommendation of more than 40 processes for review, indicating that there is a strong opportunity for such a function.

Anticipated financial benefits from improving these 40 identified potential processes are estimated to be \$6.7M ($\pm 30\%$) annually after year 5, based on high-level estimates provided by process owners and participants. In addition, these processes do not represent the entire portfolio of processes that are

candidates for improvement; thus the total potential benefit is likely to exceed these estimates.

Initiative aim (desired outcome)

This initiative will result in the ongoing optimization of processes at NYPA and in doing so will provide value in the form of reduced costs and environmental impact, balanced against an assessment of risk. In addition, it will provide opportunities for resource allocation to support evolving priorities and facilitate a more streamlined business model that will be evident to NYPA staff, customers, and stakeholders.

The initiative will establish a new team responsible for instituting process excellence across NYPA. The team will identify candidate processes that will benefit from in-depth process maturity and efficiency analysis; the current state will be assessed and the future desired state defined; with clear steps to get from current to future state identified. This approach will be repeated in areas where process concerns are identified. The team's comprehensive understanding of process excellence and best practices will be shared with staff across NYPA where process excellence projects are implemented.

Initiative Scope

All NYPA processes – including, for example, how we bill our customers and how we procure goods and services, could potentially fall within the scope of the process excellence initiative. Through interviews with EMC and other senior staff, more than 40 candidate processes were identified as having the potential to benefit from this initiative. A targeted survey was subsequently circulated to the owners of these processes to capture the suitability of each candidate process for assessment under the initiative and the potential benefits that could be achieved.

Consequence of maintaining status quo

In the absence of any action, process deficiencies will remain and NYPA will operate at a sub-optimal level. In that case, a greater number of staff members may be needed to support on-going operations and the work required to successfully implement the transformative initiatives contained in the 2014 strategic plan, both of which will lead to

a higher overall cost.

Without a specific focus on process excellence, we will miss an opportunity to streamline operational practices and improve resource efficiency, which could compromise the implementation of the new strategic initiatives. In addition, without a specific focus on sustainability within NYPA processes, it will be difficult to further advance internal green goals and demonstrate leadership to customers and stakeholders in this area. The process excellence strategic initiative is vital to create the effective and efficient base upon which the other strategic initiatives will be built.

Considered alternatives

The team considered two variations on the proposed solution presented in this business plan. Both also involved the development of a Process Excellence function. Under the first option, the team would be formed with external consultants. Under the second, the team would not comprise dedicated staff but would instead be comprised of internal staff loaned to the initiative on a part-time basis.

The major disadvantage of using consultants is that it would not promote development of process excellence expertise within NYPA. While we anticipate using some level of initial consulting support to institute best practices into our methodology, a key aim of the initiative is to enhance internal process excellence capabilities. The concern associated with the second option is that a team comprised of part-time NYPA staff might have competing priorities, and that insufficient time might be devoted to process excellence work.

SOLUTION

Proposed solution

The Process Excellence function defined in this business plan will provide the structure for NYPA to define, analyze, improve, measure, and control internal processes within, and across, business unit boundaries. By optimizing cost, facilitating environmental improvements, and assessing risk, the Process Excellence function will enable NYPA to pursue its new mission, better serve its customers, and evolve with an energy industry that is in the

midst of significant change.

The team will initially be comprised of three full-time staff members who will execute projects in parallel and perform a range of ongoing activities focused on process excellence. Preferably, at least two of the three positions will be filled by qualified internal staff to capitalize on institutional knowledge and allow the team to commence its first project expeditiously.

For each project, the team will work with subject matter experts (SMEs) from the business units involved in the target process who will act as “change agents” for the new process. The role of these change agents will be to collaborate with the Process Excellence staff and provide subject matter expertise. Their knowledge of the business will ensure that new processes are designed effectively. The involvement of change agents from the beginning of the project will ensure they are engaged and vested in the process, and will increase the likelihood of adoption of change, including potentially new processes. During the projects, change agents will gain knowledge of Process Excellence that will allow them to continuously improve processes even after the Process Excellence team has moved on to other projects.

The Process Excellence team will also collaborate with various NYPA departments, including the Office of Strategy Management, Risk Management, Sustainability, Audits, and the Controller group, to ensure process excellence efforts are aligned with NYPA’s strategic direction, positively or neutrally impact the environment, appropriately assess risk, and strengthen controls where possible.

It will be of critical importance to monitor the performance of the process excellence function in terms of costs efficiencies attained, risks mitigated and environmental improvements delivered. The governance framework set up by the process excellence team will include explicit reference to performance monitoring over time and the establishment of metrics to support this. At the outset of each new project, an assessment of potential metrics will be completed, with these metrics refined over time as the team obtains a clearer understanding of the areas that should be part of this ongoing assessment. At the end of each project, the team will finalize the metrics and begin

capturing relevant data to support effective performance measurement. The metrics should be reviewed periodically to ensure that they continue to capture the required information and provide transparency on the improvements being delivered.

Roll-out plan

Following Trustee approval, the Process Excellence function will be staffed and trained, the function's charter refined, and governance established with methodology, metrics, and tools. The goal is to have the function fully staffed from the start. This will allow the team members to initiate process improvement projects quickly, while the manager can dedicate attention to establishing governance, methodology, tools, communication, process identification, project screening, and building the project pipeline. Fully staffing the function also establishes its credibility and demonstrates NYPA's support of the function by providing the necessary resources for success. Once the team is in place, the most appropriate approach to secure process efficiencies will be identified.

Lean and Six Sigma are the two most commonly referenced methodologies used to support organizational process excellence. The goal of both methodologies is to eliminate waste, but they differ in their focus and approach. While the Lean approach involves an assessment of the entire value chain and focuses on removing steps from the process that do not directly add value, the Six Sigma approach strives to reduce waste by removing variation in organizational processes. Each methodology has its strengths, and in some cases the best approach is to combine aspects of each and develop a toolkit tailored to the organization's needs. It is likely the staff will adopt this hybrid approach and use a combined Lean Six Sigma methodology. This will allow NYPA to pick the parts of each methodology that best suit its needs.

Once staff is in place and trained, one to two processes will be selected for further evaluation by the team and the initial projects will begin. The staff will work with consultants who will provide expert guidance during the initial projects and support the staff in establishing governance. It is important that all three positions are staffed so that they all benefit from the expert guidance of the consultants. At this point, NYPA leadership and key business unit members participating in the projects will be trained

in process excellence. Once the initial projects are complete, the team will measure and monitor benefits, while identifying the next projects that should be assessed using the process excellence methodology. The team will also work to establish a project pipeline and communications plan. The strategic initiative will be considered complete once the final step of the roll-out plan - establishment of the communication plan – is complete. At that point, the Process Excellence function will become an ongoing function, rather than a strategic initiative.

Suggested business model

The proposed business model is for three dedicated staff to identify and implement business process improvements across NYPA, and for this cost to be funded through the realized savings from executed projects. Process efficiency efforts will result in reduced operating expenses in the targeted area, and will facilitate the reallocation of resources to other areas of need in the organization, thereby avoiding future costs and maximizing overall efficiency.

A key objective of this strategic initiative is to develop process expertise within NYPA. The Process Excellence function will work with business units to facilitate improvement. Business unit members who work on process excellence projects will become "change agents" and after project completion, they will continue to utilize their process excellence knowledge to improve processes over time. This is a professional development opportunity for the change agents, who will receive training in process improvement, with potential for certification.

The team will continue to leverage information from comparable organizations to grow their understanding of best practices and apply these principles across NYPA. To do this, the team will develop effective working relationships with other utilities that have process improvement functions in place to better understand the approaches they have adopted and the subsequent benefits attained. Where possible, the team will take advantage of existing networking opportunities to engage in these discussions but will also set up dedicated meetings to share experiences. If necessary, the team will secure consultancy support to attain a more holistic understanding of best practices emerging across both utilities and other industries.

Effective sharing of this information across NYPA will help to secure optimal process excellence benefits. This will be achieved when the process excellence team becomes embedded in the organization and effectively trains change agents on relevant tools, methodologies and best practices. In addition, as set out in the marketing section, the team will develop a website and quarterly newsletter to share information regarding progress of the initiative, lessons learned and best practices.

Suggested governance structure

Several options for the organizational structure of the Process Excellence function have been considered. At this time, we recommend that the function be incubated in Business Services' Office of Strategy Management group, the aim being to locate the group in a business unit that will allow independence in selection and analysis of processes, as well as the ability to act across the enterprise. The core Process Excellence function, comprised of three full time employees, will be responsible for day-to-day operation and roll-out of the initiative.

The team will be led by a manager with two business process improvement analysts as staff. We have developed examples of job descriptions and suggested several skillsets for the three staff; they are available for review. The success of the Process Excellence function will require significant interactions with SMEs from across business units, as well as the incorporation of metrics and controls to ensure estimated savings and benefits are realized and sustained. The involvement of SMEs will ensure changes are effective and a partnership is established with the business units. This collaboration will also ensure that process improvement becomes embedded in day-to-day work, and that NYPA adopts process excellence as part of its culture.

Potential initiative scenarios and selection / prioritization criteria

Processes to be considered for improvement will be identified and evaluated according to a set of weighted criteria. As a public utility focused on reliability, economic development, environmental sustainability, innovation, and technology development, monetary savings are not always a primary driver. The selection criteria include:

- Cost reduction
- Environmental impact
- Impact on employee retention
- Time savings (including: staff hours, number of work hand offs, and cycle time or time for the process to transpire)
- Time necessary to implement and realize results/savings, documentation and knowledge retention capability
- Alignment with best practice
- Alignment with NYPA's Vision, Mission and Goals
- Customer satisfaction, where applicable

BENEFITS AND REVENUE

High-level benefit description

The objective of the initiative is to reduce costs and environmental impact while assessing and balancing risk. Costs will be reduced via:

- increased productivity due to more efficient use of resources as well as the elimination of duplication and unnecessary process steps;
- the adoption of a consistent process evaluation methodology that will reduce errors and potentially avoid fines;
- the implementation of standardized software; and
- internal process expertise that will eliminate the need for on-going consulting expenditures.

A focus on sustainability, more efficient use of resources and reducing waste will ensure improvements in environmental performance. In addition, safety will increase due to clarity around and continual improvement of processes; staff morale will improve as a result of process understanding and expectation management; and customer satisfaction will rise due to higher quality services and interactions.

Benefits were estimated using the following process:

- Surveys were distributed to process owners/participants identified by the EMC. For each process there were as few as three or as many as seven respondents.
- Respondents were asked to give their best estimate of the level of potential benefit if the process was improved. They were able

to select ranges of potential dollar savings in multiple categories: time savings, fine reduction, revenue increase, and other.

- All results for each process were averaged; all responses were included.
- The benefits and revenues depicted in the tables, and cited within this business plan, are based solely and entirely on the survey results.
- The survey results for the time savings and fine reduction categories reflect costs avoided if employees can be reallocated to new, higher priority tasks and the risk of incurring fines can be reduced. These estimates have been treated conservatively and reduced by a factor of 50%, thereby acknowledging that: 1) hours saved will not always be achieved by individuals with the precise skills needed for new, priority tasks and 2) reducing risk of fines is a probabilistic rather than absolute saving.
- The surveys were not intended to replace thorough analysis on each potential process. That analysis will occur during the selection and initiation phases of the individual process improvement effort and the Process Excellence team along with the process owner will decide together what savings can be realized. The survey mechanism was used to capture a broad-brush feel for the opportunity embedded in NYPA processes. Since surveys are not an exact science, we have applied a confidence level of “Low” to the benefits estimates put forth here, allowing for a deviation of $\pm 30\%$ in stated benefits.
- The O&M savings may occur for activities at headquarters or the sites depending on the specific processes selected to be addressed.

Total Benefits (\$ '000)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
Savings from								
- Lower O&M (FTE)	\$ -	\$ 249	\$ 499	\$ 748	\$ 997	\$ 1,247	\$ 1,247	\$ 1,247
Reduction in Fines	\$ -	\$ 2	\$ 4	\$ 6	\$ 8	\$ 10	\$ 10	\$ 10
Increased Revenue	\$ -	\$ 656	\$ 1,312	\$ 1,968	\$ 2,624	\$ 3,280	\$ 3,280	\$ 3,280
Other Cost Savings	\$ -	\$ 438	\$ 877	\$ 1,315	\$ 1,753	\$ 2,192	\$ 2,192	\$ 2,192
Total (\$ '000)	\$ -	\$ 1,346	\$ 2,691	\$ 4,037	\$ 5,383	\$ 6,729	\$ 6,729	\$ 6,729

Total Benefits (\$ '000)	\$ 60,557
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Benefit assumptions

The benefits represent a high level indication of the scale and type that could be achieved and are a range based on a survey of over 40 processes that was completed in the second quarter of 2014. We engaged executive management to identify candidate processes and completed a subsequent survey with process owners to assess the scope of potential benefits. This represents a top-down approach to identifying the pool of opportunity.

Under a bottom-up approach, we would engage working level staff across NYPA. We anticipate that discussions with staff that use these processes on a day-to-day basis would reveal more opportunities for process improvement. For this reason, we believe that the benefits cited within this business

plan are understated. We will conduct this bottom-up analysis during the initiative roll-out.

We estimated a flat annual benefit based on the 40+ potential projects identified by senior management, the total benefit, and number of projects that will be completed per year. We also anticipated that the benefit for each project would be sustained for a period of five years, as over time, changes in regulation, technology, and NYPA's organizational structure, as well as the dynamic nature of the energy business, will reduce the efficiency of redesigned processes.

Anticipated increases in revenue could result from projects such as investments in plant infrastructure.

Confidence level of benefit realization

The following table represents the overall confidence that the specified revenue and benefits will be realized, using the scale that follows.

Confidence level	Benefit/revenue realization range
Very high	+/- 5% of expected benefits
High	+/- 10% of expected benefits
Medium	+/- 20% of expected benefits
Low	+/- 30% of expected benefits
Very low	+/- 50% of expected benefits

Benefits to NYS	Low
Revenue	Low

	Low	High
Total benefits to NYS (\$ '000)	\$ 42,390	\$ 78,725
Total revenue (\$ '000)	\$ -	\$ -

Risks to benefit realization

Benefit risk overview			
Risk driver	Description of impact on benefit realization	Probability	Impact
Employees have a negative perception that the initiative will reduce headcount	Some employees are unwilling to make the changes proposed and this reduces benefits attained	Significant	High
Employees resist change under the initiative as they don't appreciate benefits	Some employees are unwilling to make the changes proposed and this reduces benefits attained	High	High
The processes selected do not offer the most significant & immediate results	Processes that would deliver greater benefits are not assessed and benefits are not optimized	Medium	High
The changes made negatively impact quality of service	The negative impact on service could undermine the benefits attained from the initiative	Medium	High
The weighting applied to assess relative cost / environmental benefits is not optimal	Decisions to amend processes may detrimentally impact cost / environmental measures	Medium	Medium
Inclusion of processes involving sensitive info. may create vulnerability	If the information was recovered by external parties under FOIL this may outweigh the associated benefits	Low	High
The changes made do not represent industry best practice	The benefits attained under the initiative would not be the optimum benefits that could be achieved	High	Low
Benefits are not sustained.	Processes revert back to the previous state and operational practices are not optimized.	Medium	Medium

FUNDING FOR THE INITIATIVE

Intended sources of funding

The Process Excellence initiative will be funded via NYPA's O&M budget, with a software capital expense expected in 2015. In the long-term, this initiative will be self-funded through savings realized by the Process Excellence projects that are undertaken.

Intended total funding sources			
Source	Selected	Value (\$ '000)	Percentage of funds
Bond issuance	No	\$ -	0%
Cash reserves	Yes	\$ 1,301	100%
Third-party funds	No	\$ -	0%
Other	No	\$ -	0%
Total		\$ 1,301	100%

Expected annual funding profile								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
Bond proceeds								
Third-party funds								
Total external funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest payments								
Debt retirement								
Other								
Net external funds impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NYPA cash	\$ 358	\$ 943	\$ -					
<i>Total annual cost</i>	<i>\$ 358</i>	<i>\$ 943</i>	<i>\$ -</i>					

Total external funding (\$ '000)	\$ -
Total NYPA cash (\$ '000)	\$ 1,301

COSTS AND RESOURCES

Initiative cost and resources (i.e. costs and resources associated with implementing the initiative)

O&M Costs HQ, Overhead, & Other costs (\$ '000)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
Internal labor	\$ 153	\$ 589	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Training / Consulting	\$ 172	\$ 120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
APQC Membership and Other	\$ 33	\$ 34	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total annual HQ/OH/Other costs	\$ 358	\$ 743	\$ -					

Total HQ/OH/Other initiative costs (\$ '000) **\$ 1,101**

Capital expenses (\$ '000)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
Physical assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
IT - BPM Software Suite	\$ -	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total annual Capex	\$ -	\$ 200	\$ -					

Total initiative Capital expenses (\$ '000) **\$ 200**

Total initiative costs (\$ '000) **\$ 1,301**

Resources (FTE)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
IT	0	0	0	0	0	0	0	0
Business	3	3	0	0	0	0	0	0
Technical/(Engineer)	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Total annual FTE	3	3	0	0	0	0	0	0

Initiative cost assumptions

(i.e. cost associated with implementing the initiative)

- Implementation of the initiative will be complete by the end of 2015
- Three staff will support full roll-out; one manager and two process analysts
- Lean/Six-sigma training will be needed for the Process Excellence function (classroom) and first four change agents (online) (\$20,000 in 2014, \$15,000 in 2015)
- Temporary consulting services will be needed to provide guidance during initial projects and when the team is establishing its governance structure (\$150,000 in 2014, \$100,000 in 2015)
- Travel to sites and incidental expenses (\$3,000 in 2014, \$5,000 in 2015)
- Continued annual membership to the American Productivity and Quality Center (APQC) is recommended (\$20,000 per year as of 2015), other IT costs (\$28,600 in 2014 and \$6,100 in 2015), and miscellaneous costs (\$3,500 in 2014 and \$7,500 in 2015)
- There is a \$200,000 estimated capital expense in 2015 to purchase a BPM (Business Process Management) software suite which will provide the Process Excellence team with an efficient, interconnected system that consolidates data and supports the project management effort including modeling, analysis, process optimization and reporting.
- Costs associated with improving individual processes, are not included in this Business Plan as they will be specific to the process under assessment (e.g. purchasing a new piece of software in order to automate a

process). A cost benefit analysis will be undertaken for each project as part of its implementation.

Post-implementation costs and resources (i.e. incremental costs and resources associated with running/maintaining the solution post-implementation)

O&M Costs HQ, Overhead, & Other costs (\$ '000)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
Internal labor	\$ -	\$ -	\$ 589	\$ 589	\$ 589	\$ 589	\$ 589	\$ 589
Training / Consulting	\$ -	\$ -	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
APQC Membership / Other	\$ -	\$ -	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33
Total annual HQ/OH/Other costs	\$ -	\$ -	\$ 672					

Resources (FTE)								
Category	2014	2015	2016	2017	2018	2019	2020	Post 2020
IT	-	-	-	-	-	-	-	-
Business	-	-	3	3	3	3	3	3
Technical/(Engineer)	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total annual FTE	-	-	3	3	3	3	3	3

Post-implementation cost assumptions (i.e. cost associated with running/maintaining the solution post-implementation)

To maintain focus on process excellence following completion of the initiative, staffing and support costs will continue, but are expected to be below 2015 levels. Consideration will also be given to the

need for refresher training for the members of the Process Excellence function recognizing the potential for evolution in process efficiency approaches and best practice.

Confidence level of initiative and post-implementation costs

The following table represents the overall confidence that the cost levels will be met.

Confidence level	Cost range
Very high	+/- 5% of expected costs
High	+/- 10% of expected costs
Medium	+/- 20% of expected costs
Low	+/- 30% of expected costs
Very low	+/- 50% of expected costs
Initiative costs	High
Post-implementation costs	Medium
	Low High
Total initiative costs (\$ '000)	\$ 1,171 \$ 1,431
Total annual post-implementation costs (\$ '000)	\$ 538 \$ 806

Comments

There is a reasonable level of confidence in the quoted figures. The number of staff allocated is based on the assumption that two to three significant processes (and several smaller processes) will be addressed annually. If greater throughput of

processes is desired, additional staff will be required. A cost benefit analysis will be performed to determine the appropriate balance of staffing and throughput.

IMPACT TO MARKET

Overview of marketing approach

Because this initiative is internally focused, there are likely to be limited market impacts. Depending on the type of projects the Process Excellence function implements, customers may see improved customer service. Customer facing processes will be evaluated and assessed to ensure that any changes result in an improved customer experience.

Overview of market trends

Many other public power and investor owned utilities have long-standing process efficiency and process excellence business groups or functions. During the research and development phase of this initiative the team spoke with process excellence experts from McKinsey Consulting, Hess Corporation, and JEA who confirmed the widespread and established trend that process improvement/process excellence functions result in tangible and intangible value for those entities that adopt them. JEA (a public power company similar to

NYPA) noted time savings, cost savings, and improved public image that are directly attributable to their process excellence initiative.

JEA established their process efficiency group approximately 14 years ago, and it continues to provide benefit to the company. In total, JEA has a staff of approximately 2000 employees, of which 1750 are unionized. They have eight staff dedicated to process efficiency in their organization. JEA uses the Six Sigma methodology which has a colored belt system indicating the level mastery of the Six Sigma methods. JEA has nearly 100 black belt trained employees (not all are certified) and 200-300 green belt trained employees. All salaried employees are mandatory yellow belt trained, and union personnel are yellow belt trained on a voluntary basis.

NYPA's role in the market

While there are many consulting firms that can help develop or provide process efficiency or

improvement functions, the long-term success of the Process Excellence function depends on developing in-house capabilities. Based on the initiative team's research, the success or failure of the Process Excellence function will depend on the ability of the group to gain the trust of NYPA staff. Should the essential functions of the group be outsourced or left to consultants, its success will be limited and the timeframe in which success might be achieved elongated.

Expected impact on customer segments

The Process Excellence initiative is anticipated to have a moderate and positive impact on NYPA's customer segments. This initiative could lead to improved cycle times for billing, as well as improved resolution of customer concerns.

ORGANIZATIONAL IMPACT

Overall degree of change

To secure maximum benefits from the initiative, effective communication regarding the role of the Process Excellence team will need to accompany the establishment of the function at NYPA. The effort will focus on optimizing efficiency and supporting environmental improvement, emphasizing management support for the initiative and providing routes for two-way dialogue to embed the changes needed. The combination of these messages will help to reduce resistance to change by providing clarity about the rationale for the initiative and opportunities for employees to influence the scope of the initiative.

Comments

As specific processes are targeted for optimization, the group will assess the impact of change to the business unit(s) across several categories including process, technology, organization, and others.

Internal impact overview	
Business Unit	Description of impact
Internal Audits	Upon initially establishing the Process Excellence function, the group will reach out to Audits for audit information as needed. Upon completion of process improvement, it is expected that Audit findings will reflect improved process.
Business Services	As processes are evaluated for potential improvement, Business Services will likely be asked to assist with pertinent financial estimates as cost and cost savings estimates are calculated. The Office of Strategy Management will work with the Process Excellence function to establish meaningful metrics to help measure the success of the initiative.
Enterprise Shared Services	Dependent upon the initiative, the process selected for improvement could require support from ESS regarding potential HR impact or changes.
Law	As processes are evaluated, some could require legal advice prior to implementation.
Economic Dev. & Energy Efficiency	Impact in this area is expected, but the extent will be determined as specific process excellence projects are scoped.
Operations/ Transmission	Impact in this area is expected, but the extent will be determined as specific process excellence projects are scoped.
Governmental & Communications	As the Process Excellence function is embedded across the organization, we will ask the Communications group to help in sharing information regarding successes and impact on NYPA.

Required skills

The Process Excellence function will be comprised of three full-time staff, preferably including at least two qualified internal transfers. Each will have experience in improving processes and/or managing projects. The initiative budget includes costs for Lean and/or Six Sigma training. Also required are strong interpersonal and communication skills, as well as negotiation, facilitation, problem-solving, and analytic skills and experience. The process

excellence staff must have the ability to motivate team members, drive change, and facilitate problem-solving discussions. For each of the processes addressed by the process excellence approach, the team will receive support from SMEs working in the relevant business unit(s) who will bring project-specific expertise as well as acting as agents of change.

Skills overview			
Business Unit	Skills required	Current status	Suggested action
Business Services	Experience in process excellence approaches; excellent communication, facilitation, problem solving, analytic skills.	Existing	Train
IT	Experience in process excellence approaches; excellent communication, facilitation, problem solving, analytic skills.	Existing	Train
Change Agents	Process owners that can provide process-specific expertise and act as change agents	Existing	Train

Comments

Labor costs included in this business plan are based on compensation estimates provided by HR for the described skillset.

EXTERNAL STAKEHOLDER IMPACT AND MARKETING PLAN

External impact overview		
Stakeholder	Description of impact	Impact
Customer	Enhanced quality of services and interaction from/adopting NYPA's improved processes	Positive - Medium
Distribution Utilities	Ease of conducting business with NYPA	Positive - Medium
NYISO	Ease of executing bids, payment, scheduling	Positive - Medium
Transmission Operators	Ease of conducting business with NYPA, ease of integration with other TO's corporate processes, i.e. Transco	Positive - Medium
State Agencies	Aligns NYPA with the SAGE (Spending and Government Efficiency) program established by Governor Andrew Cuomo	Positive - Medium
Third Party Agencies	Vendors: negotiate process changes; neighboring community – positive impact of reduced environmental footprint	Positive - Medium

Description of marketing strategy

Because this initiative is internal, an external marketing strategy is unnecessary, but the following internal marketing/communication efforts will be undertaken:

- Kick-off event for the new business function. The event could feature a combination of presentations and workshops that would educate and engage staff around the Process Excellence initiative.
- Process Excellence function website with a process suggestion form, process excellence basics, training registration and research material. Success stories will be shared as the function matures.
- Quarterly newsletter, which details current projects, photos of process owners, and lessons learned

RISKS

Risks to NYPA as a result of implementing the initiative

Risk overview						
Category	Description	Probability	Impact	Suggested actions	Owner	Liaison
Financial	The benefits envisaged are not realized longer term	Low	Medium	Comprehensive analysis and ongoing monitoring	PE group Manager	TBD
Operational	Best practice process excellence is not maintained	Medium	Medium	Develop KPIs, monitor and revisit. Use best practice	PE group Manager	TBD
Operational	More processes are identified than are manageable by the Process Excellence function	High	Medium	Regular review to identify further candidate programs	PE group Manager	TBD