

2010

Baldrige National Quality Program



# NuGrain Laboratories Feedback Report

Revised for 2011 Examiner Training

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# NuGrain Laboratories Feedback Report

The *NuGrain Laboratories Feedback Report* was prepared for use in the 2010 Malcolm Baldrige National Quality Award Examiner Preparation Course. The report reflects the work of a team of experienced Baldrige Examiners who evaluated the *NuGrain Laboratories Case Study* using the Independent and Consensus Review process. The *NuGrain Laboratories Case Study* describes a fictitious government-owned, contractor-operated research laboratory. There is no connection between the fictitious NuGrain Laboratories and any other organization, either named NuGrain Laboratories or otherwise. Other organizations cited in the case study also are fictitious, except for several national and government organizations. Because the primary purpose of the case study is to provide learning opportunities for training Baldrige Examiners and others, there are areas in the case study where Criteria requirements purposely are not addressed.

NuGrain Laboratories scored in band 5 for both Process and Results Items. An organization in band 5 for Process Items typically demonstrates effective, systematic, well-deployed approaches responsive to the overall requirements of most Criteria Items. The organization demonstrates a fact-based, systematic evaluation and improvement process and organizational learning, including innovation, that result in improving the effectiveness and efficiency of key processes. For an organization that scores in band 5 for Results Items, results typically address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization's mission. Performance projections for some high-priority areas are reported.

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**Baldrige National Quality Program**  
National Institute of Standards and Technology • Department of Commerce

October 27, 2010

Ms. Celia Valasquez  
Chief Operations Officer  
NuGrain Laboratories for Strategic Agricultural Research  
Kearney, NE 68848

Dear Ms. Valasquez:

Congratulations for taking the Baldrige challenge! We commend you for your commitment to performance excellence and applying for the Malcolm Baldrige National Quality Award. This feedback report was prepared for your organization by members of the Board of Examiners in response to your application for the 2010 Malcolm Baldrige National Quality Award. It presents an outline of the scoring for your organization and describes areas identified as strengths and opportunities for possible improvement. The report contains the Examiners' observations about your organization, although it is not intended to prescribe a specific course of action. Please refer to "Preparing to Read Your Feedback Report" for further details about how to use the information contained in your feedback report.

We are eager to ensure that the comments in the report are clear to you so that you can incorporate the feedback into your planning process to continue to improve your organization. As direct communication between Examiners and applicants is not permitted, please contact me at (301) 975-2360 if you wish to clarify the meaning of any comment in your report. We will contact the Examiners for clarification and convey their intentions to you.

The feedback report is not your only source for ideas about organizational improvement. Current and previous Award recipients can be potential resources on your continuing journey to performance excellence. A contact list of Award recipients is enclosed. The 2010 recipients will share their stories at our annual Quest for Excellence Conference, April 3–6, 2011. Current and previous recipients participate in our regional conferences as well. Information about these events and other Baldrige Program-related activities can be found on our Web site at [www.nist.gov/baldrige](http://www.nist.gov/baldrige).

In approximately 30 days, you will receive a customer satisfaction survey from the Panel of Judges. As an applicant, you are uniquely qualified to provide an effective evaluation of the materials and processes that we use in administering the Award Program. Please help us continue to improve the program by completing and returning this survey.

Thank you for your participation in the Baldrige Award process. Best wishes for continued success with your performance excellence journey.

Sincerely,

Harry S. Hertz, Director  
Baldrige National Quality Program

Enclosures

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*The economic environment is difficult for Cargill Corn Milling, as it is difficult for many manufacturing companies today. But ... by utilizing the processes and tools that we've learned from Baldrige, we're able to not only meet these challenges but actually excel in them.*

*Alan Willets, President and Business Unit Leader  
Cargill Corn Milling  
2008 Baldrige Award Recipient*

### **Preparing to read your feedback report . . .**

Your feedback report contains Baldrige Examiners' observations based on their understanding of your organization. The Examiner team has provided comments on your organization's strengths and opportunities for improvement relative to the Baldrige Criteria. The feedback is not intended to be comprehensive or prescriptive. It will tell you where Examiners think you have important strengths to celebrate and where they think key improvement opportunities exist. The feedback will not necessarily cover every requirement of the Criteria, nor will it say specifically how you should address these opportunities. You will decide what is most important to your organization and how best to address the opportunities.

If your organization last applied before 2008, you may notice a slight change in the report. Key themes, which serve as an overview or executive summary of the report, comprise four sections rather than three: (a) Process Item strengths, (b) Process Item opportunities for improvement, (c) Results Item strengths, and (d) Results Item opportunities for improvement. In addition, each 2010 feedback report includes a graph in Appendix A that shows your organization's scoring profile compared to the median scores for all 2010 applicants.

Applicant organizations understand and respond to feedback comments in different ways. To make the feedback most useful to you, we've gathered the following tips and practices from prior applicants for you to consider.

- Take a deep breath and approach your Baldrige feedback with an open mind. You applied to get the feedback. Read it, take time to digest it, and read it again.
- Especially note comments in **boldface type**. These comments indicate observations that the Examiner team found particularly important—strengths or opportunities for improvement that the team felt had substantial impact on your organization's performance practices, capabilities, or results and, therefore, had more influence on the team's scoring of that particular Item.
- You know your organization better than the Examiners know it. If the Examiners have misread your application or misunderstood information contained in the application, don't discount the whole feedback report. Consider the other comments, and focus on the most important ones.

- Celebrate your strengths and build on them to achieve world-class performance and a competitive advantage. You've worked hard and should congratulate yourselves.
- Use your strength comments as a foundation to improve the things you do well. Sharing those things you do well with the rest of your organization can speed organizational learning.
- Prioritize your opportunities for improvement. You can't do everything at once. Think about what's most important for your organization at this time, and decide which things to work on first.
- Use the feedback as input to your strategic planning process. Focus on the strengths and opportunities for improvement that have an impact on your strategic goals and objectives.

*The real value in applying for this Award is in the rigorous evaluation process. The constructive feedback from Baldrige helps us improve the way we do business.*

*Mike Levinson, City Manager  
City of Coral Springs  
2007 Baldrige Award Recipient*

*The Baldrige Award application process has provided our company with many learning and continuous improvement opportunities, making Pro-Tec better for the endeavor.*

*W. Paul Worstell, President  
Pro-Tec Coating Company  
2007 Baldrige Award Recipient*



## KEY THEMES

### Key Themes—Process Items

NuGrain Laboratories for Strategic Agricultural Research (NuGrain) scored in band 5 for Process Items (1.1–6.2) in the Consensus Review of written applications for the Malcolm Baldrige National Quality Award. For an explanation of the process scoring bands, please refer to Figure 6a, Process Scoring Band Descriptors.

An organization in band 5 for Process Items typically demonstrates effective, systematic, well-deployed approaches responsive to the overall requirements of most Criteria Items. The organization demonstrates a fact-based, systematic evaluation and improvement process and organizational learning, including innovation, that result in improving the effectiveness and efficiency of key processes.

**a. The most important strengths or outstanding practices (of potential value to other organizations) identified in NuGrain’s response to Process Items are as follows:**

- NuGrain leverages its core competencies of systematic agricultural research, Process Portfolio Management, and Research Portfolio Management (Figure 6.1-1) to optimize the long-term life-cycle management of agricultural research contracts. Each strategic objective is aligned with a core competency. The Work System Design Process (Figure 6.1-2) and Stage-Gate Process (Figure 6.2-1) support the core competencies while integrating customers’ and expectations into key process and work system design. This integrated approach demonstrates NuGrain’s focus on efficient and effective processes.
- NuGrain demonstrates management by fact through its approaches for data measurement, analysis, and use; the Measure Selection Process; and a schedule of organizational performance reviews aligned with contract, strategic, and other business needs (Figure 4.1-3). An example of how NuGrain translates data into meaningful information is senior leaders’ (SLs’) use of a scorecard to monitor progress on research projects and programs and the Strategic Plan. During strategy development, the Metrics Infrastructure Group (MIG) collects and aggregates data for the environmental scan. R-37 survey data are used both to identify potential products for customers and in the development of Requests for Proposals. These processes allow NuGrain to improve organizational performance, incorporate learning into current processes, and build on strong business practices that provide systematic, repeatable results in business management.
- NuGrain focuses on customer-driven excellence by designing and improving systematic processes. For example, NuGrain determines key customer requirements through the voice-of-the-customer (VOC) approach, ensures a focus on customer requirements with the Performance Evaluation Plan (PEP), develops staff capability to engage customers via Touch Point training, incorporates input from customers and partners into the Strategic Planning Process (SPP), and addresses customer dissatisfaction with the complaint process and Irritant Program. These approaches support NuGrain’s customer-focused

culture and align with its excellent and sustainable relationships with customers, suppliers, partners, and collaborators.

- NuGrain’s well-executed approach to organizational learning includes continuous improvement of processes. For example, the Senior Leader Communication Plan has been refined to include daily rounding with employees and the collection of topics and questions before Hoedown Sessions. The SPP is evaluated annually, and improvements include the revision of planning horizons, the introduction of the Strategic Alignment Document, and the formation of the MIG. The Product and Service Offering Process (PSOP), the VOC Process, workforce engagement and communication processes, and approaches to improve work processes have all benefited from learning. By assessing and refining approaches important to its success, NuGrain supports its cultural focus of identifying problems, innovating solutions, and improving performance results.

**b. The most significant opportunities, concerns, or vulnerabilities identified in NuGrain’s response to Process Items are as follows:**

- NuGrain appears to have some gaps in deploying approaches to engage customers and stakeholders. For example, it is not evident that potential customers on the Product and Service Offering Committee (PSOC) include representatives from diverse geographies and market segments. The Irritant Program does not appear to be deployed to all relevant customer/partner groups, and Touch Point training does not appear to be individualized to meet customers and stakeholders’ varying requirements. The PEP Negotiation Process does not appear to be deployed to government agencies other than the U.S. Department of Agriculture (USDA) and the Work for Others (WFO) program managers. Finally, it is not clear how NuGrain deploys work process management approaches to partners and collaborators. Without full deployment, NuGrain may limit its ability to leverage its excellent and sustainable relationships with customers, suppliers, partners, and collaborators.
- It is not clear that NuGrain uses systematic processes to determine organizational goals, performance projections, or comparative data. The Strategic Alignment Document (Figure 2.2-1) does not include goals, and it is not evident how NuGrain chose the projections in this document and in results data. Additionally, it is not clear how the Comparative Data Selection Process ensures the effective use of comparative data or supports top-box comparisons and innovation. Systematic processes in these areas may help NuGrain achieve exceptional performance and become the premier government-owned laboratory.
- NuGrain does not appear to deploy several operational processes to all relevant workforce segments and geographic sites. For example, it is not clear whether workforce members in all types of jobs (e.g., scientists, farm operations staff) at all locations participate in volunteer activities. In addition, it is not clear that the four methods used to improve work processes are deployed to all sites and workforce segments. Also, it is unclear whether NuGrain deploys succession planning and career progression processes to all workforce members, including scientists in highly technical, specialized areas, and whether the Engagement of Workforce Assessment (EWA) differs across workforce segments.

Without fully deploying these processes, NuGrain may miss opportunities to engage the entire workforce and demonstrate leadership in the communities it serves.

### **Key Themes—Results Items**

NuGrain scored in band 5 for Results Items (7.1–7.6). For an explanation of the results scoring bands, please refer to Figure 6b, Results Scoring Band Descriptors.

For an organization in band 5 for Results Items, results typically address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization's mission. Performance projections for some high-priority areas are reported.

#### **c. Considering NuGrain's key business/organization factors, the most significant strengths found in response to Results Items are as follows:**

- NuGrain reports favorable process effectiveness outcomes aligned with the key customer requirements of reduced cycle times and effective program execution. For example, Research Total Cycle Time (Figure 7.5-1) and External Peer Review Scores (Figure 7.5-2) show improvement in strategic thrust areas and overall, with performance equaling or outperforming that of the best competitor since 2005 and 2006, respectively. The Process Management Efficiency Ratio (Figure 7.5-4) improved from about 100 to approximately 1,700, with performance equal to or better than the best competitor's in the last two years. Over four years, Idea Well suggestions and implementations (Figure 7.5-16) increased from 586 to 1,129 and from 92 to 564, respectively. These results indicate NuGrain's success in building on its success factors of cycle time to bring research opportunities to commercialized use and strong business practices.
- Several product and financial outcomes demonstrate beneficial trends and favorable comparisons. Examples are the percentage of Incentive Award Fees Earned (Figure 7.1-2), which almost doubled between 2003 and 2009 and exceeded the performance of the best USDA competitor each year, and the number of patents awarded for 2009 (Figure 7.1-3), which was more than four times the 2003 level and 17 percent above the best competitor's level. From 2003 to 2009, the value increase for Crop Yields (Figure 7.1-5) improved and outperformed the best competitor each year. Also, Funding Growth (Figure 7.3-1) improved steadily from \$20 million in 1997 to \$2.4 billion in 2009, surpassing the top two competitors. From 2003 to 2009, funding from other government agencies and the WFO program rose from zero to over 20 percent and about 8 percent, respectively (Figure 7.3-5). These results indicate success in addressing the strategic challenges of uncertain funding and competition with other contractors.
- Several customer-focused and workforce-focused results support NuGrain's success factor of attracting the brightest minds by addressing the opportunity to grow and learn, as well as other workforce engagement and satisfaction factors. USDA satisfaction with research program elements and with research project elements (Figures 7.2-1 and 7.2-2)

improved significantly from 2005, when scores ranged from 75 to 80, to 2009, with scores that range from 86 to 95. Engagement results overall and by segment (Figures 7.4-1 through 7.4-3) show improvement for all segments from 2005 to 2009, with the 2009 overall score exceeding the best peer comparison. During the same period, results for Engagement on Elements of Organizational Health (Figure 7.4-4) improved to 4.0 or higher (on a 5-point scale) for all seven elements, with six equaling or surpassing the best peer's score. Also, NuGrain's Training Effectiveness by Assessment Level (Figure 7.4-8B) has been better than the best competitor's results since 2007 and steadily improved for each level over four years.

**d. Considering NuGrain's key business/organization factors, the most significant opportunities, vulnerabilities, and/or gaps (related to data, comparisons, linkages) found in response to Results Items are as follows:**

- NuGrain is missing results in several areas. Examples are results for the strategic thrust areas of enhancing the taste of healthier products; new or more useful products from plants, including fiber-conversion products; and fertilization in different growing environments. In addition, NuGrain does not present results for its core competency of specialized research competencies, such as corn or wheat enhancements from gene engineering or crop nanotechnology, or results related to the ability to engage in high-risk research. Results are not provided for measures of engagement and loyalty of the agricultural and scientific communities. Likewise, NuGrain does not report results for the workforce engagement and satisfaction factors of scientific freedom, access to state-of-the-art technology, the opportunity to publish and present, tools to do the job, work experience while in school, job security, challenging and meaningful work, effective support processes, flexible hours, and adequate staffing.
- Comparisons are not provided for results related to the satisfaction of the scientific and agricultural communities, collaborating universities, or students (Figures 7.2-6 through 7.2-9) or for measures of fiscal accountability (Figure 7.6-2), regulatory and legal findings (Figure 7.6-3), and ethical behavior (Figure 7.6-4). In addition, some comparisons may not support NuGrain's vision to be the premier government-owned laboratory system. For example, comparisons for the number of articles published relative to USDA competitors (Figure 7.1-4) do not take into account the many laboratories outside the agricultural industry. Similarly, several financial results, such as Overall Performance to Budget (Figure 7.3-2) and Project Overhead Costs (Figure 7.3-6), are compared only to those of a very limited number of competitors. NuGrain may not be able to maintain its strategic advantage of strong results without robust and appropriate comparative data.

## DETAILS OF STRENGTHS AND OPPORTUNITIES FOR IMPROVEMENT

### Category 1 Leadership

#### 1.1 Senior Leadership

Your score in this Criteria Item for the Consensus Review is in the 70–85 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- a(1) The Leadership Integration Model (Figure 1.1-1) provides a systems approach to leadership that places NuGrain’s mission at the center of all leadership activities. The mission, vision, and values (MVV), which are reviewed and updated in the SPP, are posted in common areas, as well as being reinforced at new employee orientation and Hoedown Sessions.
- a(2) Based on the value of demonstrating integrity, SLs sign the Code of Conduct annually and provide personal examples of ethical business conduct. After a review in 2006, SLs began conducting an annual webcast for the workforce and partners to review the USDA Ethics Report, identify new legal requirements, and role-play case studies.
- b(1) The Senior Leader Communication Plan and reward and recognition methods support “practice[ing] open and honest communication ... and reinforce[ing] a culture of high performance.” The plan notes the means and frequencies of communications with the workforce (Figure 1.1-3), customers, and stakeholders. Recent additions are daily rounding with employees and the solicitation of Hoedown Session topics and questions.
- a(3) Innovation of processes is part of NuGrain’s culture. SLs personally participate in the SPP, action planning, the Process Design Process (PDP), and the Stage-Gate Process to ensure a focus on innovation. Additionally, partner agreements contain measurable outcomes for new approaches, and three workforce awards are given for innovation. Furthermore, benchmarks built into data analysis challenge NuGrain’s workforce to use innovation to exceed competitors’ performance.

#### OPPORTUNITIES FOR IMPROVEMENT

- b(2) It is not evident that NuGrain balances value for all customers and stakeholders. For example, customer relationship development does not appear to consider newer research funding customers, and action planning does not appear to address university partnership opportunities outside Nebraska Free University (NFU). These apparent gaps may limit NuGrain in maintaining sustainable relationships with customers and partners.
- a(3) Leaders do not appear to have a systematic approach for developing and enhancing their personal leadership skills or developing future leaders in a variety of workforce segments, such as scientific researchers with specialized expertise and employees who are primary contacts with key partners. This may limit NuGrain’s sustainability.

## 1.2 Governance and Societal Responsibilities

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

### STRENGTHS

- a(1) NuGrain’s governance system includes internal and external controls. SLs are accountable to the NFU Board of Trustees (BOT) and chancellor, and NuGrain’s director meets quarterly with the chancellor and the USDA Director of Strategic Research. Random monthly internal audits, an annual external audit, and piloting of federal standards ensure fiscal accountability and independence in audits. In addition, any stakeholder may view the results of performance review meetings.
- b(2) Ethical and legal behavior is an organizational expectation for all staff members and partners, as evidenced by NuGrain’s ethics processes, measures, and goals (Figure 1.2-2). NuGrain has begun sharing audit findings and scenarios with SLs and the workforce for use in understanding and recognizing ethics issues. NFU and partner/supplier agreements include the Code of Ethics.
- b(1), c(1) NuGrain demonstrates “respect [for] the land and the people who use it” in systematically addressing its societal responsibilities and reducing potential adverse environmental impacts. For example, NuGrain identifies compliance and societal risks via environmental impact statements and risk management plans (Figure 6.1-4), and feedback gathered at annual public meetings is input for the environmental scan portion of the SPP.
- a(2) The performance of all SLs is evaluated annually; the BOT conducts its own annual self-assessment to identify opportunities for improvement. Based on the results and strategic plan input, an annual leadership development plan is created.

### OPPORTUNITIES FOR IMPROVEMENT

- a(1) NuGrain does not appear to comprehensively deploy its mechanisms for protecting stakeholder interests to industry partners, universities other than NFU, and non-USDA funding agencies. These mechanisms include restriction of gifts, specifications for selection of suppliers, and compliance with hiring laws.
- c(2) It is not evident that all workforce components at all locations participate in efforts to strengthen key communities. For example, it is not clear how many scientists participate, whether staff members use their 24-hour allotment for voluntarism, or whether students participate in voluntarism that might support learning and growth, such as science fairs or partnerships with universities.

## Category 2 Strategic Planning

### 2.1 Strategy Development

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- **a(1) NuGrain’s annual, 12-step strategic planning process supports its relationships with customers, partners, suppliers, and collaborators, all of whom participate (Figure 2.1-1). Short-term planning allows rapid adjustment to changes, and the long-term horizon aligns with research timelines and stretches beyond the USDA contract. After one annual evaluation, NuGrain developed a logical thought model for the strategic plan (Figure 2.2-1).**
- a(2) To ensure that the SPP addresses various key factors, the MIG collects data and information for analysis by SLs before the planning retreat (see Figure 2.1-2), which includes a SWOT analysis. The budget, human resources, and information technology (IT) plans are aligned with the Strategic Plan, and progress is closely monitored throughout the year to allow modification of action plans as needed.
- b(1, 2) NuGrain’s strategic objectives (Figure 2.2-1) are aligned to its core competencies, strategic challenges, and strategic advantages. NuGrain considers input from all stakeholder groups and includes representatives from industry and the agricultural community in the strategic planning retreat. Each objective has associated key measures, short-term action plans, and short- and longer-term projections, with some best-in-class or competitors’ projections also included.

#### OPPORTUNITIES FOR IMPROVEMENT

- b(1) NuGrain does not present goals for its strategic objectives (Figure 2.2-1). Setting goals may help NuGrain gauge its success in achieving these strategic objectives and clarify the status of the related advantages and challenges.
- b(2) It is not evident how NuGrain’s strategic objectives balance short- and longer-term challenges and opportunities or address future core competencies. This lack of balance may make it difficult to ensure organizational sustainability in light of uncertain funding, changing contract performance requirements, and increased competition with other contractors.

## 2.2 Strategy Deployment

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## Category 3 Customer Focus

### 3.1 Customer Engagement

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- a(1) Through the Product and Service Offering Process (PSOP; Figure 3.1-1), a component within the Research Portfolio Management Work System (Figure 6.1-1), NuGrain incorporates and translates the VOC into research product features. Recently, industry partners and farmers were added to the committee overseeing the process.
- b(1) NuGrain's approaches to building a customer culture support its excellent, sustainable relationships with customers. For example, Touch Point training, instituted in 2007, provides the workforce with tools for seeking information from and serving customers, and Innovation Service Now (ISN) collects and analyzes over 1,000 customer service ideas per year from the workforce.
- a(2) Through its support and communication mechanisms (Figure 3.1-2) and VOC Process, NuGrain expands relationships with customers and stakeholders. Data gathered from the VOC Process (Figure 3.2-1) are used for organizational learning and integrated into the SPP, and the resulting requirements are deployed through meetings, Hoedown Sessions, and Touch Point training.

#### OPPORTUNITIES FOR IMPROVEMENT

- a(1) It is not clear whether the potential customers represented on the PSOC include representatives from diverse geographies and market segments or how NuGrain uses their input or other methods to attract new customers. This potential gap may hinder NuGrain's efforts toward new and useful product development.
- a(2) It is unclear how Touch Point training is individualized to meet the varying communication needs of customers and other stakeholders. As a result, NuGrain may be missing opportunities to enhance its relationships with customers, suppliers, partners, and collaborators.

### 3.2 Voice of the Customer

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range.  
(Please refer to Figure 5a, Scoring Guidelines for Process Items.)

In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## Category 4 Measurement, Analysis, and Knowledge Management

### 4.1 Measurement, Analysis, and Improvement of Organizational Performance

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- a(1) NuGrain's performance measurement system (Figures 4.1-1 and 4.1-2) cascades data and information throughout the organization through the contract process, the Performance Evaluation Plan (PEP), programs, processes, action plans, and departments. Among other refinements, comprehensive portfolio management capabilities were added to the Project Learning and Analysis Tool System (PLANTS) in 2007.
- b NuGrain's organizational performance reviews (Figure 4.1-3) are aligned with contract, strategic, and other business needs. Reviews at all workforce levels track progress on strategic objectives and action plans, research projects, and process improvement projects. Leaders at multiple levels review indicators and other measures monthly.
- c A database within PLANTS allows NuGrain to translate performance review findings into action plans, set priorities, and deploy the plans. The SLT reviews data aggregated by priorities, enabling it to set priorities based on a global review, and a special PLANTS report informs partners, suppliers, and collaborators of improvement priorities.

#### OPPORTUNITIES FOR IMPROVEMENT

- a(2) It is not clear how the Comparative Data Selection Process and Measure Selection Process (Figure 4.1-1) govern the selection and use of comparative data or support top-box comparisons and innovation. This may limit NuGrain in gauging its success relative to the industry and competitors.
- a(3) It is not clear how the Process Management Process (PMP) ensures that the performance management system is sensitive to rapid or unexpected changes or how NuGrain evaluates performance analysis and review approaches. Without an agile measurement system, NuGrain may have difficulty overcoming competition with other contractors and adjusting to changing contract performance requirements.
- b NuGrain's organizational performance reviews (Figure 4.1-3) do not appear to cover cycle time for research, efficient farming, relationships, and participation in the community, all of which NuGrain has identified as key to its success.

## 4.2 Management of Information, Knowledge, and Information Technology

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## Category 5 Workforce Focus

### 5.1 Workforce Engagement

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- a(2) NuGrain encourages open communication and respect for diverse opinions across the organization. For example, teams review suggestions submitted to the Idea Wells, implement quick wins, and pass on more complex ideas for implementation. In addition to existing cross-discipline forums, recently initiated communities of interest and discussion groups communicate across the organization through the Internet and intranet.
- b(2) NuGrain's learning and development system demonstrates a commitment to organizational and individual learning. In addition to shadowing or cross-training with retiring employees, programs are developed to address gaps identified in workforce performance plans, and an extensive computer-based training library supports self-identified training needs and career development.
- b(4) The WPM Process and Work System Design Process (Figure 6.1-2) align workforce development and career progression with strategic objectives and provide efficient, effective processes for workforce and leader development. The Succession Planning Process (Figure 5.1-3) managed at each site is linked to the organization's strategies and the Human Resource Plan.

#### OPPORTUNITIES FOR IMPROVEMENT

- b(4) It is not clear how the WPM Process, Work System Design Process, and Succession Planning Process (Figure 5.1-3) manage effective career progression for fellows, junior and senior scientists, and expert scientists in fields such as gene splicing and natural-based fuels. The lack of such an approach may affect NuGrain's sustainability.
- c(1) The Employee Workforce Assessment (EWA) and other informal processes do not appear to differ for NuGrain's workforce segments, and it is not clear whether the EWA has been improved since 2000. Without cycles of improvement and assessments tailored to different workforce segments, NuGrain may miss information that may help retain a high-quality workforce.

## 5.2 Workforce Environment

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## Category 6 Process Management

### 6.1 Work Systems

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

#### STRENGTHS

- NuGrain’s Work System Design Process (Figure 6.1-2) supports efforts toward strong business practices that provide systematic, repeatable results in business management. Using a process salience scoring matrix, NuGrain has outsourced several non-key processes over the years, resulting in significant cost savings and reducing the number of key work processes by 40 percent.
- a(2) NuGrain capitalizes on its core competencies, deploying them to its key processes (Figure 6.1-3). For example, core competencies are embedded in key work processes and job descriptions, and are built into education, training, and performance plans.
- c NuGrain’s site emergency plans, which are updated and reapproved annually in the SPP, ensure workplace preparedness for disasters and emergencies. Annual performance review and improvement workshops have resulted in, for example, an electronic hazardous material inventory.
- b(1, 2) By identifying and classifying 22 key processes that contribute to organizational success, financial return, and customer value (Figure 6.1-4), NuGrain ties program and project deliverables to its annual contract performance ratings and award fee. Process teams that include suppliers, partners, and collaborators, as appropriate, formally document each process.

#### OPPORTUNITIES FOR IMPROVEMENT

- **c It is not clear whether NuGrain’s site emergency plans address continuity of operations in the event of natural disasters, such as fires, floods, tornadoes, and blizzards. This may be particularly important since NuGrain operates in four diverse geographic areas.**
- b(1) It is not evident that NuGrain’s program leads engage WFO program managers and government agency program managers other than those at USDA (Figure P.1-6) during the annual PEP Negotiation Process or through other approaches. Such engagement may be particularly important since these customer groups contribute 30 percent of NuGrain’s funding.

## 6.2 Work Processes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## Category 7 Results

### 7.1 Product Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

#### STRENGTHS

- **a Several product performance results demonstrate that NuGrain meets the USDA customer’s requirements. Examples are the percentage of incentive award fees earned (Figure 7.1-2) and the number of patents awarded (Figure 7.1-3). In both measures, results have improved over the periods shown and exceed those of the best competitor.**
- a NuGrain’s results for savings through reduced fertilizer and pesticide use meet a requirement of the agricultural community market segment. The value increases for Crop Yields (Figure 7.1-5), savings on Fertilizer and Pesticide Usage, and Soil Erosion (Figure 7.1-7) all improved over the periods shown and have compared favorably with the best competitor’s results since 2006.

#### OPPORTUNITIES FOR IMPROVEMENT

- **a NuGrain does not provide results for some strategic thrust areas (i.e., enhancing the taste of healthier products, new or more useful products from plants, and fertilization in different growing environments); specialized research competencies (such as corn or wheat enhancements or crop nanotechnology); or engagement in high-risk research. Such results may help NuGrain build its competitive position in an uncertain funding environment.**
- a Segmentation of results is limited. For example, results for patents (Figure 7.1-3) are not segmented by strategic thrust area, and results for Efficient and Precision Farming (Figures 7.1-5, 7.1-6, and 7.1-7) are not segmented by growing area. Such segmentation may reveal progress on research programs and outcomes in different growing areas.
- a Most product results are compared to those of competitors rather than to best-in-class benchmarks. For example, Published Articles (Figure 7.1-4) does not include comparisons with laboratories outside the USDA realm. Increased use of best-in-class comparative data could increase NuGrain’s opportunities to adopt best practices and innovate.

## 7.2 Customer-Focused Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

### STRENGTHS

- a(1) Several results for customer satisfaction support the vision to be the premier government-owned laboratory system. Ten measures related to USDA satisfaction (Figures 7.2-1 and 7.2-2) show significant improvement over the periods shown. In 2009, NuGrain outperformed two key competitors in all ten measures, and it equaled the best R37 score in six of the measures.
- a(2) Results for customer loyalty evidence NuGrain's likelihood of a continuing relationship with USDA and other agencies. Over the periods shown, the USDA's likelihood to renew NuGrain's contract and to contract for additional research both increased, bettered the top competitor's results, and equaled or approached the best score (Figure 7.2-11). Other government agencies' and WFOs' likelihood to contract also increased over the periods shown (Figure 7.2-12).
- a(2) For all three of its customer groups, NuGrain demonstrates strong and improving results for engagement through the customer life cycle (Figure 7.2-13) and for the effectiveness of its engagement methods (Figure 7.2-14).

### OPPORTUNITIES FOR IMPROVEMENT

- a(1) NuGrain presents limited comparisons for its customer satisfaction results, such as the satisfaction of the scientific and agricultural communities, collaborating universities, or students (Figures 7.2-6 through 7.2-9). Without comparatives, NuGrain may have difficulty assessing its progress in addressing its uncertain funding environment and increasing competition.
- a(1) Results are missing for in-process measures of customer and stakeholder dissatisfaction, such as the Irritant Program. Without such measures, NuGrain may miss opportunities for higher levels of organizational performance and customer loyalty.
- a(2) NuGrain does not report results for the engagement and loyalty of the agricultural or scientific communities or of individual organizations within non-USDA government agencies and WFOs. Such results may help NuGrain build key relationships with organizations that influence long-term sustainability.

### 7.3 Financial and Market Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

#### STRENGTHS

- a(1) NuGrain shows strong, steady funding growth over more than 10 years (Figure 7.3-1) and surpassed the growth of two key competitors in 2008 and 2009. Additionally, growth in funding from other government agencies and the WFO program (Figure 7.3-5) reflects efforts to address uncertain funding and dependence on a single main source.
- a(1) NuGrain demonstrates positive results for financial measures tied to the strategic challenges of the high cost of entry into new research programs and competition with other contractors. NuGrain consistently performs below budget (Figure 7.3-2), and Project Overhead Costs (Figure 7.3-6) steadily improved over six years, outperforming a key competitor since 2007.
- a(2) Aligned with the vision to be the premier government-owned laboratory system, NuGrain's share of USDA government-owned, contractor-operated (GOCO) research (Figure 7.3-9) and its share of USDA overall research steadily increased over four years, despite declines in USDA funding. In these measures, NuGrain's shares have equaled or bettered two competitors' since 2008.

#### OPPORTUNITIES FOR IMPROVEMENT

- a(1) Results for measures of financial performance contain data for only a few of NuGrain's competitors and no other comparisons or benchmarks. For example, Figures 7.3-1, 7.3-2, and 7.3-7 report results for only two competitors. Without tracking the results of key competitors and other comparisons, NuGrain may have an inaccurate picture of its performance.
- a(1, 2) NuGrain does not report results for the value of patents, funding for high-risk research, or the Foundation's performance. Additionally, NuGrain does not report marketplace performance for its funding community market segment, other than the USDA. Tracking these measures may give NuGrain an accurate picture of its position in light of competition with other contractors and uncertain funding.
- a(1, 2) It is unclear whether NuGrain's projected overall funding growth of 67 percent (Figure 7.3-1) is supported by projections of growth from separate funding sources (Figure 7.3-5), since performance to budget and market share (Figures 7.3-2, 7.3-9, and 7.3-10) are projected as relatively stable. Without justified projections, NuGrain may not be able to overcome the challenge of uncertain funding.

## 7.4 Workforce-Focused Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

### STRENGTHS

- **a(1) NuGrain reports good results for some workforce motivation and satisfaction factors. Engagement results (Figures 7.4-1 through 7.4-4) improved for all segments over four years, with NuGrain outperforming the best peer in nearly all measures. Workforce Satisfaction (Figure 7.4-5) improved during the same period on three of five measures.**
- a(4) Significant improvement in the number and severity of incidents over the past six years reflects NuGrain's focus on safety excellence. Total Recordable Cases (Figure 7.4-12) equaled the best competitor's results and exceeded the Occupational Safety and Health Administration (OSHA) 80th percentile in 2009; Days Away/Restricted Time (Figure 7.4-13) and Reported Incidents (Figure 7.4-14) also improved.
- a(3) The number of interns remaining with NuGrain or staying in the industry has been increasing since 2005 (Figure 7.4-10), indicating success in addressing the declining number of agricultural graduates. In contrast, two competitors have seen a decrease in this measure.
- a(3) Capability and capacity results show improvement in meeting the workforce satisfaction factors of career support and adequate staffing. For example, training effectiveness (Figure 7.4-8B) steadily improved for each level over four years and has outperformed the best competitor's results since 2007. Turnover (Figure 7.4-11) improved for most workforce segments, outperforming NuGrain's key competitor's results.

### OPPORTUNITIES FOR IMPROVEMENT

- **a(1) NuGrain does not report results for the engagement and satisfaction measures of scientific freedom, access to state-of-the-art technology, and opportunity to publish and present, among others (Figure P.1-4). This gap may make it more difficult to attract the brightest minds in agricultural science and technology.**
- a(2) Results for training (Figures 7.4-6 and Figure 7.4-7) do not appear to indicate the overall development of employees, especially leaders, and are not segmented by job types and locations. Results in these areas may help NuGrain assess whether it is affording all employees the opportunity to grow and learn.

## 7.5 Process Effectiveness Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

### STRENGTHS

- a(1, 2) NuGrain demonstrates that it is reducing cycle times (Figures 7.5-1, 7.5-7, and 7.5-8, 7.5-9, and 7.5-15). On all measures, NuGrain improved over four- or five-year periods and outperformed the best competitor or best-in-class comparison.
- a(1) NuGrain shows success in effective program execution. For example, External Peer Review Scores (Figure 7.5-2) improved for all strategic thrust areas and overall from 2003 to 2009, equaling or outperforming the best competitor's scores since 2006. Over the same period, Stage-Gate Approval Rate (Figure 7.5-3) and Process Management Efficiency Ratio (Figure 7.5-4) also improved.
- a(2) NuGrain also demonstrates success in increasing efficiency and lowering costs. For example, Total Project Cost vs. Baseline Project Cost (Figure 7.5-10) remained within the “good” range over the five years shown, while the best competitor's ratio was outside this range for three of those years.
- a(2) Suggestions and implementations from the Idea Well, a key part of NuGrain's performance improvement system throughout the organization, both increased from 2005 to 2009. Submissions increased from 586 to 1,129, and implementations grew from 92 to 564 (Figure 7.5-16).

### OPPORTUNITIES FOR IMPROVEMENT

- a(1) NuGrain reports few results for overall work system effectiveness, such as results for the effectiveness of the Information Management Contingency and Disaster Recovery Process, several processes performed by suppliers and partners, or the requirements of key suppliers (Figure P.1-7). The absence of these results may limit NuGrain's overall work system efforts.
- a(1, 2) Results for several process effectiveness measures do not support the vision of being the premier government-owned laboratory system. For example, the percentage of milestones delivered on time (Figure 7.5-11) remains below the performance level of the best GOCO, and Commercialization Process Performance (Figure 7.5-13) is equal to the national research laboratory average.

## 7.6 Leadership Outcomes

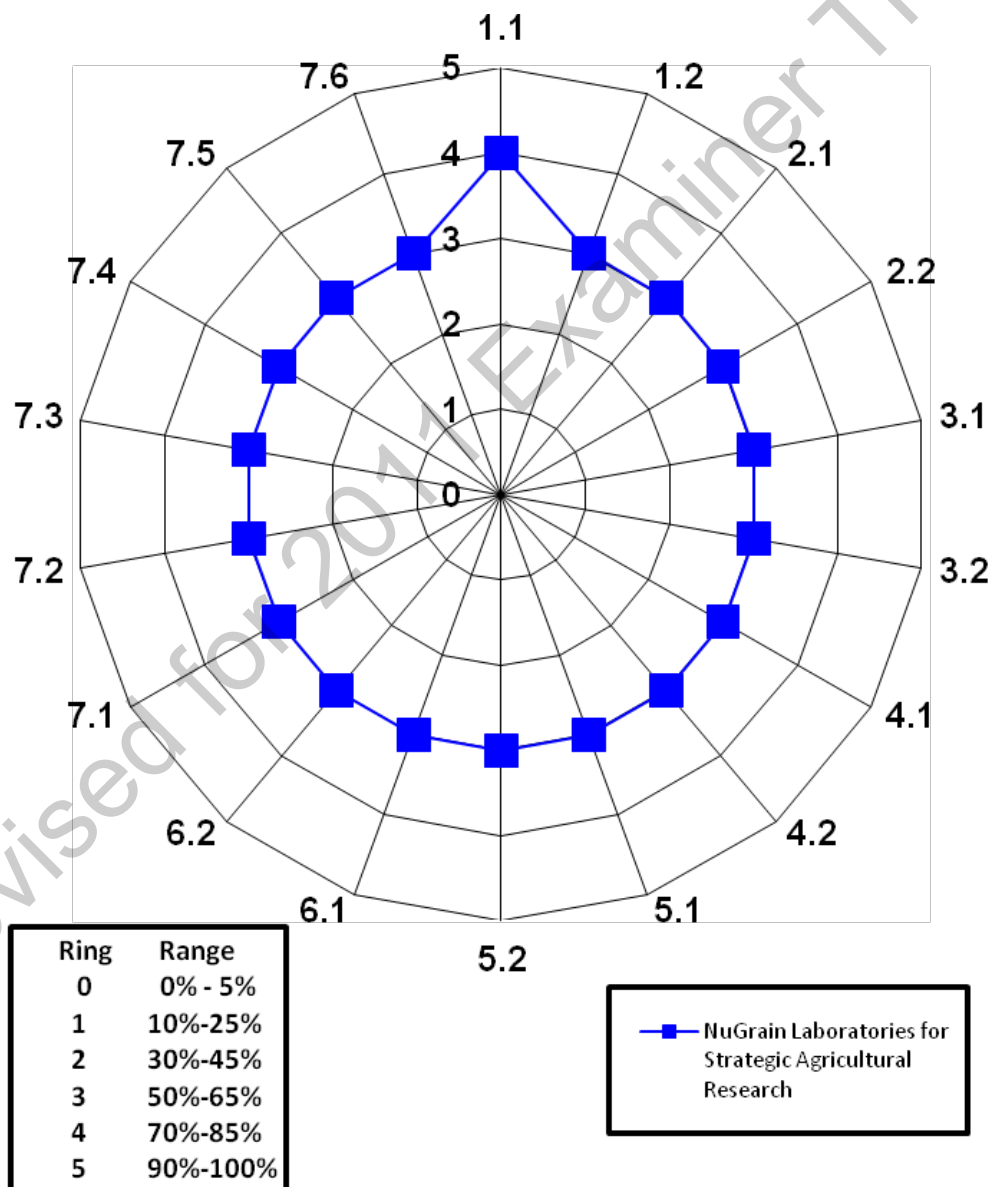
In the full feedback report, strengths and opportunities for improvement for this item appear here.

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## APPENDIX A

The spider, or radar, chart that follows depicts your organization's performance as represented by scores for each Item. This performance is presented in contrast to the median scores for all 2010 applicants. You will note that each ring of the chart corresponds to a scoring range, as indicated in the key below the chart.

Each point in blue represents the scoring range your organization achieved for the corresponding Item. The points in red represent the median scoring ranges for all 2010 applicants. Seeing where your performance is similar or dissimilar to the median of all applicants may help you initially determine or prioritize areas for improvement efforts and strengths to leverage.



## **APPENDIX B**

By submitting a Baldrige application, you have differentiated yourself from most U.S. organizations. The Board of Examiners has evaluated your application for the Malcolm Baldrige National Quality Award. Strict confidentiality is observed at all times and in every aspect of the application review and feedback.

This feedback report contains the Examiners' findings, including a summary of the key themes of the evaluation, a detailed listing of strengths and opportunities for improvement, and scoring information. Background information on the examination process is provided below.

### **APPLICATION REVIEW**

#### **Independent Review**

Following receipt of the Award applications, the Award process review cycle (shown in Figure 1) begins with Independent Review, in which members of the Board of Examiners are assigned to each of the applications. Examiners are assigned based on their areas of expertise and with attention to avoiding potential conflicts of interest. Each application is evaluated independently by the Examiners, who write observations relating to the Scoring System described beginning on page 66 of the *2009–2010 Criteria for Performance Excellence*.



## Award Process Review Cycle

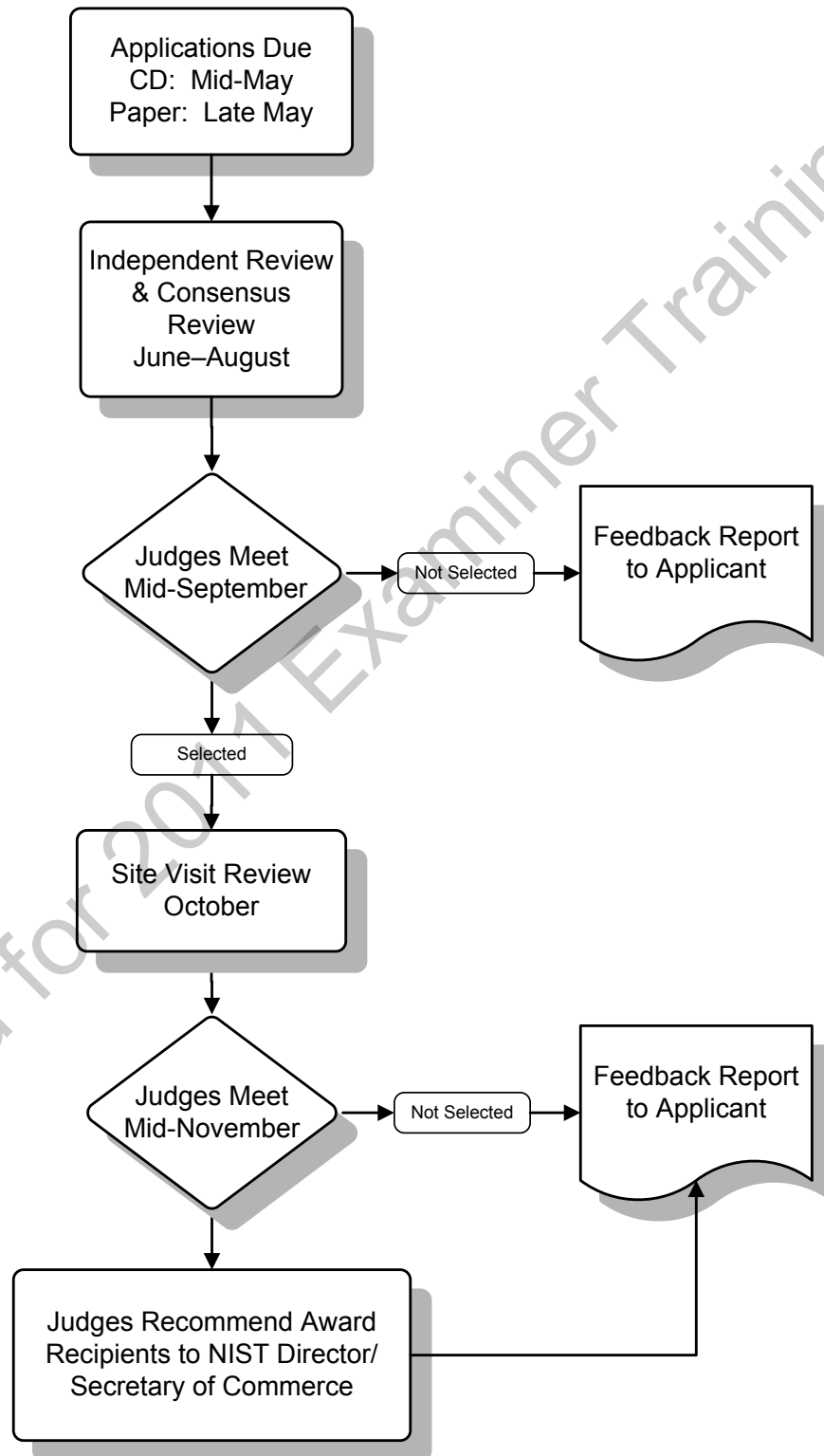


Figure 1—Award Process Review Cycle

## Consensus Review

In Consensus Review (see Figure 2), a team of Examiners, led by a Senior Examiner, conducts a series of reviews, first managed virtually through a secure Web site and eventually concluded through a focused conference call. The purpose of this series of reviews is for the team to reach consensus on comments and scores that capture the team’s collective view of the applicant’s strengths and opportunities for improvement. The team documents its comments and scores in a Consensus Scorebook.

<b>Step 1 Consensus Planning</b>	<b>Step 2 Virtual Consensus</b>	<b>Step 3 Consensus Call</b>	<b>Step 4 Post-Consensus Call Activities</b>
<ul style="list-style-type: none"> <li>• Clarify the timeline for the team to complete its work.</li> <li>• Assign Category/Item discussion leaders.</li> <li>• Discuss key business/organization factors.</li> </ul>	<ul style="list-style-type: none"> <li>• Review all Independent Review evaluations—draft consensus comments and propose scores.</li> <li>• Post Consensus Review Worksheets for the team to review.</li> <li>• Address feedback, incorporate inputs, and propose a resolution of differences on each worksheet.</li> <li>• Review updated comments and scores.</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss a limited number of issues related to specific comments or scores, and discuss all key themes.</li> <li>• Achieve consensus on comments and scores.</li> </ul>	<ul style="list-style-type: none"> <li>• Revise comments and scores to reflect consensus decisions.</li> <li>• Prepare final Consensus Scorebook.</li> <li>• Prepare feedback report.</li> </ul>

**Figure 2—Consensus Review**

## Site Visit Review

After Consensus Review, the Panel of Judges selects applicants to receive site visits based on the scoring profiles. If an applicant is not selected for Site Visit Review, one of the Examiners on the consensus team edits the final Consensus Scorebook, which becomes the feedback report.

Site visits are conducted for the highest-scoring applicants to clarify any uncertainty or confusion the Examiners may have regarding the written application and to verify that the information in

the application is correct (see Figure 3 for the Site Visit Review process). After the site visit, the team of Examiners prepares a final Site Visit Scorebook.

<b>Step 1 Team Preparation</b>	<b>Step 2 Site Visit</b>	<b>Step 3 Post-Site Visit Activities</b>
<ul style="list-style-type: none"> <li>• Review consensus findings.</li> <li>• Develop site visit issues.</li> <li>• Plan site visit.</li> </ul>	<ul style="list-style-type: none"> <li>• Make/receive presentations.</li> <li>• Conduct interviews.</li> <li>• Record observations.</li> <li>• Review records.</li> </ul>	<ul style="list-style-type: none"> <li>• Resolve issues.</li> <li>• Summarize findings.</li> <li>• Finalize comments.</li> <li>• Prepare final Site Visit Scorebook.</li> <li>• Prepare feedback report.</li> </ul>

**Figure 3—Site Visit Review**

Applications, Consensus Scorebooks, and Site Visit Scorebooks for all applicants receiving site visits are forwarded to the Panel of Judges for review (see Figure 4). The Judges recommend which applicants should receive the Award. The Judges discuss applications in each of the six Award categories separately, and then they vote to keep or eliminate each applicant. Next, the Judges decide whether each of the top applicants should be recommended as an Award recipient based on an “absolute” standard: the overall excellence of the applicant and the appropriateness of the applicant as a national role model. The process is repeated for each Award category.

<b>Step 1 Panel of Judges’ Review</b>	<b>Step 2 Evaluation by Category</b>	<b>Step 3 Assessment of Top Organizations</b>
<ul style="list-style-type: none"> <li>• Applications</li> <li>• Consensus Scorebooks</li> <li>• Site Visit Scorebooks</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Service</li> <li>• Small business</li> <li>• Education</li> <li>• Health care</li> <li>• Nonprofit</li> </ul>	<ul style="list-style-type: none"> <li>• Overall strengths/opportunities for improvement</li> <li>• Appropriateness as national model of performance excellence</li> </ul>

**Figure 4—Judges’ Review**

Judges do not participate in discussions or vote on applications from organizations in which they have a competing or conflicting interest or in which they have a private or special interest, such as an employment or a client relationship, a financial interest, or a personal or family relationship. All conflicts are reviewed and discussed so that Judges are aware of their own and others’ limitations on access to information and participation in discussions and voting.

Following the Judges’ review and recommendation of Award recipients, the Site Visit Team Leader edits the final Site Visit Scorebook, which becomes the feedback report.

## SCORING

The scoring system used to score each Item is designed to differentiate the applicants in the various stages of review and to facilitate feedback. As seen in the Scoring Guidelines (Figures 5a and 5b), the scoring of responses to Criteria Items is based on two evaluation dimensions: Process and Results. The four factors used to evaluate process (Categories 1–6) are Approach (A), Deployment (D), Learning (L), and Integration (I), and the four factors used to evaluate results (Items 7.1–7.6) are Levels (Le), Trends (T), Comparisons (C), and Integration (I).

In the feedback report, the applicant receives a percentage range score for each Item. The range is based on the Scoring Guidelines, which describe the characteristics typically associated with specific percentage ranges.

As shown in Figures 6a and 6b, the applicant's overall scores for Process Items and Results Items each fall into one of eight scoring bands. Each band score has a corresponding descriptor of attributes associated with that band. Figures 6a and 6b provide information on the percentage of applicants scoring in each band at Consensus Review.

<b>SCORE</b>	<b>PROCESS (For Use with Categories 1–6)</b>
<b>0% or 5%</b>	<ul style="list-style-type: none"> <li>▪ No systematic approach to Item requirements is evident; information is anecdotal. (A)</li> <li>▪ Little or no deployment of any systematic approach is evident. (D)</li> <li>▪ An improvement orientation is not evident; improvement is achieved through reacting to problems. (L)</li> <li>▪ No organizational alignment is evident; individual areas or work units operate independently. (I)</li> </ul>
<b>10%, 15%, 20%, or 25%</b>	<ul style="list-style-type: none"> <li>▪ The beginning of a systematic approach to the basic requirements of the Item is evident. (A)</li> <li>▪ The approach is in the early stages of deployment in most areas or work units, inhibiting progress in achieving the basic requirements of the Item. (D)</li> <li>▪ Early stages of a transition from reacting to problems to a general improvement orientation are evident. (L)</li> <li>▪ The approach is aligned with other areas or work units largely through joint problem solving. (I)</li> </ul>
<b>30%, 35%, 40%, or 45%</b>	<ul style="list-style-type: none"> <li>▪ An effective, systematic approach, responsive to the basic requirements of the Item, is evident. (A)</li> <li>▪ The approach is deployed, although some areas or work units are in early stages of deployment. (D)</li> <li>▪ The beginning of a systematic approach to evaluation and improvement of key processes is evident. (L)</li> <li>▪ The approach is in the early stages of alignment with your basic organizational needs identified in response to the Organizational Profile and other Process Items. (I)</li> </ul>
<b>50%, 55%, 60%, or 65%</b>	<ul style="list-style-type: none"> <li>▪ An effective, systematic approach, responsive to the overall requirements of the Item, is evident. (A)</li> <li>▪ The approach is well deployed, although deployment may vary in some areas or work units. (D)</li> <li>▪ A fact-based, systematic evaluation and improvement process and some organizational learning, including innovation, are in place for improving the efficiency and effectiveness of key processes. (L)</li> <li>▪ The approach is aligned with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)</li> </ul>
<b>70%, 75%, 80%, or 85%</b>	<ul style="list-style-type: none"> <li>▪ An effective, systematic approach, responsive to the multiple requirements of the Item, is evident. (A)</li> <li>▪ The approach is well deployed, with no significant gaps. (D)</li> <li>▪ Fact-based, systematic evaluation and improvement and organizational learning, including innovation, are key management tools; there is clear evidence of refinement as a result of organizational-level analysis and sharing. (L)</li> <li>▪ The approach is integrated with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)</li> </ul>
<b>90%, 95%, or 100%</b>	<ul style="list-style-type: none"> <li>▪ An effective, systematic approach, fully responsive to the multiple requirements of the Item, is evident. (A)</li> <li>▪ The approach is fully deployed without significant weaknesses or gaps in any areas or work units. (D)</li> <li>▪ Fact-based, systematic evaluation and improvement and organizational learning through innovation are key organization-wide tools; refinement and innovation, backed by analysis and sharing, are evident throughout the organization. (L)</li> <li>▪ The approach is well integrated with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)</li> </ul>

**Figure 5a—Scoring Guidelines for Process Items in the Business/Nonprofit Criteria**

<b>SCORE</b>	<b>RESULTS (For Use with Category 7)</b>
<b>0% or 5%</b>	<ul style="list-style-type: none"> <li>▪ There are no organizational performance results and/or poor results in areas reported. (Le)</li> <li>▪ Trend data either are not reported or show mainly adverse trends. (T)</li> <li>▪ Comparative information is not reported. (C)</li> <li>▪ Results are not reported for any areas of importance to the accomplishment of your organization's mission. No performance projections are reported. (I)</li> </ul>
<b>10%, 15%, 20%, or 25%</b>	<ul style="list-style-type: none"> <li>▪ A few organizational performance results are reported, and early good performance levels are evident in a few areas. (Le)</li> <li>▪ Some trend data are reported, with some adverse trends evident. (T)</li> <li>▪ Little or no comparative information is reported. (C)</li> <li>▪ Results are reported for a few areas of importance to the accomplishment of your organization's mission. Limited or no performance projections are reported. (I)</li> </ul>
<b>30%, 35%, 40%, or 45%</b>	<ul style="list-style-type: none"> <li>▪ Good organizational performance levels are reported for some areas of importance to the Item requirements. (Le)</li> <li>▪ Some trend data are reported, and a majority of the trends presented are beneficial. (T)</li> <li>▪ Early stages of obtaining comparative information are evident. (C)</li> <li>▪ Results are reported for many areas of importance to the accomplishment of your organization's mission. Limited performance projections are reported. (I)</li> </ul>
<b>50%, 55%, 60%, or 65%</b>	<ul style="list-style-type: none"> <li>▪ Good organizational performance levels are reported for most areas of importance to the Item requirements. (Le)</li> <li>▪ Beneficial trends are evident in areas of importance to the accomplishment of your organization's mission. (T)</li> <li>▪ Some current performance levels have been evaluated against relevant comparisons and/or benchmarks and show areas of good relative performance. (C)</li> <li>▪ Organizational performance results are reported for most key customer, market, and process requirements. Performance projections for some high-priority results are reported. (I)</li> </ul>
<b>70%, 75%, 80%, or 85%</b>	<ul style="list-style-type: none"> <li>▪ Good to excellent organizational performance levels are reported for most areas of importance to the Item requirements. (Le)</li> <li>▪ Beneficial trends have been sustained over time in most areas of importance to the accomplishment of your organization's mission. (T)</li> <li>▪ Many to most trends and current performance levels have been evaluated against relevant comparisons and/or benchmarks and show areas of leadership and very good relative performance. (C)</li> <li>▪ Organizational performance results are reported for most key customer, market, process, and action plan requirements, and they include some projections of your future performance. (I)</li> </ul>
<b>90%, 95%, or 100%</b>	<ul style="list-style-type: none"> <li>▪ Excellent organizational performance levels are reported for most areas of importance to the Item requirements. (Le)</li> <li>▪ Beneficial trends have been sustained over time in all areas of importance to the accomplishment of your organization's mission. (T)</li> <li>▪ Evidence of industry and benchmark leadership is demonstrated in many areas. (C)</li> <li>▪ Organizational performance results fully address key customer, market, process, and action plan requirements, and they include projections of your future performance. (I)</li> </ul>

Figure 5b—Scoring Guidelines for Results Items in the Business/Nonprofit Criteria

Band Score	Band Number	% Applicants in Band <sup>1</sup>	PROCESS Scoring Band Descriptors
0–150	1	0	The organization demonstrates early stages of developing and implementing approaches to the basic Criteria requirements, with deployment lagging and inhibiting progress. Improvement efforts are a combination of problem solving and an early general improvement orientation.
151–200	2	0	The organization demonstrates effective, systematic approaches responsive to the basic requirements of the Criteria, but some areas or work units are in the early stages of deployment. The organization has developed a general improvement orientation that is forward-looking.
201–260	3	0	The organization demonstrates effective, systematic approaches responsive to the basic requirements of most Criteria Items, although there are still areas or work units in the early stages of deployment. Key processes are beginning to be systematically evaluated and improved.
261–320	4	0	The organization demonstrates effective, systematic approaches responsive to the overall requirements of the Criteria, but deployment may vary in some areas or work units. Key processes benefit from fact-based evaluation and improvement, and approaches are being aligned with organizational needs.
321–370	5	0	The organization demonstrates effective, systematic, well-deployed approaches responsive to the overall requirements of most Criteria Items. The organization demonstrates a fact-based, systematic evaluation and improvement process and organizational learning, including innovation, that result in improving the effectiveness and efficiency of key processes.
371–430	6	0	The organization demonstrates refined approaches responsive to the multiple requirements of the Criteria. These approaches are characterized by the use of key measures, good deployment, and evidence of innovation in most areas. Organizational learning, including innovation and sharing of best practices, is a key management tool, and integration of approaches with organizational needs is evident.
431–480	7	0	The organization demonstrates refined approaches responsive to the multiple requirements of the Criteria Items. It also demonstrates innovation, excellent deployment, and good to excellent use of measures in most areas. Good to excellent integration is evident, with organizational analysis, learning through innovation, and sharing of best practices as key management strategies.
481–550	8	0	The organization demonstrates outstanding approaches focused on innovation. Approaches are fully deployed and demonstrate excellent, sustained use of measures. There is excellent integration of approaches with organizational needs. Organizational analysis, learning through innovation, and sharing of best practices are pervasive.

<sup>1</sup> Percentages are based on scores from the Consensus Review.

**Figure 6a—Process Scoring Band Descriptors**

Band Score	Band Number	% Applicants in Band <sup>1</sup>	RESULTS Scoring Band Descriptors
0–125	1	0	Results are reported for a few areas of importance to the accomplishment of the organization’s mission, but they generally lack trend and comparative data. Limited or no performance projections are reported.
126–170	2	0	Results are reported for several areas of importance to the Criteria requirements and the accomplishment of the organization’s mission. Some of these results demonstrate good performance levels. The use of comparative and trend data is in the early stages. Limited performance projections are reported.
171–210	3	0	Results address many areas of importance to the accomplishment of the organization’s mission, with good performance being achieved. Comparative and trend data are available for some of these important results areas, and some beneficial trends are evident. Limited performance projections are reported.
211–255	4	0	Results address some key customer/stakeholder, market, and process requirements, and they demonstrate good relative performance against relevant comparisons. There are no patterns of adverse trends or poor performance in areas of importance to the Criteria requirements and the accomplishment of the organization’s mission. Limited performance projections are reported, including those for a few high-priority areas.
256–300	5	0	Results address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission. Performance projections for some high-priority areas are reported.
301–345	6	0	Results address most key customer/stakeholder, market, and process requirements, as well as many action plan requirements, and some results include projections of future performance. Results demonstrate beneficial trends in most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission, and the organization is an industry <sup>2</sup> leader in some results areas.
346–390	7	0	Results address most key customer/stakeholder, market, process, and action plan requirements and include projections of future performance. Results demonstrate excellent organizational performance levels and some industry <sup>2</sup> leadership. Results demonstrate sustained beneficial trends in most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.
391–450	8	0	Results fully address key customer/stakeholder, market, process, and action plan requirements and include projections of future performance. Results demonstrate excellent organizational performance levels, as well as national and world leadership. Results demonstrate sustained beneficial trends in all areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.

<sup>1</sup> Percentages are based on scores from the Consensus Review.

<sup>2</sup> “Industry” refers to other organizations performing substantially the same functions, thereby facilitating direct comparisons.

**Figure 6b—Results Scoring Band Descriptors**



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## Baldrige National Quality Program

**Baldrige National Quality Program**  
**National Institute of Standards and Technology**  
**United States Department of Commerce**  
Administration Building, Room A600  
100 Bureau Drive, Stop 1020  
Gaithersburg, MD 20899-1020

The National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, manages the Baldrige National Quality Program (BNQP). For more than a century, NIST has helped to lay the foundation for the innovation, economic growth, and quality of life that Americans have come to expect. NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. Through a network of nearly 400 assistance centers that serve all 50 states and Puerto Rico, NIST provides technical and business assistance to help smaller manufacturers overcome barriers to productivity and competitiveness.

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